

A G E N D A

**SAN RAFAEL SANITATION DISTRICT
BOARD OF DIRECTORS
FRIDAY – NOVEMBER 22, 2019 - 9:00 A.M.
SAN RAFAEL CITY HALL
1400 FIFTH AVENUE – CONFERENCE ROOM 201
SAN RAFAEL, CALIFORNIA 94901**

Members of the public may speak on Agenda items.

1. OPEN PERIOD

Opportunity for the public to address the Board on items not on the agenda.
(Presentations are generally limited to 2 minutes.)

2. MINUTES OF THE MEETING

Request approval as submitted – October 25, 2019

3. PAYMENTS

Request approval as submitted.

4. NEW BUSINESS

- a. Report on proposals received for design and construction related services for the Third Street Sewer Rehabilitation Project, Lootens Place to Fourth Street, and adopt resolution to execute a Professional Services Agreement.
- b. Report on proposals received for design and construction related services for the Woodland Avenue Sewer Improvement Project and adopt resolution to execute a Professional Services Agreement.

5. OLD BUSINESS

None scheduled.

6. INFORMATIONAL ITEMS

7. DIRECTOR REPORTS/REQUESTS FOR FUTURE AGENDA ITEMS

8. CLOSED SESSION

- a. **Public Employee Performance Evaluation**
California Government Code Section 54957
Title: District Manager

9. ADJOURNMENT

The next scheduled meeting is December 20, 2019.



SAN RAFAEL SANITATION DISTRICT
Minutes of the Meeting
October 25, 2019

Regular Meeting

City of San Rafael
 Conference Room 201
 1400 Fifth Avenue
 San Rafael, CA 94901

The meeting was called to order at 9:05 A.M. by Chair Phillips.

Attendance Board: Gary O. Phillips, Chair
 Maribeth Bushey, Secretary/Director
 Katie Rice, Director

Attendance Staff: Doris Toy, District Manager/District Engineer
 Karen Chew, Senior Civil Engineer

Attendance Others: John W. Maher, CPA, Maher Accountancy
 Dean DiGiovanni, CMSA Commissioner for SRSD
 Jackie Whitfield, Hospice by the Bay

1. OPEN PERIOD - No persons were present to address the Board.

2. MINUTES OF JULY 10, 2019, AND SEPTEMBER 27, 2019.

MOTION by Director Bushey, seconded by Chair Phillips, to approve the minutes of the July 10, 2019, meetings as presented.

AYES: Director Bushey, Director Rice, Chair Phillips

NOES: None

ABSTAIN: None

Motion Carried

MOTION by Director Rice, seconded by Chair Phillips, to approve the minutes of the September 27, 2019, meetings as presented.

AYES: Director Rice, Chair Phillips

NOES: None

ABSTAIN: Director Bushey

Motion Carried

3. PAYMENTS

MOTION by Director Bushey, seconded by Director Rice, to approve the payments for September 2019 in the amount of \$158,290.38 for maintenance and operation of the District and for capital improvements.

AYES: Director Bushey, Director Rice, Chair Phillips

NOES: None

ABSENT: None

Motion Carried

4. NEW BUSINESS

a. **Presentation of the 2018-19 Financial Statements for acceptance and approval. (John Maher)**

CPA Maher reported that the District's longtime auditors, Vavrinek, Trine, Day & Co., LLP, had merged with a larger firm, Eide Bailly, LLP, but they are virtually the same group of people. He then reviewed the 2018-19 Financial Statements and reported the following: The Independent Auditor's Report (Pages 1 & 2) states that the Financial Statements are in accordance with accounting principles generally accepted in the United States of America, and there were no adjustments made. Management's Discussion and Analysis (Page 3) states that the net assets are \$82 million, of which \$52 million is capital assets (property) and \$30 million is available for use. However, a portion of the \$30 million has been set aside for capital projects. On Page 4, the current assets (mostly cash) and the noncurrent assets (mostly property) both show an increase; the current liabilities vary based on when project payments are made, and the noncurrent liabilities are the current obligation to the City, which corresponds with the City's obligation to MCERA. On Page 5, the operating revenue (sewer service charges) is mostly stable; the nonoperating revenue (property taxes & interest) have increased some; the operating expenses have increased slightly, mainly due to planned increases by CMSA; the capital contributions (\$1.4 million) is the promised reimbursement from Caltrans for the Harbor Bridge Project (to replace the District's asset). On Page 6, the reserves for the 80-Year Life-Cycle Program, the Pump Station and Force Main Capital Improvement Program, and the replacement of vehicles and other equipment, which are allocated from the general fund, were shown. After review and discussion on the 80-Year Life-Cycle Program, the Board requested an analysis of this program. On Page 18, there was a recap of the capital outlay for both the nondepreciable (construction in progress) and depreciable (sewage collection facilities) capital assets. CPA Maher then reported that he found an error in the figures for the reimbursement to the City for OPEB and distributed a revised copy of this page. He also reported that this revision would not impact the other figures in the financial statements. There was then a discussion on the best way to pay this down and the possibility of setting up a trust account for these payments. The Board then requested CPA Maher to consider this matter. Next, CPA Maher reported that the auditors had prepared an internal control report on government auditing standards, but special districts that do not receive federal funding are not usually required to have this report. He then reported that nothing was noted in this report. CPA Maher also reported that there was an additional report by the auditors regarding the way the value of the

County pool is presented in the financial statements. He reported that accounting standards require these figures to be presented at Fair Market Value, but the County does not provide them in this manner so they were presented at cost, which was noted in the report. He then reported that he might reconsider this for next year.

MOTION by Director Rice, seconded by Director Bushey, to accept and approve the 2018-19 Financial Statements, with the corrected Page 20.

AYES: Director Bushey, Director Rice, Chair Phillips

NOES: None

ABSENT: None

Motion Carried

b. Presentation of the 2018-19 Schedule of Connection Fees for acceptance and approval. (John Maher)

CPA Maher reported that the District is required to track the sewer connection fees to ensure that they are being used for capital projects. He also reported that the District's policy is to apply the connection fees received to the current-year capital projects on a first-in-first-out basis. He then reported that as of the end of the fiscal year there were no unexpended connection fees.

MOTION by Director Bushey, seconded by Director Rice, to accept and approve the 2018-19 Schedule of Connection Fees.

AYES: Director Bushey, Director Rice, Chair Phillips

NOES: None

ABSENT: None

Motion Carried

5. OLD BUSINESS

a. Discussion on a sewer lateral ordinance.

District Manager Toy reported that the Board had previously discussed the possibility of implementing a sewer lateral ordinance at the April Board meeting in order to reduce inflow and infiltration (I/I). She also reported that the Las Gallinas Valley Sanitary District (LGVSD) is currently developing a sewer lateral ordinance and that SRSD is considering following suit since it would be beneficial for both districts to have similar ordinances for San Rafael property owners. Manager Toy then reviewed the following potential triggers for sewer lateral inspections, that were discussed in April, under consideration by LGVSD: Remodels over \$15,000, the sale of property, a sewer lateral overflow, and a change in the type of property of use. Inspections will need to be performed by a plumber that is PACP (Pipeline Assessment Certification Program) certified. A rating system would be used to determine the condition of the pipe, and a report with this information would be submitted to the District for review. The District would then advise the property owner on whether their lateral was acceptable, whether it would need to be watched, or whether it would need to be repaired or replaced within 2 years. Property owners would have 90 days to fix any illegal connections. Over the

summer, LGVSD sent out a public-outreach letter to both the ratepayers and the Marin Association of Realtors asking for feedback. There were 65 responses from the realtors that appeared to be a template, all of which were negative, and 22 responses from the property owners, two were opposed to the point-of-sale trigger, half were concerned about the \$15,000 remodel trigger, and half were in favor of a sewer lateral ordinance. Based on these comments, LGVSD is considering increasing the \$15,000 remodel trigger to \$30,000, removing the 2-year timeline to repair or replace the sewer lateral and letting the property owner decide when or if they want to do this, dropping the requirement for plumbers to be PACP certified, and revisiting the ordinance in 5 years to see if any revisions need to be made based on the flow data. Manager Toy reported that LGVSD might have this ordinance adopted by the end of the year. She also reported that Ross Valley Sanitary District (RVSD) and Corte Madera (SD2) have already adopted their lateral ordinances, which are more stringent. The Board then recommended that SRSD wait for LGVSD to adopt their ordinance and then adopt a similar ordinance. The Board also requested Manager Toy to bring this matter back to them once LGVSD has adopted their ordinance.

b. Discussion on mutual aid with other agencies.

District Manager Toy reported that during the first week of September, SRSD and RVSD had assisted SD2 (Corte Madera) with some maintenance work on their force main. She also reported that this work requires the force main to be shut down and drained. She then reported that SRSD had provided two maintenance workers and a vactor truck to assist with this work for three evenings. Manager Toy reported that this matter had been brought to the September meeting and that the Board had discussed whether the District should charge for its services. She then provided the Board with the costs for the personnel and equipment provided to SD2. Manager Toy reported that the District had never charged for assisting other districts in the past, but it was usually just for one day. The Board then proposed having some type of threshold for charging and requested Manager Toy to discuss this matter further with the other JPA members in order to develop a policy.

c. Discussion on City of Larkspur withdrawal from the Central Marin Sanitation Agency Joint Powers Agreement.

Director Bushey reported that she had not yet received any response on this matter. District Manager Toy then reported that CMSA General Manager Jason Dow had prepared a draft agreement for the withdrawal of the City of Larkspur from the CMSA JPA (attached to staff report). She also reported that at the last JPA Managers' meeting, the managers had suggested that the Board of each JPA member select a representative to serve on a special ad hoc committee and that this committee should meet and review the draft agreement just prior to the start time of the next CMSA meeting. Manager Toy reported that this would satisfy the requirements of Section 20, Withdrawal as stated in the JPA Agreement. She also reported that once the ad hoc committee members were satisfied with the agreement, they would then take it back to their respective boards to be signed. The Board reported that they agreed with this plan.

6. INFORMATIONAL ITEMS

Director Rice asked Manager Toy if the District was ready for the potential upcoming public safety power shutdown by PG&E. Manager Toy then responded that the District had topped off its fuel and that the maintenance crews would be working 24/7 over the weekend to monitor the pump stations. She also reported that the District has portable generators that can be towed to each pump station.

7. DIRECTOR REPORTS/REQUESTS FOR FUTURE AGENDA ITEMS

Chairman Phillips reported that he recently realized that a performance review had not previously been done for the District Manager, and the Board agreed that doing a review would be a good idea. The Board then provided the District Manager with information on how the review is typically done and the type of information that should be included. Chairman Phillips then requested that this matter be put on the agenda for the next meeting.

8. ADJOURNMENT

There being no further business to come before the Board, the meeting of October 25, 2019, was adjourned at 10:09 A.M. The next meeting of the San Rafael Sanitation District was scheduled for Friday, November 22, 2019, at 9:00 A.M. at San Rafael City Hall.

Respectfully submitted,

Maribeth Bushey, Recording Secretary

ATTEST THIS 22nd DAY OF NOVEMBER 2019

Gary Phillips, Chair

SAN RAFAEL SANITATION DISTRICT
PAYMENT SUMMARY
October 1, 2019 - October 31, 2019

Vendor/Payee

Memo


	Class	Acct #	Account Name	Amount
AMERICAN MESSAGING SERVICE	100	2534	Telephone service	149.64
APPLIED TECHNOLOGY GROUP, INC.	100	4830	Vehicle & Equipment Acquisition - SCADA site surveys & troubleshooting	2,324.20
ARAMARK UNIFORM SERVICES	200	2021	Uniforms	110.41
ARAMARK UNIFORM SERVICES	200	2021	Uniforms	110.41
ARAMARK UNIFORM SERVICES	200	2021	Uniforms	110.41
ARAMARK UNIFORM SERVICES	200	2021	Uniforms	110.41
ARAMARK UNIFORM SERVICES	200	2021	Uniforms	110.41
ARAMARK UNIFORM SERVICES	200	2021	Uniforms	110.41
AT&T *4667	100	2534	Telephone service	240.20
AT&T *4667	100	2534	Telephone service	443.21
AT&T MOBILITY	100	2534	Telephone service	732.12
BAY AREA AIR QUALITY MANAGEMENT DIS	200	2359	Maint- pump sta's & force mains	455.00
BAY AREA BARRICADE SERVICE	300	4302	Rehab of Gravity Sewer (80yr)	817.51
BXPRESS	300	4148	S. Francisco Pump Station (10)	107.22
BXPRESS	300	4148	S. Francisco Pump Station (10)	223.94
BRANDON TIRE	200	2083	Parts and repairs vehicles	507.87
BRUCE ENTERPRISES	300	4332	Sewer Pipe Repair '18, Phs 1(80)	750.00
BWS DISTRIBUTORS	200	2365	Safety equipment and supplies	263.89
CALIFORNIA CAD SOLUTIONS INC	100	2325	Consulting services	5,000.00
CALIFORNIA CAD SOLUTIONS INC	100	2325	Consulting services	5,850.00
CALIFORNIA CAD SOLUTIONS INC	100	4188	Facilities mapping services	300.00
CALIFORNIA CAD SOLUTIONS INC	100	4188	Facilities mapping services	525.00
CENTRAL MARIN SANITATION AGENCY	400	4112	Sewage treatment	1,269,084.48
CITY OF SAN RAFAEL	100	2361	Contract with San Rafael	486,871.19
CITY OF SAN RAFAEL	200	2083	Parts and repairs vehicles	201.92
CITY OF SAN RAFAEL	200	2083	Parts and repairs vehicles	187.61
CITY OF SAN RAFAEL	200	2083	Parts and repairs vehicles	145.44
CITY OF SAN RAFAEL	200	2083	Parts and repairs vehicles	199.33
CITY OF SAN RAFAEL	300	4306	Miramar and Miraflores (80)	8,959.50
CWS/STUBER-STROEH ENGR GROUP INC.	100	2388	Training and education	192.00
CWEA-TCP	100	2388	Training and education	192.00
CWEA-TCP	100	4333	Forbes Ave Sewer Project (80)	388,402.75
DURACABLE MANUFACTURING	200	2360	O&M - collection systems	156.93
EVOQUA WATER TECHNOLOGIES, LLC	200	2106	Odor control chemicals	10,247.84
EWOQUA WATER TECHNOLOGIES, LLC	200	2106	Odor control chemicals	4,332.75
EWERS ENGINEERING INC	300	4151	Force Main Cond A	3,190.00
EWERS ENGINEERING INC	300	4151	Force Main Cond A	10,036.00
EWERS ENGINEERING INC	300	4151	Force Main Cond A	9,557.50
FASTENAL	200	2359	Maint- pump sta's & force mains	49.15
FASTENAL	200	2083	Parts and repairs vehicles	139.63
GAINGER	200	2359	Maint- pump sta's & force mains	60.08
HERNANDEZ, CYNTHIA	100	4188	Facilities mapping services	10.00



JACKSON'S HARDWARE	Pump Stations - chest wader for wet well cleaning	200	2359	Maint- pump sta's & force mains	87.19
JACKSON'S HARDWARE	Pump Stations - underwater sealant	200	2359	Maint- Pump sta's & force mains	30.51
MAHER ACCOUNTANCY	Accounting Services - September	100	2717	Accounting services	3,600.00
MARIN COUNTY TAX COLLECTOR	Office Supplies - printing services for daily time sheet forms	100	2133	Office & shop supplies	414.30
MARIN COUNTY TAX COLLECTOR	Office Supplies - printing services for monthly station report forms	100	2133	Office & shop supplies	404.30
MARIN ROTO-ROOTER SEWER SERVICE, INC	Collection System - spot repair at 121 Reservoir Road	200	2360	O&M - collection systems	7,985.00
MARIN ROTO-ROOTER SEWER SERVICE, INC	Collection System - spot repair at 131 Reservoir Road	200	2360	O&M - collection systems	1,800.00
MARIN ROTO-ROOTER SEWER SERVICE, INC	Collection System - spot repair at 523 Mission Ave.	200	2360	O&M - collection systems	7,985.00
MARIN ROTO-ROOTER SEWER SERVICE, INC	Standby - service at 30 Sonoma Street	200	2363	Standby services	650.00
MARIN ROTO-ROOTER SEWER SERVICE, INC	Standby - service at 1721 Fifth Ave	200	2363	Standby services	536.00
MARIN ROTO-ROOTER SEWER SERVICE, INC	Standby - service at Fourth Street and Grand Ave.	200	2363	Standby services	1,925.00
MILLER PACIFIC ENGINEERING GROUP	Forbes Ave. Sewer Improvements Project - geotechnical services 6/10/19-7/21/19	300	4333	Forbes Ave Sewer Project (80)	463.60
MILLER PACIFIC ENGINEERING GROUP	South Francisco Pump Station Improvements Project - services from 8/01/19-8/31/19	300	4148	S. Francisco Pump Station (10)	10,223.75
NUTE ENGINEERING	Power - electric service for pump stations Aug-Sept 2019	200	2335	Electric utility costs	13,313.06
PG&E a/c 2480925202-5	Refunds - refund of overpayment for FY 2018-19 sewer service charge for 2130 Fourth St. APN 010-277-11	100	2122	Rebate/Refunds	4,303.20
PICK, CHARLES	Pump Stations - repair submersible pump at Loch Lomond PS	200	2359	Maint- pump sta's & force mains	27,646.83
PUMP REPAIR SERVICE CO	Pump Stations - repair submersible pump at Riviera PS	200	2359	Maint- pump sta's & force mains	19,648.93
PUMP REPAIR SERVICE CO	N. Francisco Force Main Relocation Project - to reimburse SMART for the reconstruction and relocation of sewer facilities at Rice Dr.	300	4152	North Francisco Force Main (10)	123,148.31
SONOMA-MARIN AREA RAIL TRANSIT	Office Supplies - boxes and toner	100	2133	Office & shop supplies	131.31
STAPLES INC	Office Supplies - laptop carrying case	100	2133	Office & shop supplies	24.51
STAPLES INC	Pump Stations - replacement phone for the North Francisco PS	200	2359	Maint- pump sta's & force mains	27.24
STAPLES INC	Pump Stations - UPS for the Biscayne PS	200	2359	Maint- pump sta's & force mains	83.92
STAPLES INC	Pump Stations - installation of VFD at Baypoint PS	200	2359	Maint- pump sta's & force mains	4,688.00
TELSTAR INSTRUMENTS INC	Pump Stations - shop rags	200	2360	O&M - collection systems	168.67
UNITED TEXTILE	Collection System - camera for vacor truck	200	2360	O&M - collection systems	190.99
US BANK CORPORATE PAYMENT	Collection System - lens covers for vacor truck camera	200	2360	O&M - collection systems	7.98
US BANK CORPORATE PAYMENT	Office Supplies - cell phone holster case	100	2133	Office & shop supplies	12.99
US BANK CORPORATE PAYMENT	Office Supplies - cell phone holsters cases	100	2133	Office & shop supplies	108.96
US BANK CORPORATE PAYMENT	Rehab Gravity Sewer System - striping at 732 Fourth St. due to lateral replacement for Spoiless Cleaners	300	4302	Rehab of Gravity Sewer (80yr)	1,035.00
VALENTINE CORPORATION	Telephone Service - wireless service for laptops 7/21/19-8/20/19	100	2534	Telephone service	266.11
VERIZON WIRELESS	Telephone Service - wireless service for laptops 8/21/19-9/20/19	100	2534	Telephone service	266.07
WATER COMPONENTS & BLDG SUPPLY	Collection System - black paint for USA marking revisions to carry on vehicle # 8199	200	2360	O&M - collection systems	8.76
WATER COMPONENTS & BLDG SUPPLY	Collection System - couplings and crushed rock for spot repair at 8 Neame Avenue	200	2360	O&M - collection systems	218.67
WATER COMPONENTS & BLDG SUPPLY	Collection Systems - parts for sewer repair at 111 Rafael Drive	200	2360	O&M - collection systems	268.75
WATER COMPONENTS & BLDG SUPPLY	Collection Systems - parts for sewer repair at 111 Rafael Drive	200	2360	O&M - collection systems	202.34
WATER COMPONENTS & BLDG SUPPLY	Pump Stations - coupling for West Railroad Pump Station sump pump	200	2359	Maint- pump sta's & force mains	30.69
WATER COMPONENTS & BLDG SUPPLY	Pump Stations - flex tube for station cleaning	200	2359	Maint- pump sta's & force mains	105.36
WATER COMPONENTS & BLDG SUPPLY	Pump Stations - pipe for the vacor truck for cleaning wet wells	200	2359	Maint- pump sta's & force mains	105.36
WORKSMART AUTOMATION, INC	Vehicle & Equipment Acquisition - TopView alarm notification software and setup	100	4830	Vehicle equipment & acquisition	12,257.00
					\$ 2,461,531.36

4.a.

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 4.a.

DATE: November 22, 2019
TO: Board of Directors, San Rafael Sanitation District
FROM: Doris Toy, District Manager/District Engineer 
SUBJECT: Report on Proposals Received for Design and Construction Related Services for the Third Street Sewer Rehabilitation Project, Lootens Place to Fourth Street, and Adopt Resolution to Execute a Professional Services Agreement

RECOMMENDATION:

Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with CSW/Stuber-Stroeh Engineering Group, Inc., for design and construction related services for the Third Street Sewer Rehabilitation Project, Lootens Place to Fourth Street.

BACKGROUND:

At the September Board Meeting, staff informed the Board that the City of San Rafael is planning to rehabilitate Third Street from Fourth Street/Miracle Mile to Union Street, which will include ADA sidewalks and ramps, traffic signal upgrades, bike and pedestrian safety, and paving the road.

In August, the Department of Public Works (DPW) invited the utility agencies for a meeting to discuss the project. Marin Municipal Water District (MMWD) is planning to replace some of its facilities and is working on its design. We (District) have televised our sewer pipes and will need to repair and replace some portions of our sewer facilities as well. The City is planning to begin construction in 2021; and, therefore, both MMWD and the District will have next year to design and replace our facilities. However, at the DPW meeting, they offered to incorporate MMWD and the District's plans and specifications into the City's construction project, which will benefit both the utility agencies and the public. The road work operations will occur all at once, including trenching and paving, which will lessen the impact on traffic and disturbance to the public. MMWD and the District will share a portion of the paving costs.

As part of the DPW meeting discussion, DPW was in the middle of its Request for Proposal (RFP) process for the design portion of the project and received proposals from CSW/Stuber-Stroeh, BKF, and Kimley-Horn. Since the District had just started its RFP process and had not yet sent them out, DPW offered to include the District in the selection process for a design consultant with the thought that the chosen consultant could include the sewer design. District staff agreed with DPW that it would streamline the project and make it more efficient. Therefore, the District distributed its RFP to the three consultants and participated in the interviews with DPW.

ANALYSIS:

The District and DPW staff interviewed the three consultants, CSW/Stuber-Stroeh, BKF, and Kimley-Horn. All three consultants addressed and adequately analyzed the issues raised in both the District and DPW's Request for Proposals. Since the portion of the project located between Lindaro Street and Union Street is funded by Federal funds, DPW decided to separate this portion out into a separate project and only address the portion of Third Street from Fourth Street/Miracle Mile to Lindaro Street at this time.

On Monday, November 19, 2019, the City Council awarded the contract to CSW/Stuber-Stroeh to perform the design and construction related services for the Third Street project from Fourth Street/Miracle Mile to Lindaro Street.

Since the nearest sewer manhole on Third and Lindaro streets is at Lootens Place, the District has revised its project limits on Third Street to begin at Lootens Place and end at the Fourth Street/Miracle Mile.

CSW/Stuber-Stroeh proposes to perform the design and construction related services for the District on a time-and-materials basis, not to exceed \$114,660.00 for the Third Street Sewer Rehabilitation Project, Lootens Place to Fourth Street/Miracle Mile.

FISCAL IMPACT:

CSW/Stuber-Stroeh's design and construction related services for the Third Street Sewer Rehabilitation Project, Lootens Place to Fourth Street/Miracle Mile, will be funded by the 80-Year Life Cycle Sewer Replacement Program from Fiscal Years 2019-20 and 2020-21.

ACTION REQUIRED:

Staff recommends that the Board adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with CSW/Stuber-Stroeh Engineering Group, Inc., for design and construction related services for the Third Street Sewer Rehabilitation Project, Lootens Place to Fourth Street/Miracle Mile.

Attachments: Resolution
Professional Services Agreement
Proposal from Consultant, Exhibit "A"

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 19-1196

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE SAN RAFAEL SANITATION DISTRICT
AUTHORIZING THE DISTRICT MANAGER/DISTRICT ENGINEER
TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH
CSW/STUBER-STROEH ENGINEERING GROUP, INC.
FOR DESIGN AND CONSTRUCTION RELATED SERVICES
FOR THE THIRD STREET SEWER REHABILITATION PROJECT
FOR AN AMOUNT NOT TO EXCEED \$114,660**

**THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT,
COUNTY OF MARIN, hereby resolves as follows:**

The District Manager/District Engineer is hereby authorized to execute, on behalf of the San Rafael Sanitation District, a Professional Services Agreement with CSW/Stuber-Stroeh Engineering Group, Inc., for design and construction related services for the Third Street Sewer Rehabilitation Project, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a regular meeting of the San Rafael Sanitation District Board of Directors held on the 22nd day of November, 2019, by the following vote, to wit:

AYES:

NOES:

ABSENT/ABSTAIN:

SAN RAFAEL SANITATION DISTRICT

Gary O. Phillips, Chair

ATTEST:

Maribeth Bushey, Secretary

**PROFESSIONAL SERVICES AGREEMENT
FOR DESIGN AND CONSTRUCTION RELATED SERVICES FOR THE
THIRD STREET SEWER REHABILITATION PROJECT**

This Agreement is made and entered into this 22nd day of November, 2019, by and between the SAN RAFAEL SANITATION DISTRICT (hereinafter "DISTRICT"), and *CSW/STUBER-STROEH ENGINEERING GROUP, INC.* (hereinafter "CONSULTANT").

RECITALS

WHEREAS, the DISTRICT has selected *CSW/STUBER-STROEH ENGINEERING GROUP, INC.*, to perform the required design related services for the "**Third Street Sewer Rehabilitation Project**" (hereinafter "PROJECT"); and

WHEREAS, the CONSULTANT has offered to render certain specialized professional services in connection with this Project.

AGREEMENT

NOW, THEREFORE, the parties hereby agree as follows:

1. DEFINITIONS.

DISTRICT and CONSULTANT have outlined the scope of services to be provided, and related expenses as described in Exhibit "A" attached and incorporated herein.

2. PROJECT COORDINATION

A. DISTRICT. The District Manager/District Engineer shall be the representative of the DISTRICT for all purposes under this Agreement. The Senior Civil Engineer is hereby designated as the PROJECT MANAGER for the DISTRICT, and said PROJECT MANAGER shall supervise all aspects of the progress and execution of this Agreement.

B. CONSULTANT. CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. Al Cornwell is hereby designated as the PROJECT DIRECTOR for CONSULTANT. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute PROJECT DIRECTOR for any reason, the CONSULTANT shall notify the DISTRICT within ten (10) business days of the substitution.

3. DUTIES OF CONSULTANT

CONSULTANT shall perform the duties and/or provide services as follows; the CONSULTANT agrees to provide professional services as an Engineering Consultant to prepare work outlined in the Proposal from CONSULTANT dated November 11, 2019, marked Exhibit "A", attached hereto, and incorporated herein by this reference. The CONSULTANT agrees to be available and perform the work specified in this agreement in the time frame as specified and as shown in Exhibit "A".

4. DUTIES OF THE DISTRICT

DISTRICT shall perform the duties as described and incorporated herein.

5. COMPENSATION

For the full performance of the services described herein by CONSULTANT, DISTRICT shall pay CONSULTANT on a time and materials basis for services rendered in accordance with the rates shown on the current fee schedule as described in Exhibit "A" attached and incorporated herein. The total payment will not exceed the \$114,660 as shown on the Proposal Budget, set out in Exhibit "A".

Payment will be made monthly upon receipt by PROJECT MANAGER of itemized invoices submitted by CONSULTANT.

6. TERM OF AGREEMENT

The term of this Agreement shall be from the date of execution until the Project is complete.

7. TERMINATION

A. Discretionary. Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. Cause. Either party may terminate this Agreement for cause upon ten (10) days written notice mailed or personally delivered to the other party, and the notified party's failure to cure or correct the cause of the termination notice, to the reasonable satisfaction of the party giving such notice, within thirty (30) days of the receipt of said notice.

C. Effect of Termination. Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other.

D. Return of Documents. Upon termination, any and all DISTRICT documents or materials provided to CONSULTANT and any and all of CONSULTANT's documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to DISTRICT as soon as possible, but not later than thirty (30) days after termination.

8. OWNERSHIP OF DOCUMENTS

The written documents and materials prepared by the CONSULTANT in connection with the performance of its duties under this Agreement shall be the sole property of DISTRICT. DISTRICT may use said property for any purpose, including projects not contemplated by this Agreement providing that the DISTRICT indemnify, release and hold harmless the CONSULTANT, its officers and employees against any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney fees, arising out of or resulting in any way from use of said property for any project other than project entitled "Cayes Main Pump Station and Catalina Force Main Improvement Project."

9. INSPECTION AND AUDIT

Upon reasonable notice, CONSULTANT shall make available to DISTRICT, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with DISTRICT or its agent in any such audit or inspection.

10. ASSIGNABILITY

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

11. INSURANCE

A. During the term of this Agreement, CONSULTANT shall maintain, at no expense to DISTRICT, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence and \$2,000,000 aggregate for death, bodily injury, personal injury, or property damage;

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence;

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million (\$1,000,000) dollars to cover any claims arising out of the CONSULTANT's performance of services under this Agreement.

B. The insurance coverage required of the CONSULTANT by Section 11. A., shall also meet the following requirements:

1. The insurance shall be primary with respect to any insurance or coverage maintained by DISTRICT and shall not call upon DISTRICT's insurance or coverage for any contribution;

2. Except for professional liability insurance, the insurance policies shall be endorsed for contractual liability and personal injury;

3. Except for professional liability insurance, the insurance policies shall be specifically endorsed to include the DISTRICT, its officers, agents, and employees as additionally named insureds under the policies;

4. CONSULTANT shall provide to PROJECT MANAGER, (a) Certificates of Insurance evidencing the insurance coverage required herein, and (b) specific endorsements naming DISTRICT, its officers, agents and employees, as additional insureds under the policies;

5. The insurance policies shall provide that the insurance carrier shall not cancel or terminate said insurance policies except upon thirty (30) days written notice to DISTRICT's PROJECT MANAGER;

6. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years as long as the insurance is reasonably affordable and available;

7. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement;

8. The insurance shall be approved as to form and sufficiency by PROJECT MANAGER and the County Counsel.

C. If it employs any person, CONSULTANT shall maintain Workers' Compensation and Employer's Liability Insurance, as required by the State Labor Code and other applicable laws and regulations, and as necessary to protect both CONSULTANT and DISTRICT against all liability for injuries to CONSULTANT's officers and employees.

D. Any deductibles or self-insured retentions exceeding \$20,000 in CONSULTANT's insurance policies must be declared to and approved by the PROJECT MANAGER and the County Counsel. At District's option, the deductibles or self-insured retentions with respect to DISTRICT shall be reduced or eliminated to DISTRICT's satisfaction, or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees, and defense expenses.

12. INDEMNIFICATION

CONSULTANT shall indemnify, release, and hold harmless DISTRICT, its officers, and employees against any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney's fees, to the extent caused by the CONSULTANT's negligent acts or omissions or negligence of CONSULTANT or CONSULTANT's officers, agents, and employees in the performance of their duties and obligations under this Agreement.

13. NONDISCRIMINATION

CONSULTANT shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

14. COMPLIANCE WITH ALL LAWS

CONSULTANT shall use due professional care to observe and comply with all applicable Federal, State and local laws, ordinances, codes, and regulations in the performance of its duties and obligations under this Agreement. CONSULTANT shall perform all services under this Agreement in accordance with these laws, ordinances, codes, and regulations.

15. NO THIRD PARTY BENEFICIARIES

DISTRICT and CONSULTANT do not intend, by any provision of this Agreement, to create in any third party any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

16. NOTICES

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery or, if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO DISTRICT: Ms. Karen Chew (Project Manager)
San Rafael Sanitation District
111 Morphew Street
P.O. Box 151560
San Rafael, CA 94915-1560

TO CONSULTANT: Mr. Al Cornwell (Project Director)
CSW/Stuber-Stroeh Engineering Group, Inc.
45 Leveroni Court
Novato, CA 94949

17. INDEPENDENT CONSULTANT

For the purposes and for the duration of this Agreement, CONSULTANT, its officers, agents, and employees shall act in the capacity of an Independent Contractor, and not as employees of the DISTRICT. CONSULTANT and DISTRICT expressly intend and agree that the status of CONSULTANT, its officers, agents, and employees be that of an Independent Contractor and not that of an employee of DISTRICT.

18. ENTIRE AGREEMENT -- AMENDMENTS

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the CONSULTANT and the DISTRICT.

C. No other agreement, promise, or statement, written or oral, relating to the subject matter of this Agreement shall be valid or binding except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the CONSULTANT and the DISTRICT.

E. If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

19. SET-OFF AGAINST DEBTS

CONSULTANT agrees that DISTRICT may deduct from any payment due to CONSULTANT under this Agreement any monies which CONSULTANT owes DISTRICT under any ordinance, agreement, contract, or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks, or other amounts.

20. WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any ordinance, law, or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law, or regulation or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, or covenant of this Agreement or any applicable law, ordinance, or regulation.

21. CITY BUSINESS LICENSE/OTHER TAXES

CONSULTANT shall obtain and maintain during the duration of this Agreement a CITY business license as required by the San Rafael Municipal Code. CONSULTANT shall pay any and all State and Federal taxes and any other applicable taxes. CONSULTANT's taxpayer identification number is 68-0215172, and CONSULTANT certifies under penalty of perjury that said taxpayer identification number is correct.

22. APPLICABLE LAW

The laws of the State of California shall govern this Agreement.

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

SAN RAFAEL SANITATION DISTRICT

CONTRACTOR

Doris Toy, P.E.
District Manager/District Engineer

APPROVED AS TO FORM:

Jack F. Govi
Assistant County Counsel

CSW/STUBER STROEH ENGINEERING GROUP, INC.

By: _____
Al Cornwell

Title: Vice President

EXHIBIT

A

CSW | ST 2

CSW/Stuber-Stroeh Engineering Group, Inc.

November 11, 2019

Ms. Doris Toy
District Manager
San Rafael Sanitation District
111 Morphew Street
San Rafael, CA 94901

Subject: THIRD STREET SEWER REHABILITATION FEE PROPOSAL
(LOOTENS PLACE - MH 1724 TO FOURTH STREET/MIRACLE MILE)

Dear Ms. Toy:

Please find enclosed our amended fee proposal to support the sewer design and implementation of improvements to Third Street.

Please contact feel free to contact me at 415.533.1864 or rstevens@cswst2.com or Rich at 415.883.9850 or richs@cswst2.com if we can provide any additional information.

Sincerely,

CSW/Stuber-Stroeh Engineering Group



Robert Stevens, PE, LEED AP
President

SCOPE OF WORK

The CSW Design Group has established our work plan to implement the sewer rehabilitation improvements along the Third Street Corridor from Lootens Place (MH 1724) to Fourth Street/Miracle Mile.

TASK 1: EXISTING CONDITIONS ASSESSMENT AND PRELIMINARY ENGINEERING

Objective: In this initial phase, we will complete data collection and review, geotechnical studies, supplemental topographic survey, as well as establish a basis of design to develop a preliminary plan which works within the District's project budget.

- 1.1 **Project Kickoff.** Our team will meet with the District to review the scope of work, schedule, and confirm project goals. We will coordinate with staff to define project stakeholders.

- 1.2 **Data Collection and Field Review.** Our team will collect the preliminary documents and perform a field review to understand basic conditions along Third Street. This task will include the following elements:
 - A. **Data Collection.** The team will collect, coordinate and review:
 - CCTV video and reports
 - Utility Companies for gas, water, storm drain, and communication lines
 - Current pavement assessment, sections and conditions
 - Right of way and record monument information
 - B. **Site Reconnaissance.** The team will complete a field walk along the corridor to record pavement condition, potential staging areas, and existing utility information. We will record the data in photograph or video format.
 - C. **Flow Capacity Analysis.** CSW | ST2 will review the frontage property connecting into the Third Street corridor sewer mains to provide a capacity estimate. We will coordinate with the District, the Community Development Department and current land use applications to identify future land uses to estimate future demand on the wastewater collection system.
 - D. **Flow Monitoring.** If requested, CSW | ST2 can provide flow monitoring services at key locations in the sewer main system. We understand the existing sewer main capacity is acceptable. This service may be provided as an additional service under a separate contract agreement.

- 1.3 **Geotechnical Investigations.** Our team will collect the preliminary documents available from the City of San Rafael as part of the Third Street Rehabilitation Project. As part of the Third Street Rehabilitation Project Miller Pacific (MP) will explore subsurface conditions, evaluate subsurface soils, and provide geotechnical recommendations for the waterline work in a letter report form. We believe this should be adequate to address geotechnical questions as part of the sewer work. The geotechnical scope of work and fee are not included within the sewer rehabilitation project. Any additional services requested by the Sanitation District, such as geotechnical testing and observations during construction will be performed as an additional service.

1.4 Existing Conditions Mapping. We understand that a topographic and utility survey has been completed by the first phase of work the City completed on the Third Street corridor. However, additional supplemental survey specifically tailored to the project needs is recommended. Our team will provide up to 16 hours of supplemental topographic survey which includes:

- A. Field Survey:** We will establish control based on NAVD 88 and NAD 83 and tie into the previous survey work completed by the City. Our team will collect topography including elevations and surface features using traditional survey methods.
- B. Utility Survey:** If not completed during the overall survey for the Third Street corridor under the City's contract we will have Bess Testlabs will complete a ground penetrating radar scan within areas anticipated for open trench construction and for lateral connections. This service may be provided as an additional service under a separate contract agreement.
- C. Prepare Base Map:** CSW | ST2 will develop a detailed topographic base map collecting the supplemental surface and underground utility data.

1.5 Basis of Design and Preliminary Design (35%). Based on the information collected in this phase, the documents created will include the following:

- A.** Layout plan with alternatives of sewer main and lateral improvements
- B.** Line item costs to implement the sewer main and lateral improvements and alternatives
- C.** Summary report identifying preferred alternative, cost summary, and results of the flow capacity analysis

1.6 Outreach. Our team will support the District's outreach effort to inform property owners of sewer main and lateral improvements along Third Street. This will include the following meetings:

- A. Private Property Plat Maps.** Our team will prepare plat maps for the frontage improvements along with a brief letter summarizing proposed improvements and District requirements.
- B. Meetings with Property owners.** Our team will work with the city to identify a program to contact property owners and discuss the project and the City's approach and schedule and the necessity to reconnect their existing laterals to the rehabilitated system
- C. Board Hearing.** We will support staff in presenting the project to Board of Directors authorizing the project for public advertisement.

1.7 Prepare Project Plans, Specifications, and Estimates (PS&E). The team will prepare phased construction documents. Each submittal will include plans (22 x 34 size) and specifications, in accordance with the District's standards for formal submittal at the 65% and 95% level of completeness. We will prepare all drawings using AutoCAD Civil 3D version 2018 (or later if applicable). Each submittal will contain the following design elements:

- A.** Plans will include:

- i. Title and Key Map
 - ii. Existing Conditions Plan
 - iii. Demolition Plan
 - iv. Sewer Plan and Profile Sheets
 - v. Traffic Control, Construction Phasing and Staging Plans
 - vi. Detail Sheets
 - vii. Erosion Control Plan
- B.** Project Specifications will be prepared at 65% and 95% phases which include both the Districts general specifications and the project team's technical specifications.
- C.** A line item opinion of probable construction cost will be provided at 65% and 95% phases

1.8 Contract Management. CSW | ST2 will be responsible for overall management of our design team including the following:

- A. Project Management:** We will manage the design team as well as track progress, schedule, and budget.
- B. Quality Control/ Assurance:** An independent member of our team will perform an independent quality control review of the team's documents prior to submittal
- C. Meetings:** In addition to the outreach meetings, the team will be available for monthly meetings or conference calls with District staff. We will meet with District staff following each PS&E submittal.

Deliverables

- Geotechnical Report (pdf)
- Basis of Design Report (pdf)
- Preliminary Plan (35%)(pdf)
- 65% and 95% PS&E (paper and pdf)
- Private property plat maps and letters (pdf)
- Public utility coordination reports (pdf)
- Meeting Minutes, Project Schedule Updates (pdf)
- Response to plan check comments (pdf)
- Summary of outreach meeting comments (Word)

TASK 2: FINAL DESIGN

Objective: With stakeholder and District consensus on the preliminary plans, our team will complete phased and final documents for bidding and construction.

2.1 Prepare Project Plans, Specifications, and Estimates. The team will prepare construction documents for bidding. The final submittal will include plans, specifications, and opinion of probable construction cost.

2.2 Contract Management. CSW will complete contract management services as defined in Task 1.8. In this task, we anticipate up to two (2) meetings with the District.

Deliverables

- 100% PS&E submittal in Acrobat and AutoCAD format/ MS Word Format
- Response to plan check comments (Word)
- Meeting Minutes, Project Schedule Updates (pdf)

TASK 3: BIDDING SUPPORT

Objective: Our team will support both the bidding and construction process.

3.1 Bidding Support. Our team will assist during the bidding phase by attending the pre-bid meeting, responding to contractor requests for information, and preparing two bid addenda, if necessary.

Deliverables

- Up to two (2) bid addenda
- Prepare response to bidder's questions on a weekly basis during bid phase
- Recommendation to District to award construction contract

TASK 4: DESIGN SUPPORT DURING CONSTRUCTION

Objective: As requested by the District, our team will support the construction process with the following:

- 4.1 Preconstruction Meeting.** CSW | ST2 will be available to attend one (1) preconstruction meeting with the successful construction contractor.
- 4.2 Weekly Meetings.** CSW | ST2 will attend weekly construction meetings.
- 4.3 Contractor Change Orders.** CSW | ST2 will assist the District in preparation of contractor change orders, if necessary.
- 4.4 Review Submittals.** CSW | ST2 will review contractor submittals as necessary for the sewer related project whether it is stand-alone or part of the overall Third Street project. An allowance for up to ten (10) submittals has been provided.
- 4.5 Respond to RFI's.** CSW | ST2 will respond to civil related contractor Requests for Information and Request's for Clarification (RFI's and RFC's). An allowance for up to twelve (12) responses has been provided.
- 4.6 Site Visits.** CSW | ST2 will provide periodic on-site field observations to review the progress of construction and conformance to plans as directed by the Executive Architect. An allowance for four (4) visits has been provided.
- 4.7 Punch List.** CSW | ST2 will take part in one (1) final field observation and prepare a punch list of sewer project. We will assist the District in the project close-out for the sanitary sewer replacement, repairs and rehabilitation.

November 11, 2019

4.8 Record Drawings. CSW | ST2 will prepare one (1) set of record drawings, to be drafted from field mark-ups provided by the General Contractor at project completion.

Deliverables

- Submittal review and responses
- Respond to requests for information during construction
- Contractor change order(s), if necessary
- Memorandums summarizing field reports during construction
- Record Drawings 22x34 and 11x17 bond paper and pdf



CSW/Stuber-Stroeh Engineering Group, Inc.

HOURLY RATES AND BILLING POLICY

Effective July 1, 2019 the following hourly rates will be charged for services rendered. (Rates subject to change):

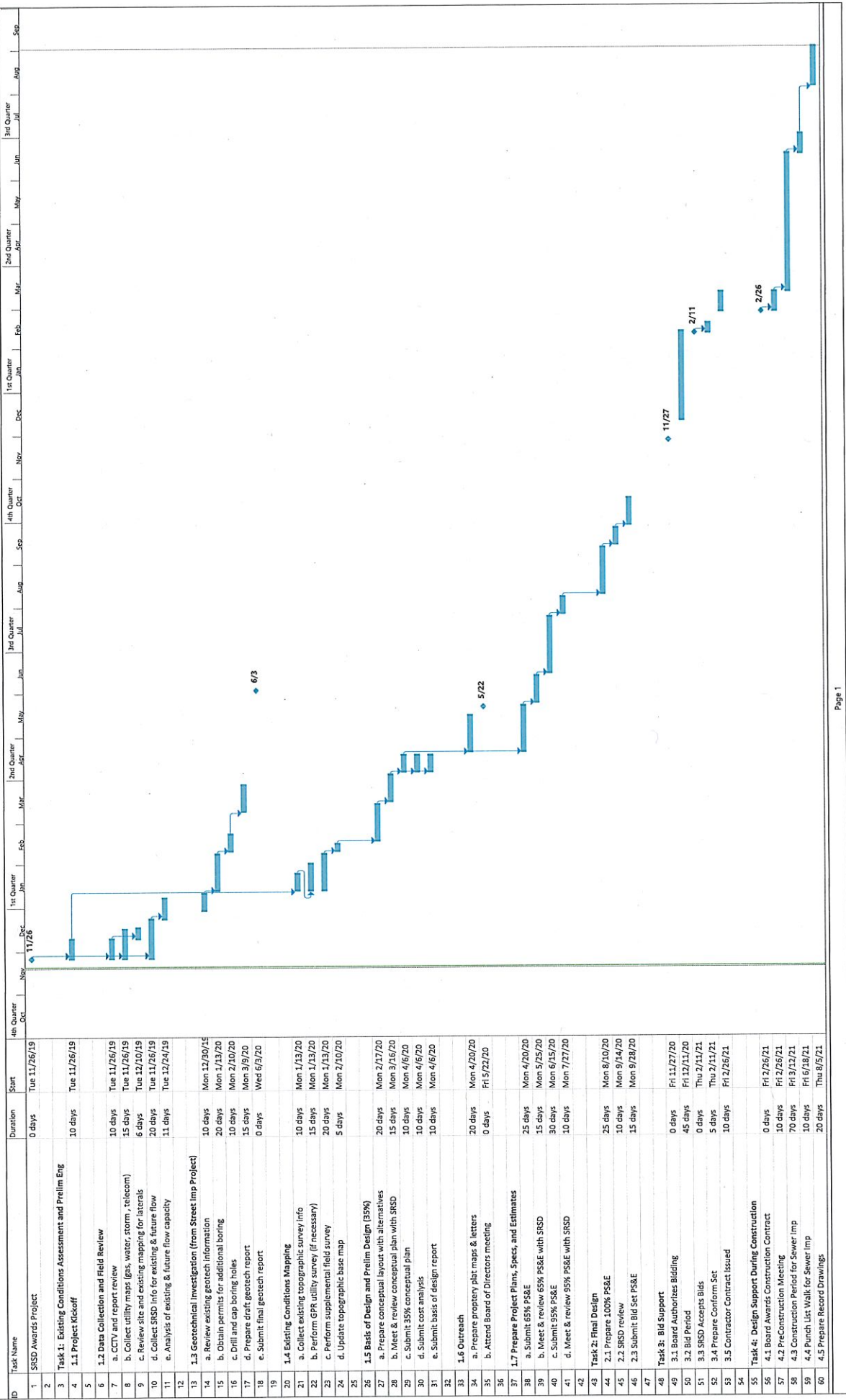
<u>CIVIL ENGINEERING</u>	<u>HOURLY RATES</u>
Principal	\$205.00-\$235.00
Sr. Project Manager	\$ 205.00
Project Manager	\$ 193.00
Project Engineer III	\$ 175.00
Engineer III	\$ 161.00
Engineer II	\$ 148.00
Engineer I	\$ 110.00
Senior Designer	\$ 186.00
Designer III	\$ 161.00
Designer II	\$ 148.00
Designer I	\$ 110.00
Technician III	\$ 161.00
Technician II	\$ 148.00
Technician I	\$ 100.00
Project Coordinator/Office Manager	\$ 120.00
Project Assistant II	\$ 88.00
Project Assistant I	\$ 77.00
<u>SURVEYING</u>	<u>HOURLY RATES</u>
Land Surveyor/Project Manager	\$ 175.00
Project Surveyor	\$ 175.00
Survey Technician II	\$ 128.00
Survey Technician I	\$ 100.00
Two-Man Survey Party	\$ 275.00

All expenses for transportation will be charged at cost plus service charges at the rate of 10%.

Filing fees, checking fees, prints, and other outside costs (such as agency submittal/permit fees etc.) will be charged at cost, plus service charges at the rate of 10%.

Billing will be monthly. Invoices are due and payable upon presentation. Interest at the rate of 1.5% per month commencing thirty (30) days after invoice date will be charged on delinquent accounts.

Third Street Sewer Rehab Project Schedule



ID	Task Name	Start	Duration
1	SRSD Awards Project	Tue 11/26/19	0 days
2			
3	Task 1: Existing Conditions Assessment and Prelim Eng		
4	1.1 Project Kickoff	Tue 11/26/19	10 days
5			
6	1.2 Data Collection and Field Review	Tue 11/26/19	10 days
7	a. CCTV and report review	Tue 11/26/19	15 days
8	b. Collect utility maps (gas, water, storm, telecom)	Tue 12/10/19	6 days
9	c. Review site and existing mapping for laterals	Tue 11/26/19	20 days
10	d. Collect SRSD info for existing & future flow	Tue 12/24/19	11 days
11	e. Analysis of existing & future flow capacity		
12			
13	1.3 Geotechnical Investigation (from Street Imp Project)	Mon 12/30/19	10 days
14	a. Review existing geotech information	Mon 1/13/20	20 days
15	b. Obtain permits for additional boring	Mon 2/10/20	10 days
16	c. Drill and cap boring holes	Mon 3/9/20	15 days
17	d. Prepare draft geotech report	Wed 6/3/20	0 days
18	e. Submit final geotech report		
19			
20	1.4 Existing Conditions Mapping	Mon 1/13/20	10 days
21	a. Collect existing topographic survey info	Mon 1/13/20	15 days
22	b. Perform GPR utility survey (if necessary)	Mon 1/13/20	20 days
23	c. Perform supplemental field survey	Mon 2/10/20	5 days
24	d. Update topographic base map		
25			
26	1.5 Basis of Design and Prelim Design (35%)	Mon 2/17/20	20 days
27	a. Prepare conceptual layout with alternatives	Mon 3/16/20	15 days
28	b. Meet & review conceptual plan with SRSD	Mon 4/6/20	10 days
29	c. Submit 35% conceptual plan	Mon 4/6/20	10 days
30	d. Submit cost analysis	Mon 4/6/20	10 days
31	e. Submit basis of design report		
32			
33	1.6 Outreach	Mon 4/20/20	20 days
34	a. Prepare property plat maps & letters	Fri 5/22/20	0 days
35	b. Attend Board of Directors meeting		
36			
37	1.7 Prepare Project Plans, Specs, and Estimates	Mon 4/20/20	25 days
38	a. Submit 65% PS&E	Mon 5/25/20	15 days
39	b. Meet & review 65% PS&E with SRSD	Mon 6/15/20	30 days
40	c. Submit 95% PS&E	Mon 7/27/20	10 days
41	d. Meet & review 95% PS&E with SRSD		
42			
43	Task 2: Final Design	Mon 8/10/20	25 days
44	2.1 Prepare 100% PS&E	Mon 9/14/20	10 days
45	2.2 SRSD review	Mon 9/28/20	15 days
46	2.3 Submit Bid Set PS&E		
47			
48	Task 3: Bid Support	Fri 11/27/20	0 days
49	3.1 Board Authorizes Bidding	Fri 12/11/20	45 days
50	3.2 Bid Period	Thu 2/11/21	0 days
51	3.3 SRSD Accepts Bids	Thu 2/11/21	5 days
52	3.4 Prepare Conform Set	Fri 2/26/21	10 days
53	3.5 Contractor Contract Issued		
54			
55	Task 4: Design Support During Construction	Fri 2/26/21	0 days
56	4.1 Board Awards Construction Contract	Fri 2/26/21	10 days
57	4.2 Pre-Construction Meeting	Fri 3/12/21	70 days
58	4.3 Construction Period for Sewer Imp	Fri 6/18/21	10 days
59	4.4 Punch List Walk for Sewer Imp		
60	4.5 Prepare Record Drawings	Thu 8/6/21	20 days


Third Street Sewer Rehabilitation Project--Lootens to Fourth Street/Miracle Mile C S W S T 2 SUMMARY OF FEE 11.11.2019 Billable Rate (\$/hour)										SubConsultants Miller Pacific			Total Hours	Total Fee
Task	CSW/ST2 Design Group Project Manager				CSW/ST2 Hours				Total Parisi-CSW Fee			Total Hours	Total Fee	
	Project Manager	Project Engineer	Staff Engineer	Survey Crew	Project Manager	Project Engineer	Staff Engineer	Survey Crew	Principal	Project Manager	Designer			
Task 1 Existing Conditions Assessment														
1.1 Project Kickoff	4	4												\$1,460
1.2 Data Collection and Field Review														
Data Collection	2	6	16											\$3,450
Site Reconnaissance	4	4												\$1,460
Flow Capacity Analysis	2	12	8											\$3,370
1.3 Geotechnical Investigations (MPC)														
1.4 Existing Conditions Mapping (CSW & Bess)	4	12	16	16										\$9,220
1.5 Basis of Design and Prelim Plan (35%)	12	45	45											\$15,510
1.6 Outreach	4	4												\$1,460
1.7 Prepare Project PS&E (65% and 95%)	30	80	160											\$39,750
1.8 Contract Management	30													\$6,150
Task 1 Existing Conditions Assessment Subtotal:	92	167	245	16										\$81,830
Task 2 Final Design														
2.1 Prepare Project PS&E (100%)														
2.2 Contract Management	12	24	40											\$11,500
Task 2 Final Design Subtotal:	12	24	40											\$11,500
Task 3 Bidding Support														
3.1 Bidding Support	4	4	4											\$1,980
Task 3 Bidding Support Subtotal:	4	4	4											\$1,980
Task 4 Design Support During Construction														
4.1 Preconstruction Meeting	2													\$410
4.2 Weekly Meetings		32												\$5,120
4.3 Contractor Change Orders	4	4												\$1,460
4.4 Review Submittals	12	10												\$4,060
4.5 Respond to RFIs	12	10												\$4,060
4.6 Site Visits	8													\$1,640
4.7 Punch List	2													\$410
4.8 Record Drawings	2	8												\$1,690
Task 4 Design Support During Construction	36	28	0	0										\$18,850
Total Labor:	180	251	289	16										\$114,160
Total Fee:														\$500
Reimbursable Expenses														\$500
										Percentage	0%			
										Total Cost	\$114,660	\$114,660		

4.b.

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 4.b.

DATE: November 22, 2019

TO: Board of Directors, San Rafael Sanitation District

FROM: Doris Toy, District Manager/District Engineer 

SUBJECT: Report on Proposals Received for Design and Construction Related Services for the Woodland Avenue Sewer Improvement Project and Adopt Resolution to Execute a Professional Services Agreement

RECOMMENDATION:

Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Schaaf & Wheeler for design and construction related services for the Woodland Avenue Sewer Improvement Project.

BACKGROUND:

The Woodland Avenue Sewer Improvement Project includes sewer facilities on B Street between First and Taylor streets, Woodland Avenue between B & Taylor streets and Warner Court, Woodland Place, and Octavia Street. They are residential streets that were built in the late 1940's. B Street has several commercial businesses, including Safeway and the City's Community Center and playground.

Woodland Place is very flat and is bound on the south by Woodland Avenue and on the north by the drainage channel, which parallels Albert Park Lane. The streets can become inundated during severe flooding events. In general, the floor elevations of most of the homes are 12 inches to 18 inches above the street level.

The homes on Woodland Place sewer to the back of their properties into a 6-inch sewer in a 5-foot utility easement on the west side of Woodland Place and into another 6-inch sewer in a 10-foot utility easement on the east side of Woodland Place. However, there are structures built on top of these easements. Both sewer pipes are in poor condition with offset joints, cracks, and root intrusions. They are also flat and shallow, approximately 2.5 feet deep, and hold standing water, which increases the chances of having sewer backups. Our maintenance crew cleans these lines up to six times a year, and they have found grease, grit, and black water, which results from standing water.

Wastewater from Woodland Place flows to a sewer main in Woodland Avenue, which runs east to Lindaro Street. Since this sewer main is shallow, the District proposes to reverse the direction of the flow to the west. In 1993, a study prepared for the District by Nute Engineering recommended that a deeper sewer be constructed in Woodland Avenue starting at Taylor and B streets in order to obtain a better depth and grade for a new sewer at both Woodland Place and Warner Court. Warner Court is the next street over to the east, perpendicular to Woodland Avenue. Please refer to the attached map.

On Warner Court, the original sewer mains were located behind the sidewalk in the front yards of the properties on both sides of the street; the pipe conditions were poor, similar to the ones at Woodland Place. The Woodland Avenue Sewer Improvement Project was originally planned to include Warner Court; however, the City was planning to repave the street in 2016. Thus, in 2015, the District installed an 8-inch PVC sewer pipe in the center of Warner Court at a deeper elevation, extended the lower portion of the laterals to the new pipe, and abandoned the two older sewers. Since the manhole at the intersection of Warner Court and Woodland Avenue is deeper in preparation of the future Woodland Avenue sewer flowing westerly, the wastewater from Warner Court currently collects in this manhole until the water level reaches the invert of the Woodland Avenue pipe. Since this produces odors, the maintenance crew has been pumping out the wastewater twice a week.

In June 2019, the District had a sewer overflow in front of 703 B Street. Wastewater was weeping out of the cracks in the pavement on B Street. Staff attempted to video the sewer main in order to find the source of the leak; however, they were unsuccessful since the camera was underwater. The video did show grease in the pipe. It appears this section of sewer is flat. There is a storm drain crossing the sewer, just downstream of this location, which may be the reason for the sewer being flat.

On Octavia Street, the sewer main is in poor condition and is shallow.

ANALYSIS:

The District sent a Request for Proposal (RFP) to a number of civil engineering firms. The work described in the RFP includes the design and preparation of construction contract documents and design support during construction of the new sewer in B Street, Woodland Place, Woodland Avenue, and Octavia Street. The work includes the following:

- Improve the pipe grade on B Street and replace the pipe to Taylor Street.
- Replace the sewer main on Woodland Avenue between Warner Court and B Street and redirect the sewer flow from Warner Court to B Street.
- Rehabilitate the sewer mainline on Octavia Street from C Street to Woodland Avenue.
- Install a new sewer mainline in the roadway in Woodland Place. The laterals from the buildings will need to be rerouted to the road (Woodland Place). The District will need to consider how the new laterals will be installed and funded, since the entire lateral is private. Because the lateral issue is complex and may take a significant amount of time to resolve with the District Board and property owners, the District would consider separating this into two phases. The first phase would be to install the new sewer main in the roadway and provide a lower sewer lateral stub for each property to connect in the future. The second phase would be to reroute the laterals from the buildings. Once all the buildings have reconnected to the sewer mainline in Woodland Place, it will allow the District to abandon the sewer main in the easements.
- Present to the District Board various alternatives for the installation of the new laterals and funding, i.e. who will design and install the new laterals and who will fund the laterals, etc.
- Assist the District with public outreach.

Proposals were received from CSW/Stuber-Stroeh, Nute Engineering, and Schaaf & Wheeler. All the consultants addressed and adequately analyzed the issues raised in the Request for Proposals. After a thoughtful and considerate review of the submitted information, staff

recommends that Schaaf & Wheeler (Santa Rosa) be selected as the firm to provide the engineering services.

Schaaf & Wheeler proposes to perform the design and construction related services on a time-and-materials basis, not to exceed \$237,213.00.

FISCAL IMPACT:

Schaaf & Wheeler's design and construction related services for the Woodland Avenue Sewer Improvement Project will be funded by the 80-Year Life Cycle Sewer Replacement Program from Fiscal Years 2019-20 and 2020-21.

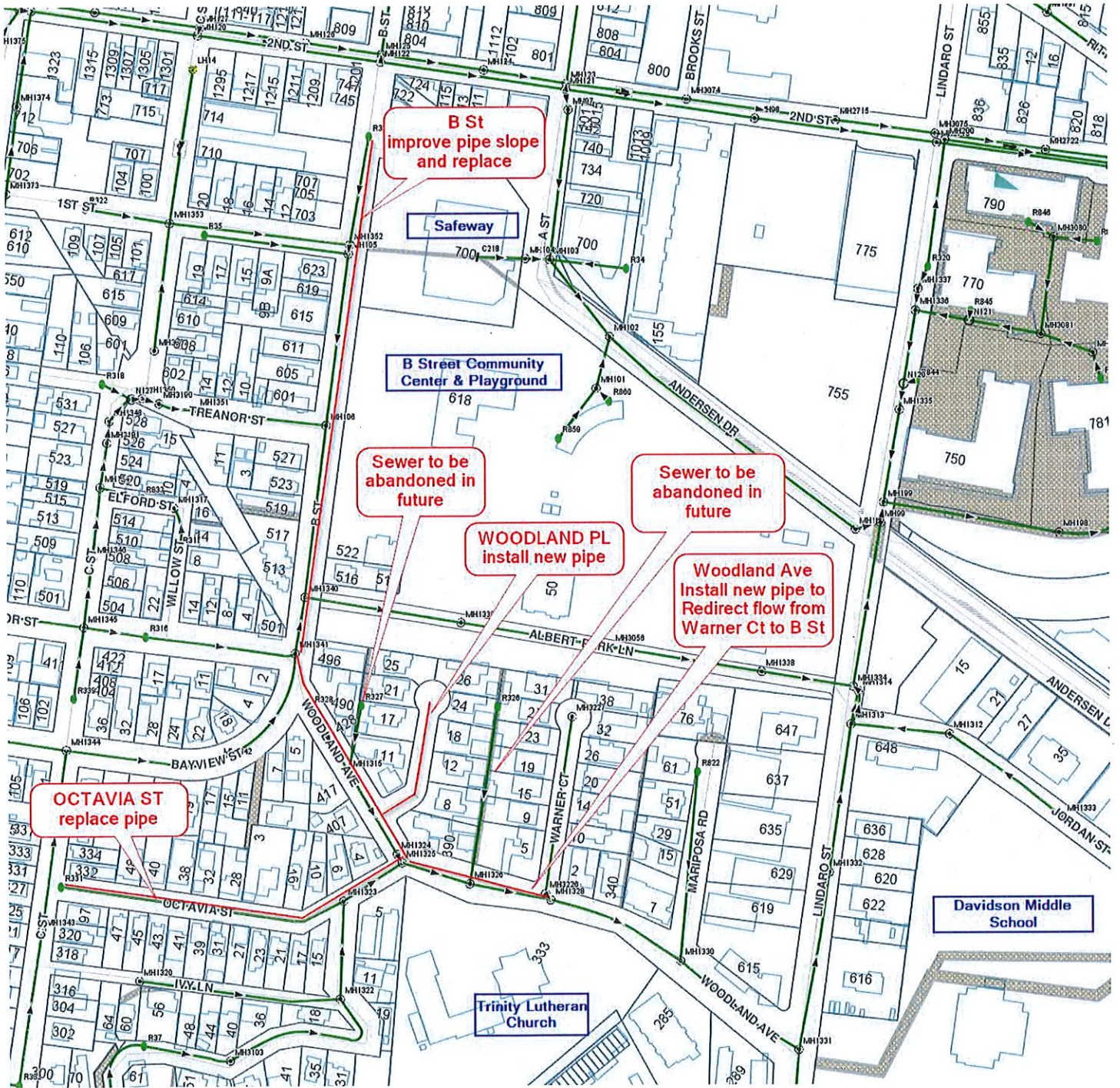
ACTION REQUIRED:

Staff recommends that the Board adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Schaaf & Wheeler for design and construction related services for the Woodland Avenue Sewer Improvement Project.

Attachments: Site Map
Resolution
Professional Services Agreement
Proposal from Consultant, Exhibit "A"

WOODLAND AVENUE SEWER IMPROVEMENT PROJECT

SITE MAP



SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 19-1197

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE SAN RAFAEL SANITATION DISTRICT
AUTHORIZING THE DISTRICT MANAGER/DISTRICT ENGINEER
TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT
WITH SCHAAF & WHEELER
FOR DESIGN AND CONSTRUCTION RELATED SERVICES
FOR THE WOODLAND AVENUE SEWER IMPROVEMENT PROJECT
FOR AN AMOUNT NOT TO EXCEED \$237,213**

**THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT,
COUNTY OF MARIN,** hereby resolves as follows:

The District Manager/District Engineer is hereby authorized to execute, on behalf of the San Rafael Sanitation District, a Professional Services Agreement with Schaaf & Wheeler for design and construction related services for the Woodland Avenue Sewer Improvement Project, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a regular meeting of the San Rafael Sanitation District Board of Directors held on the 22nd day of November, 2019, by the following vote, to wit:

AYES:

NOES:

ABSENT/ABSTAIN:

SAN RAFAEL SANITATION DISTRICT

Gary O. Phillips, Chair

ATTEST:

Maribeth Bushey, Secretary

**PROFESSIONAL SERVICES AGREEMENT
FOR DESIGN AND CONSTRUCTION RELATED SERVICES FOR THE
WOODLAND AVENUE SEWER IMPROVEMENT PROJECT**

This Agreement is made and entered into this 22nd day of November, 2019 by and between the SAN RAFAEL SANITATION DISTRICT [hereinafter "DISTRICT"], and SCHAAF & WHEELER (hereinafter "CONSULTANT").

RECITALS

WHEREAS, the DISTRICT has selected SCHAAF & WHEELER to perform the required engineering services for the **"Woodland Avenue Sewer Improvement Project"** (hereinafter **"PROJECT"**); and

WHEREAS, the CONSULTANT has offered to render certain specialized professional services in connection with this Project.

AGREEMENT

NOW, THEREFORE, the parties hereby agree as follows:

1. DEFINITIONS.

DISTRICT and CONSULTANT have outlined the scope of services to be provided, and related expenses as described in Exhibit "A" attached and incorporated herein.

2. PROJECT COORDINATION

A. DISTRICT. The District Manager/District Engineer shall be the representative of the DISTRICT for all purposes under this Agreement. The Senior Civil Engineer is hereby designated the PROJECT MANAGER for the DISTRICT, and said PROJECT MANAGER shall supervise all aspects of the progress and execution of this Agreement.

B. CONSULTANT. CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. Benjamin Shick is hereby designated as the PROJECT DIRECTOR for CONSULTANT. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute PROJECT DIRECTOR for any reason, the CONSULTANT shall notify the DISTRICT within ten (10) business days of the substitution.

3. DUTIES OF CONSULTANT

CONSULTANT shall perform the duties and/or provide services as follows: the CONSULTANT agrees to provide professional services as an Engineering Consultant to prepare work outlined in the Proposal from CONSULTANT dated November 13, 2019, marked Exhibit "A" attached hereto, and incorporated herein by this reference. CONSULTANT agrees to be available and perform the work specified in this Agreement in the time frame as specified and as shown in Exhibit "A".

4. DUTIES OF THE DISTRICT

DISTRICT shall perform the duties as described and incorporated herein.

5. COMPENSATION

For the full performance of the services described herein by CONSULTANT, DISTRICT shall pay CONSULTANT on a time and materials basis for services rendered in accordance with the rates shown on the current fee schedule as described in Exhibit "A" attached and incorporated herein. The total payment will not exceed \$237,213 as shown on the Proposal Budget, set out in Exhibit "A".

Payment will be made monthly upon receipt by PROJECT MANAGER of itemized invoices submitted by CONSULTANT.

6. TERM OF AGREEMENT

The term of this Agreement shall be from the date of execution until the Project is complete.

7. TERMINATION

A. Discretionary. Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. Cause. Either party may terminate this Agreement for cause upon ten (10) days written notice mailed or personally delivered to the other party, and the notified party's failure to cure or correct the cause of the termination notice, to the reasonable satisfaction of the party giving such notice, within thirty (30) days of the receipt of said notice.

C. Effect of Termination. Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other.

D. Return of Documents. Upon termination, any and all DISTRICT documents or materials provided to CONSULTANT and any and all of CONSULTANT's documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to DISTRICT as soon as possible, but not later than thirty (30) days after termination.

8. OWNERSHIP OF DOCUMENTS

The written documents and materials prepared by the CONSULTANT in connection with the performance of its duties under this Agreement, shall be the sole property of DISTRICT. DISTRICT may use said property for any purpose, including projects not contemplated by this Agreement.

9. INSPECTION AND AUDIT

Upon reasonable notice, CONSULTANT shall make available to DISTRICT, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with DISTRICT or its agent in any such audit or inspection.

10. ASSIGNABILITY

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

11. INSURANCE

A. During the term of this Agreement, CONSULTANT shall maintain, at no expense to DISTRICT, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence and \$2,000,000 aggregate for death, bodily injury, personal injury, or property damage;

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence;

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million (\$1,000,000) dollars to cover any claims arising out of the CONSULTANT's performance of services under this Agreement.

B. The insurance coverage required of the CONSULTANT by Section 11. A., shall also meet the following requirements:

1. The insurance shall be primary with respect to any insurance or coverage maintained by DISTRICT and shall not call upon DISTRICT's insurance or coverage for any contribution;

2. Except for professional liability insurance, the insurance policies shall be endorsed for contractual liability and personal injury;

3. Except for professional liability insurance, the insurance policies shall be specifically endorsed to include the DISTRICT, its officers, agents, and employees as additionally named insureds under the policies;

4. CONSULTANT shall provide to PROJECT MANAGER, (a) Certificates of Insurance evidencing the insurance coverage required herein, and (b) specific endorsements naming DISTRICT, its officers, agents and employees, as additional insureds under the policies;

5. The insurance policies shall provide that the insurance carrier shall not cancel, terminate or otherwise modify the terms and conditions of said insurance policies except upon thirty (30) days written notice to DISTRICT's PROJECT MANAGER;

6. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years;

7. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement;

8. The insurance shall be approved as to form and sufficiency by PROJECT MANAGER and the County Counsel.

C. If it employs any person, CONSULTANT shall maintain Worker's Compensation and Employer's Liability Insurance, as required by the State Labor Code and other applicable laws and regulations, and as necessary to protect both CONSULTANT and DISTRICT against all liability for injuries to CONSULTANT's officers and employees.

D. Any deductibles or self-insured retentions exceeding \$20,000 in CONSULTANT's insurance policies must be declared to and approved by the PROJECT MANAGER and the County Counsel. At DISTRICT's option, the deductibles or self-insured retentions with respect to DISTRICT shall be reduced or eliminated to DISTRICT's satisfaction, or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees and defense expenses.

12. INDEMNIFICATION

CONSULTANT shall indemnify, release, and hold harmless DISTRICT, its officers, and employees against any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney's fees, arising out of or resulting in any way from any negligent acts or omissions or negligence of CONSULTANT or CONSULTANT's officers, agents, and employees in the performance of their duties and obligations under this Agreement.

13. NONDISCRIMINATION

CONSULTANT shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

14. COMPLIANCE WITH ALL LAWS

CONSULTANT shall use due professional care to observe and comply with all applicable Federal, State and local laws, ordinances, codes, and regulations in the performance of its duties and obligations under this Agreement. CONSULTANT shall perform all services under this Agreement in accordance with these laws, ordinances, codes, and regulations.

15. NO THIRD PARTY BENEFICIARIES

DISTRICT and CONSULTANT do not intend, by any provision of this Agreement, to create in any third party, any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

16. NOTICES

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery, or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery, or if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO DISTRICT: Karen Chew, (Project Manager)
San Rafael Sanitation District
111 Morphew Street
San Rafael, CA 94915-1560

TO CONSULTANT: Benjamin Shick (Project Director)
Schaaf & Wheeler
2200 Range Ave., Ste. 201
Santa Rosa, CA 95403

17. INDEPENDENT CONSULTANT

For the purposes, and for the duration, of this Agreement, CONSULTANT, its officers, agents and employees shall act in the capacity of an Independent Consultant, and not as employees of the DISTRICT. CONSULTANT and DISTRICT expressly intend and agree that the status of CONSULTANT, its officers, agents and employees be that of an Independent Consultant and not that of an employee of DISTRICT.

18. ENTIRE AGREEMENT -- AMENDMENTS

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference, represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the CONSULTANT and the DISTRICT.

C. No other agreement, promise or statement, written or oral, relating to the subject matter of this Agreement, shall be valid or binding, except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the CONSULTANT and the DISTRICT.

E. If any conflicts arise between the terms and conditions of this Agreement, and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

19. SET-OFF AGAINST DEBTS

CONSULTANT agrees that DISTRICT may deduct from any payment due to CONSULTANT under this Agreement, any monies which CONSULTANT owes DISTRICT under any ordinance, agreement, contract or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks or other amounts.

20. WAIVERS

The waiver by either party of any breach or violation of any term, covenant or condition of this Agreement, or of any ordinance, law or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law or regulation, or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, covenant of this Agreement or any applicable law, ordinance or regulation.

21. CITY BUSINESS LICENSE/OTHER TAXES

CONSULTANT shall obtain and maintain during the duration of this Agreement, a CITY business license as required by the San Rafael Municipal Code. CONSULTANT shall pay any and all State and Federal taxes and any other applicable taxes. CONSULTANT's taxpayer identification number is 77-0061375, and CONSULTANT certifies under penalty of perjury that said taxpayer identification number is correct.

22. APPLICABLE LAW

The laws of the State of California shall govern this Agreement.

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

SAN RAFAEL SANITATION DISTRICT

CONSULTANT

Doris Toy, P.E.
District Manager/District Engineer

Schaaf & Wheeler

APPROVED AS TO FORM:

By: _____

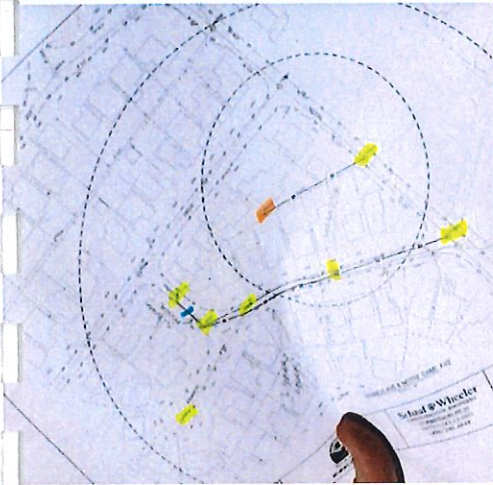
Jack F. Govi
Assistant County Counsel

Title: _____

EXHIBIT A



Proposal for San Rafael Sanitation District Engineering Design Services for WOODLAND AVENUE SEWER IMPROVEMENT PROJECT



November 13, 2019

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS



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Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

2200 Range Avenue, Ste. 201
Santa Rosa, CA 95403
707-528-4848
Fax 707-528-0248

November 13, 2019

Doris Toy
District Manager
San Rafael Sanitation District
111 Morpew Street
San Rafael, CA 94901

Subject: *Proposal for Engineering Design Services for Woodland Avenue Sewer Improvement Project*

Dear Doris Toy:

Schaaf & Wheeler is pleased to propose engineering design and construction support services for the Woodland Avenue Sewer Improvement Project to the San Rafael Sanitation District. We have studied the project parameters and are confident that our team can provide the District with cost-effective and constructible solutions that meet the District's goals and schedule.

Schaaf & Wheeler is a civil engineering firm that works exclusively on water related projects. Our extensive experience and a well-thought-out approach are the key to successfully completing the project within schedule and budget. Our team has provided assessment, design and construction support services for wastewater infrastructure to many public agencies throughout the Bay Area, including the Cities of Mill Valley, Corte Madera, Ross Valley Sanitary District, Belmont, San Mateo, Novato, Tiburon, Oakland, Morgan Hill, and Marin County.

We have assembled a team of specialists, each of whom is dedicated to providing a specific scope of service within their expertise through well-defined tasks, budgets, and schedules. The District will benefit from our team's experience with similar projects of realigning and re-routing sewer mains within residential neighborhoods.

Benjamin L. Shick, PE will be the project manager, he brings extensive experience leading sewer projects throughout the Bay Area. I will serve as the principal-in-charge and provide peer review and quality assurance. I bring more than 30 years of experience in water resource engineering services; I am authorized to bind the firm for any contracting negotiations. Understanding the need of the project we have included specialty subconsultants for geotechnical engineering, survey and mapping and potholing/utility locating.

Our team collectively has demonstrated expertise in sewer rehabilitation/replacement design, hydraulic modeling, geotechnical engineering, utility locating, survey and mapping, cost estimating, constructability review, bid and construction support to ensure workable designs with tightly controlled plans and specifications.

We welcome the opportunity to meet and review the proposed scope and fee to ensure they meet the needs and goals of the District. Should you need any further information or have any questions, please contact Ben Shick at Ph: (707) 528-4848 or bshick@swsv.com.

Sincerely,

Schaaf & Wheeler



Charles D. Anderson, PE
President



Project Understanding

Project Understanding

The Woodland Avenue Sewer Improvement Project includes pipe replacement, rehabilitation, adjusting pipe slope, and re-routing laterals along B Street, Woodland Avenue, Warner Court, Woodland Place, and Octavia Street. The existing sewer infrastructure is in poor condition, has flat slopes, and requires significant maintenance. The goal of the project is to:

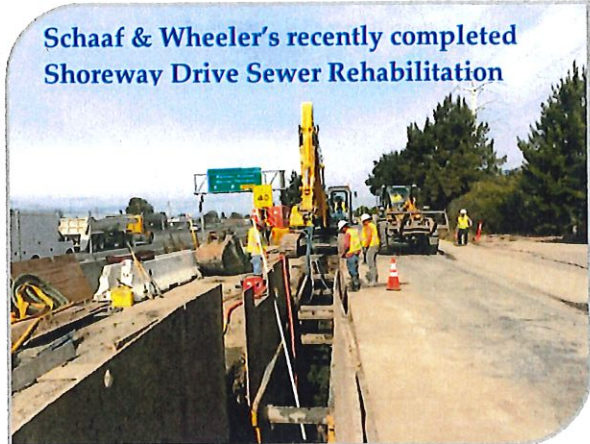
1. improve the pipe slopes to meet minimum velocity requirements,
2. improve the condition of the sewer infrastructure,
3. reduce infiltration, and eliminate the surcharging within the manhole at the intersection of Warner Court and Woodland Avenue by re-routing and adjusting the grade of the sewer main.

The project includes topographic surveying, utility investigations, geotechnical investigation, condition assessment, alternative evaluation, developing bid documents, and assisting the District throughout the bid and construction phases of the project.

Schaaf & Wheeler has identified the following key elements for a successful project:

- Existing utilities will need to be accurately identified to minimize the potential for utility conflicts and issues during construction. Schaaf & Wheeler will perform a detailed utility investigations during the preliminary design phase of the project. Utility potholing has been included as an optional task if deemed necessary to accurately identify the existing utility locations and depths.
- Schedule: The proposed schedule to commence construction in the summer of 2020 is feasible; however, it will be necessary to streamline the preliminary design phase and move into detailed design as soon as feasible. Schaaf & Wheeler will kickoff the project by immediately scheduling the topographic surveys and geotechnical investigations so the detailed design can proceed as soon as possible. Schaaf & Wheeler will obtain the preliminary topographic survey data immediately following the field work so the pipe alignments and slopes can be evaluated.

Schaaf & Wheeler's recently completed Shoreway Drive Sewer Rehabilitation



- ✓ located in an area of shallow Bay Mud,
- ✓ high ground water,
- ✓ congested utilities,
- ✓ heavy traffic, and parallels U.S. 101,
- ✓ undersized flat sloped sewer mains.

Project was successfully designed and constructed within budget and schedule.

The project resulted in significant long term savings

Two sewer mains were replaced with one larger and deeper sewer main

Key Elements for Completing the Project Successfully

- Accurate identification of existing utilities
- Streamlining the Preliminary Design Phase
- Close Coordination with the specialty subconsultants
- Efficient and timely public outreach
- Woodland Place Re-routing entails significant effort in
 - outreach
 - funding
 - alternative evaluation



- The project is within a residential and commercial neighborhood. Public outreach will be necessary to coordinate and notify residents and businesses of the impacts and expectations during construction.
- Woodland Place: Re-routing the sewer laterals for the homes along Woodland Place will require significant efforts to educate the homeowners, develop methods for funding the design and construction, identify sewer lateral locations, and to design the lateral re-route for each property. Schaaf & Wheeler has included the requested alternative evaluation, board presentation, and public outreach within the base scope of the project. The coordination and design of the lateral re-route for each property can be provided for an additional scope and fee upon request.



Detailed Approach and Work Plan

Project Approach

Schaaf & Wheeler's objective is to provide the District with cost-effective and constructible solutions that will mitigate existing issues with flat sewer mains, condition related issues, and reduce maintenance requirements. The proposed Schaaf & Wheeler team has successfully completed numerous sewer rehabilitation and replacement projects throughout the Bay Area.

Schaaf & Wheeler will facilitate a project kickoff meeting with the District and necessary stakeholders. The project goals, scope, budget, and schedule will be discussed to make sure everyone is on the same page. A data request list will be submitted to the District which will include all information that would be useful during the assessment and design.

Schaaf & Wheeler firmly believes that engaging all stakeholders including management, public relations, engineering, and operations & maintenance, early in the process is a great way to ensure all parties are on informed and everyone is working towards the same goal.

Schaaf & Wheeler's proposed approach for the design process is identified below:

1. **Kickoff Meeting** – Is used to get all stakeholders in the same room and work through key project elements including:
 - a. Project Goals – Capacity, Engineering Requirements, O&M Requirements, City standards
 - b. Project Constraints – Budget, schedule, physical site constraints, utility constraints and conflicts, traffic coordination
 - c. Project Expectations – Construction contract type, deliverables, project management/staffing, schedule
 - d. Site Visit – Document existing conditions, verify surveying basemap, identify existing utilities
2. **Preparation of Basis of Design Memorandum (35% Design)** – Is used to document design decisions and project information. The Basis of Design will serve as the starting point for detailed design and include discussions regarding project capacity, construction constraints and limitations, costs, schedule, and other key components for the design. Preliminary plan and profiles of the proposed sewer improvements will be included with the Basis of Design submittal.
3. **Detailed Design (65%, 95%, and Final Bid Documents)** – Each design submittal will be prepared and submitted as detailed in the scope of services below. Stakeholder input is critical at each submittal level to ensure that the project meets the District's expectations and goals. Schaaf & Wheeler will schedule and attend design review meetings with the District after each progress submittal.
4. **QA/QC Process** – Schaaf & Wheeler will perform an internal QA/QC review of each progress submittal prior to being submitted to the District. QA/QC staff will review all design documents, visit the site, and work with the project design team to identify and correct potential issues and conflicts.
5. **Bid and Construction Support** – Schaaf & Wheeler will stay actively involved with the project throughout the bid and construction phases as detailed in the scope of services below.

Schaaf & Wheeler's approach is further described in the Scope of Work below.



Scope of Work

Schaaf & Wheeler's proposed scope of work is included herein. This scope of services includes the design, bid, and construction support services for the following project elements and extents:

- Improve the pipe grade on B Street from 1st Street (north) to 1st Street (south)
- Consider replacing the rest of B Street pipe to Taylor Street (the evaluation and design is included within this scope of services)
- Replace the sewer main on Woodland Avenue between Warner Court and B Street; and redirect the sewer flow from Warner Court to B Street.
- Rehabilitate the sewer mainline on Octavia Street, from C Street to Woodland Avenue.
- Install a new sewer mainline in the roadway in Woodland Place.
 - Design of the new sewer main and lower laterals
 - Develop alternatives for the installation and funding of the upper lateral (from the building to the lower lateral extension), Present to the Board, Public Outreach, etc.
 - Coordination, investigations, and design of the upper lateral can be provided for an additional fee upon request.

Task 1: Project Management and Coordination

1. Schaaf & Wheeler shall be responsible for providing all contract management and quality control services throughout the duration of the project.
2. Kickoff Meeting: Schaaf & Wheeler will facilitate a project kickoff meeting with the District and necessary stakeholders. The project goals, scope, budget, and schedule will be discussed to make sure everyone is on the same page.
3. Schaaf & Wheeler will facilitate design review meetings with the District for each draft submittal (3 meetings).

Deliverables:

- Project Schedule and updates
- Meeting agendas and minutes for all design and coordination meetings

Task 2: Design

1. Utility Investigation, Topographic Surveying & Basemapping:
Schaaf & Wheeler's subconsultant, Kier & Wright will perform utility research, topographic surveying and base mapping for the project. Utility research will consist of contacting all franchise utility provider for their utility plans within the area of work. Design-level topographic surveying will be performed throughout the project limits. Survey will include spot elevations of the ground, curbs, sidewalks, fences, trees, utilities that are within the street Right of Way. The survey limits will be from back of walk to back of walk.
2. Geotechnical Investigations and Design Memorandum:
Based on our review of available geologic maps and previous reports, the site is not located within an Alquist-Priolo Earthquake Hazard Zone; however, the site is located in an area where liquefaction susceptibility is considered to be high to very high (ABAG, 2019). Based on our initial cursory review, historic high groundwater is anticipated to be at a depth of about 10 to 15 feet below existing site grades. In general, the site is underlain by man-made fill that is underlain by Holocene-aged alluvial soil deposits consisting of interbedded clay, silt, sand, and gravel underlain by Franciscan Formation bedrock. This scope of services was developed to evaluate the subsurface conditions and provide recommendations for utility trenching, support, and backfilling. Schaaf & Wheeler's subconsultant, Cornerstone Earth Group, will perform the following tasks to assist the design process:



- File review – Cornerstone will review select information available online and information available pertinent to the site conditions in the vicinity of the project. In addition, should prior site information be available, including geotechnical reports, subsurface information, grading information, test data, etc. will also be reviewed.
 - Health and Safety Plan – Cornerstone will prepare project-specific Health and Safety Plans (HSP) for the sites pertaining to the specific geotechnical on-site field activities. The HSPs will provide information including the proper personal safety equipment to be worn on-site, directions to the nearest public emergency room, and information for the key contact personnel involved in the project.
 - Exploratory Borings – Cornerstone will drill, log and sample two exploratory borings at the site using conventional truck-mounted hollow-stem auger drilling equipment. Three conventional borings will extend to approximately 20 to 30 feet.
 - Traffic Control - Traffic control will be necessary to perform the proposed subsurface exploration. Signage and a flagman will be provided to caution on-coming cars. Traffic control plans will be prepared and submitted to the District and/or City for review. This proposal includes two days of traffic control.
 - Utility Clearance - Underground Service Alert (USA) will be notified, and a private utility locator will be utilized to locate existing utilities prior to drilling.
 - Permits, Site Access and Disposal of Drill Spoils – The borings will be backfilled with cement grout in accordance with the County of Marin’s Environmental Health Services guidelines. Encroachment permits will be obtained from the City of San Rafael for the proposed subsurface explorations. It is assumed that there will be no fee for these permits. Spoils generated during drilling will be placed in 55-gallon drums, moved to a secure location near each site or to a location designated by the District, and analytically tested for off-site disposal. A subcontractor will transport the drums to an appropriate disposal facility. This proposal assumes up to four drums for disposal at a non-hazardous disposal facility.
 - Laboratory Testing - In-situ Moisture/Density tests, Grain Size Distribution tests, Atterberg Limit tests, One-Dimensional Consolidation, and Soil Corrosion tests will be performed on the soil samples.
 - Engineering Analysis and Report – Site excavation, backfill, and shoring recommendations and geotechnical design parameters for foundations, retaining structures and pavement areas will be developed. The data obtained from the field investigation and the laboratory testing program will be utilized in the engineering analysis. Following the completion of the engineering analysis, a report will be prepared with conclusions and recommendations. The consultant shall conduct all field, topographic and control surveys, prepare all preliminary geotechnical studies and reports, and complete all preliminary design calculations as necessary
3. 35% Design Submittal:
Schaaf & Wheeler will summarize the preliminary design, data review, CCTV inspection, and recommendations in a brief Basis of Design memorandum. The memorandum will provide recommendations for rehabilitation/replacement methods and will include preliminary estimates of probable construction costs. Preliminary plan and profiles of the proposed improvements will be included with the 35% design submittal. Schaaf & Wheeler will meet with the District to present and review the preliminary design recommendations.
4. 65% Design Submittal:
Schaaf & Wheeler will initiate the detailed design effort which will include project layouts of sewer lines, plan & profiles, construction details, technical specifications, construction cost estimate, and a construction schedule. Potential utility conflicts will be identified and if deemed necessary utility potholing can be performed as outlined in the optional tasks below.



Schaaf & Wheeler will facilitate a design review meeting with the District to present and review the 65% design documents.

5. 95% Design Submittal:

After receiving and reviewing comments from the District, Schaaf & Wheeler will prepare the 95% construction documents. Construction documents will include detailed plans, technical specifications, and engineer's estimates. Schaaf & Wheeler will also review and edit the District's front end documents.

Schaaf & Wheeler will facilitate a design review meeting with the District to present and review the 95% design documents.

6. Final Bid Documents:

After receiving and reviewing comments from the District, Schaaf & Wheeler will prepare the final construction documents. Construction documents will include bid-ready plans, technical specifications, front end documents, and engineer's estimates. Final plans shall be printed on 22"x34" paper and shall be complete with final signatures ready for reproduction.

- The plans shall be drawn using AutoCAD
- The schedule of items shall address all items of work as specifically as possible and shall indicate as precisely as possible the quantities.
- Schaaf & Wheeler will provide a cost estimate with each design submittal in the format of the schedule of bid items.

Deliverables:

- 35%, 65% and 95% PS&E submittals in both paper and electronic (Word, Excel, and pdf) format
- A letter report summarizing review comments and the resolution of the review comments
- Final bid documents in both paper and electronic format (AutoCAD, Word, Excel, and pdf) format

Task 3: District Board and Public Outreach Support

1. Schaaf & Wheeler will coordinate with the District and develop alternatives for methods of designing, funding, and constructing the lateral re-routes for each building along Woodland Place.
2. The consultant shall present to the District Board various alternatives in how to resolve the lateral issue on Woodland Place.
3. The consultant shall assist the District in communicating with the property owners at Woodland Place following the District Board's direction. This scope of services includes coordination with the District, development of mailings (letters, flyers, figures, etc.), and up to two community meetings to present and discuss the lateral issues on Woodland Place.

Deliverables:

- Presentation to the District Board, including material for agenda packet.
- Prepare letters for distribution to the property owners on Woodland Place.

Task 4: Final Bid Phase and Bid Phase Support

1. Schaaf & Wheeler will facilitate the pre-bid meeting, set the agenda and respond to questions concerning the plans, specifications, and estimates prior to bid opening and prepare contract addenda, if required.
2. Assist the District in coordinating and posting the bid package and addenda in an online advertising service.



3. Schaaf & Wheeler will review construction bids received, check references and make a recommendation to the District for award of construction contract.

Deliverables:

- Prepare contract addenda, if required, including answers to bidder's questions, for distribution by an online service.
- Prepare bid summary sheet and letter of recommendation to the District for the award of the construction contract.

Task 5: Design Support during Construction

1. Schaaf & Wheeler will attend the pre-construction conference to respond to questions concerning the plans, specifications and estimates
2. Schaaf & Wheeler will be available to be called to the site in response to questions arising from the progress of the work. This scope of services includes up to three (3) site visits during construction.
3. Schaaf & Wheeler will respond to Request for Informations (RFIs) from the contractor when called for by the District and prepare modifications or revisions that are related to the project's original scope and character. The District shall not be billed for nor shall they pay for any revisions to the plans and specifications that are required due to errors or omissions in the original contract documents
4. Schaaf & Wheeler will assist District staff in reviewing submittals from the contractor
5. Schaaf & Wheeler will assist the District in preparation of contract change orders, if necessary
6. Schaaf & Wheeler will attend weekly construction meetings and record the minutes. This scope of services includes attendance at up to 15 construction meetings. Additional meeting attendance can be provided for an additional fee if deemed necessary.
7. The consultant shall participate in the final walk though of the constructed project and assist in the preparation of "punch list" items in need of work
8. The consultant shall prepare record drawings following construction from mark ups by the contractor and the resident engineer. Submittal of record drawings shall be on 11"x17" and 22"x34" bond paper and electronic format.

Deliverables:

- Response to RFIs and Submittals from the contractor
- Modification or revisions that are related to the project original scope and character
- Contract change orders if necessary

Optional Tasks:

Optional Task A1: Utility Potholing

This optional task item provides utility investigations for up to 10 utilities within the street right-of-way. Schaaf & Wheeler's subconsultant Bess Testlab, Inc. will perform the identified potholing services.



Assumptions:

This scope of work and the associated fee estimate is prepared with the following assumptions.

- CCTV data for all of the existing sewer lines within the project limits will be provided by the District. Additional CCTV inspection can be performed for an additional fee if deemed necessary.
- The design and coordination of extensive utility relocations will not be required.
- This proposal specifically excludes the assessment of environmental characteristics at the site, particularly those involving hazardous substances.



Project Schedule

ID	Task Name	Duration	Start	Finish	Qtr. 1, 2020			Qtr. 2, 2020			Qtr. 3, 2020			Qtr. 4, 2020					
					E	B	M	E	B	M	E	B	M	E	B	M			
1	Project Kickoff Meeting	0 days	Mon 12/2/19	Mon 12/2/19															
2	Task 1. Project Management and Coordination	245 days	Mon 12/2/19	Fri 11/6/20															
3	Task 2: Design	10 days	Mon 12/2/19	Fri 12/13/19															
4	2.1: Utility Investigation, Topographic Surveying, and Basemapping	30 days	Mon 12/2/19	Fri 1/10/20															
5	2.2: Geotechnical Investigations and Design Memorandum	60 days	Mon 12/2/19	Fri 2/21/20															
6	2.3: 35% Design Submittal	20 days	Mon 12/23/19	Fri 1/17/20															
7	District Review 35% Submittal	10 days	Mon 1/20/20	Fri 1/31/20															
8	35% Design Review Meeting	0 days	Fri 1/31/20	Fri 1/31/20															
9	2.4: 65% Design Submittal	30 days	Mon 1/20/20	Fri 2/28/20															
10	District Review 65% Submittal	10 days	Mon 3/2/20	Fri 3/13/20															
11	65% Design Review Meeting	0 days	Fri 3/13/20	Fri 3/13/20															
12	2.5: 95% Design Submittal	25 days	Mon 3/2/20	Fri 4/3/20															
13	District Review 95% Submittal	10 days	Mon 4/6/20	Fri 4/17/20															
14	95% Design Review Meeting	0 days	Fri 4/17/20	Fri 4/17/20															
15	2.6: Final Design Documents	25 days	Mon 4/6/20	Fri 5/8/20															
16	Submit Final Design Documents	0 days	Fri 5/8/20	Fri 5/8/20															
17	Task 3: District Board and Public Outreach Support	60 days	Mon 3/16/20	Fri 6/5/20															
18	Task 4: Final Bid Phase and Bid Phase Support	30 days	Mon 6/8/20	Fri 7/17/20															
19	Task 5: Design Support during Construction	80 days	Mon 7/20/20	Fri 11/6/20															
20	Optional Task A1: Utility Potholing	20 days	Mon 2/3/20	Fri 2/28/20															



Level of Effort

Schaaf & Wheeler Level of Effort (Hours) November 13, 2019		PIC & Project Manager	Associate Engineer	Assistant Engineer	Cornerstone Earth Group - Geotechnical	Kier & Wright - Surveying	Bess Testlabs - Potholing	Total Hours
Task 1	Project Management	48	16	0	0	0	0	64
1.1	Project Management & QA/QC Reviews	40						40
1.2	Kickoff Meeting	2	4					6
1.3	Design Review Meetings (3 Meetings)	6	12					18
Task 2	Design	68	128	268	47	182	0	693
2.1	Utility Investigation, Topographic Surveying & Basemapping	6	8	16		182		212
2.2	Geotechnical Investigations and Design Memorandum	2	4		39			45
2.3	35% Design Submittal	12	16	40				68
2.4	65% Design Submittal	24	48	100	8			180
2.5	95% Design Submittal	16	32	80				128
2.6	Final Design Documents	8	20	32				60
Task 3	District Board and Public Outreach Support	24	28	72	0	0	0	124
3.1	Alternative Evaluation & Coordination	8	12	24				44
3.2	District Board Presentation	8		8				16
3.3	Community Outreach	8	16	40				64
Task 4	Final Bid Phase and Bid Phase Support	8	12	6	0	0	0	26
4.1	Bid Phase Support	4	6					10
4.2	Post Bid Package	2		6				8
4.3	Review Bids	2	6					8
Task 5	Design Support during Construction	36	68	44	0	0	0	148
5.1	Preconstruction conference	2	4					6
5.2	Site Visits During Construction (3)	6	6					12
5.3	Respond to RFIs	4		8				12
5.4	Submittal Review	4	16	24				44
5.5	Assist with Contract Change Orders	2	4					6
5.6	Weekly Meeting Attendance (15)	8	30					38
5.7	Final Walk Through and Punch List	6	8					14
5.8	Record Drawings	4		12				16
TOTAL DESIGN AND CONSTRUCTION TASKS		184	252	390	47	182	0	1,055

OPTIONAL TASKS								
Task A1	Utility Potholing	2	6	0	0	0	32	32
A	Utility Potholing	2	6				32	32
TOTAL DESIGN, CONSTRUCTION AND OPTIONAL TASKS		186	258	390	47	182	32	1,087



Firm Qualifications

About Schaaf & Wheeler

Firm Name	Schaaf & Wheeler CONSULTING CIVIL ENGINEERS
Project Manager	Benjamin L. Shick, PE Address: 2200 Range Ave., Ste. 201, Santa Rosa, CA 95403 Phone: (707) 528-4848 ; Fax: (707) 528-0248; Email: bshick@swsv.com
S&W Offices Other Offices	HQ - 1171 Homestead Rd., Ste. 255, Santa Clara, CA 95050 870 Market Street, Ste. 1278, San Francisco, CA, 94102 3 Quail Run Drive, Ste. 101, Salinas, CA 93907
Year of Establishment	1985 (34 years as a company)
Type of Organization	Corporation, Incorporated in California
Small Business Enterprise	State of California Certification No. 40527

Schaaf & Wheeler is a civil engineering firm focused in water resources. With over thirty years of commitment to solving flood control, stormwater, wastewater, potable water, and recycled water problems; Schaaf & Wheeler is recognized by public and private sector clients for its value-adding engineering. Certified as a small business enterprise by the State of California, Schaaf & Wheeler engineers operate from four locations: Santa Clara, San Francisco, Santa Rosa and Salinas.

Our Areas of Focus:

Schaaf & Wheeler has ten areas of focus within the water resources discipline.

- Waste water system master planning, engineering, and design of conveyance systems, including lift stations and pump stations;
- Potable water system master planning, modeling, engineering; and design of supply, storage, distribution systems, including tanks and booster stations;
- Storm water management and drainage services, including master planning, engineering, and design of urban storm drain systems and pump stations;
- Recycled water systems planning, engineering, and design; including reclamation feasibility studies and customer retrofits;
- Construction management, construction site observation, construction inspection services, value engineering, construction cost analysis, and constructability reviews;



We will serve the City from our Santa Rosa Office and the San Francisco Office

- *Schaaf & Wheeler focuses on Water Resources*
- *Currently completing projects in neighboring cities of Mill Valley and Corte Madera*
- *Specialize in Wastewater Infrastructure Condition Assessment and Design*
- *CIP Design and CS*



- Hydrology and hydraulics analyses, including site evaluations and modeling;
- Flood control analyses, including floodplain studies and channel design, filing of letters of map revision, and FEMA coordination;
- Watershed assessments, erosion and sediment control, and bioengineered channel stabilization;
- Water quality, including design or review of best management practices (BMPs) for storm water treatment and hydromodification flow control facilities;
- Program management, including management of subconsultants, containment of schedule and cost, and communications with client and stakeholders.

Our Subconsultant

Schaaf & Wheeler generally works with geotechnical engineers, surveyors, potholing/utility location subconsultants and CCTV technicians for specialty services.

Schaaf & Wheeler engineers have been working with each one of our proposed subconsultants for over a decade now and have a collaborative professional relationship. This proposed team has successfully completed several wastewater infrastructure design and construction support projects for public agencies throughout



Cornerstone Earth Group –

Geotechnical Engineering. Cornerstone Earth Group (CEG) integrates geotechnical engineering, environmental services, engineering geology, and construction services to facilitate cost-effective site selection, project design, and site development. Their staff includes registered civil and geotechnical engineers, registered geologists, certified engineering geologists, certified hydrogeologists, and registered environmental assessors. Cornerstone's principal geotechnical group has over 115 years of combined geotechnical experience, and has completed thousands of projects throughout the Bay Area and California. Their project experience includes the evaluation and design for repairs, upgrades and the installation of new utilities throughout California, including open cuts, bore and jack, microtunneling, direction drilling installation, and trenchless methods.

Understanding the subsurface conditions is critical to any utility project – ground water, caving soils, soft or wet clays, dense gravels, the presence of bedrock, or other conditions can significantly impact your choices regarding installation methods, techniques, timing, and planned costs.



Kier & Wright – Survey and Mapping. Kier & Wright Civil Engineers & Surveyors, Inc. (K&W) has been committed to providing both public and private sector clients with high-quality, cost-effective, efficient civil engineering and land surveying services since 1972. Services offered include street and highway design, municipal consultation, utility engineering and the preparation of civil engineering plans for residential, commercial and industrial site developments throughout the Bay Area and its

Cornerstone has completed several projects with Schaaf & Wheeler:

- *Kingridge Drive Sewer Evaluation & Design, City of San Mateo;*
- *El Camino Real Sanitary Sewer Rehabilitation, San Mateo; Marsten Road Pump Station, City of Burlingame;*
- *East San Mateo Sanitary Sewer Lift Stations Rehabilitation, San Mateo; and*
- *Sewer Rehabilitation Projects for City of San Mateo.*

Kier & Wright has been working with Schaaf & Wheeler engineers for more than 10 years to provide storm water, wastewater and potable water services for Bay Area municipalities.



surrounding regions. With over 70,000 field survey hours logged in 2015, Kier & Wright's field survey operation is the largest in the Northern California.

BTL **Bess Testlab, Inc. – Potholing/Utility Location.** Bess Testlab, Inc. (BTL), is a Bess Testlab Inc. CPUC certified MBE/DBE company that provides solutions to mitigate the underground utility related risks associated with the design and construction of civil infrastructure projects. These solutions include: Ground Penetrating Radar (GPR)/concrete scanning, underground utility location, and vacuum excavation. Their utility locating services are performed by certified professional technicians, utilizing state-of-the-art cable and pipe locators, pipeline current mappers, Ground Penetrating Radar (GPR) systems as well as 3-D mobile scanning (LiDAR) to designate and map underground utilities. In addition, a fleet of vacuum excavation (potholing) trucks to locate and determine visually the actual depth of underground utilities are also used. They have been providing a complete range of services in California, Arizona and Nevada. Their clientele includes Utility Companies, Cities, Counties, Municipalities and Military Installations, Contractors, Consulting and Engineering firms. Their typical services include: Utility Locating – State of the art electromagnetic pipe locators designate and mark out utilities; Ground Penetrating Radar – Latest techniques utilized in location of subsurface metallic and non-metallic objects; and Potholing – Non-destructive air-vacuum excavation exposing utilities being surveyed to determine their exact depth and location.

Bess TestLabs provided potholing and utility locating services to Schaaf & Wheeler for:

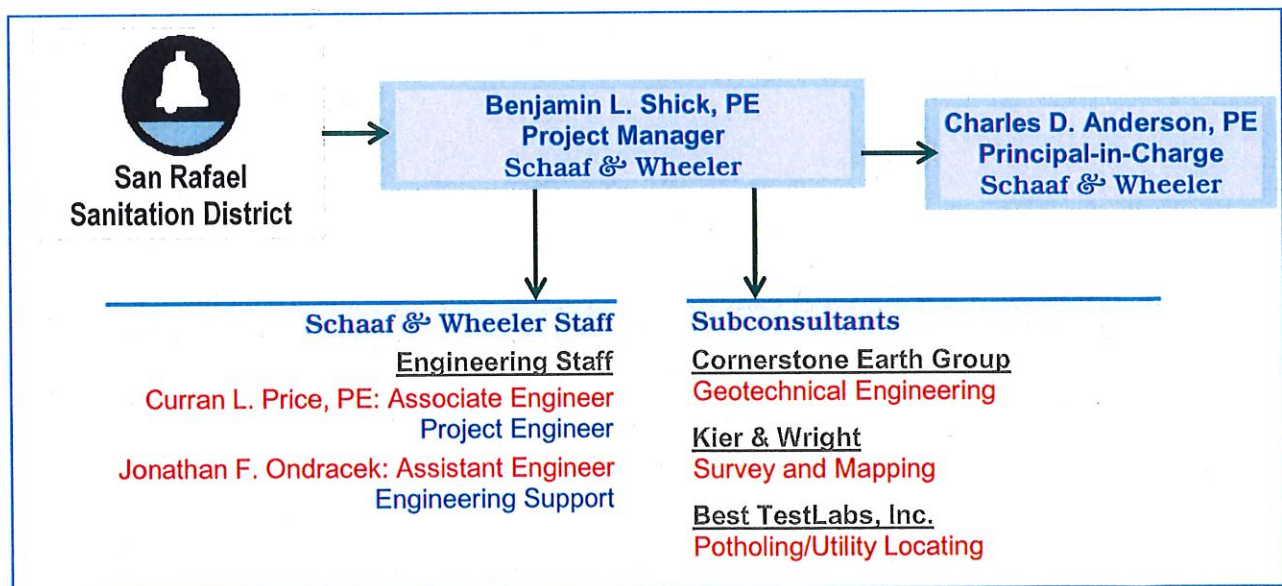
- *City of Mountain View Leong Drive Sewer and Water Main Project*
- *City of Belmont Sewer and Water Main Replacement Project.*

The proposed Schaaf & Wheeler team organization chart is shown below:

Team Organization

We have put together a dedicated team for the San Rafael Sanitation District. The team will be led by Ben Shick, who has over 17 years of experience.

Organization Chart





Schaaf & Wheeler's Experience in Wastewater Infrastructure Planning, Design and Construction Support

Wastewater – Sewer Design - The table and the map figure below present Schaaf & Wheeler experience in sewer replacement/rehabilitation, trunk alignment study and design, inspection, trenchless technology, CIPPs, siphon design and condition assessment, surveying and mapping, and constructability review to ensure workable designs with tightly controlled plans and specifications.

Schaaf & Wheeler Experience in Design of Wastewater Infrastructure

Project	Client	Services Provided								
		Detailed Assessment	Detailed Design	Project Prioritization	Trenchless Design	CIPP	Construction Plans	Engineering Estimates	Bid Support	Construction Support
Sanitary Sewer Assessment and Repair Design and CS	City of Mill Valley	•	•	•	•	•	•	•	•	•
Harbor Drive Sewer Rehabilitation Design and CS, CIP Project #18-201	Town of Corte Madera	•	•	•			•	•	•	•
El Camino Real Sanitary Sewer Rehabilitation Design and CS	City of San Mateo	•	•	•	•	•	•	•	•	•
Leong Drive Sanitary Sewer Design and CS	City of Mountain View	•	•	•		•	•	•	•	•
Pump Station Q Force Main Reverse Flow Project	East Bay Municipal Utility District		•	•			•	•	•	•
Force Main Appurtenance Projects	Ross Valley Sanitary District	•	•	•			•	•	•	•
Sewer and Water Replacement Design and CS	City of Belmont and Mid-Peninsula Water District	•	•	•		•	•	•	•	•
Shoreway Sewer Replacement Design and CS	City of Belmont	•	•	•			•	•	•	•
Sanitary Sewer Main Rehabilitation Assessment & Design	City of San Mateo	•	•	•	•	•	•	•	•	•
Force Main Appurtenance Design	Ross Valley Sanitary District	•	•				•	•	•	•
Shoreline Sewage PS Assessment & Trunk Sewer Alignment Study	City of Mountain View	•		•	•			•		
El Camino Real Sanitary Sewer Improvement and the Calabazas Creek Sewer Siphon Design	BRE Properties & City of Santa Clara	•	•		•	•	•	•	•	•
Cabrillo Ave. Sewer Replacement Design and CS	City of Santa Clara	•	•				•	•	•	•
Belmont Sewer Rehabilitation Design and CS	City of Belmont	•	•	•	•	•	•	•	•	•
Kingridge Sanitary Sewer Line Improvements Design and CS	City of San Mateo	•	•	•	•	•	•	•	•	•
South Trunk Sanitary Sewer Relief Design	City of San Mateo	•	•	•	•	•	•	•	•	•
Morgan Hill Trunk Sewer #2 Design	City of Morgan Hill	•	•	•	•		•	•	•	•

The map on the following page presents Schaaf and Wheeler's similar experience. Our engineers have provided wastewater planning, design and construction support services to several cities of comparable size

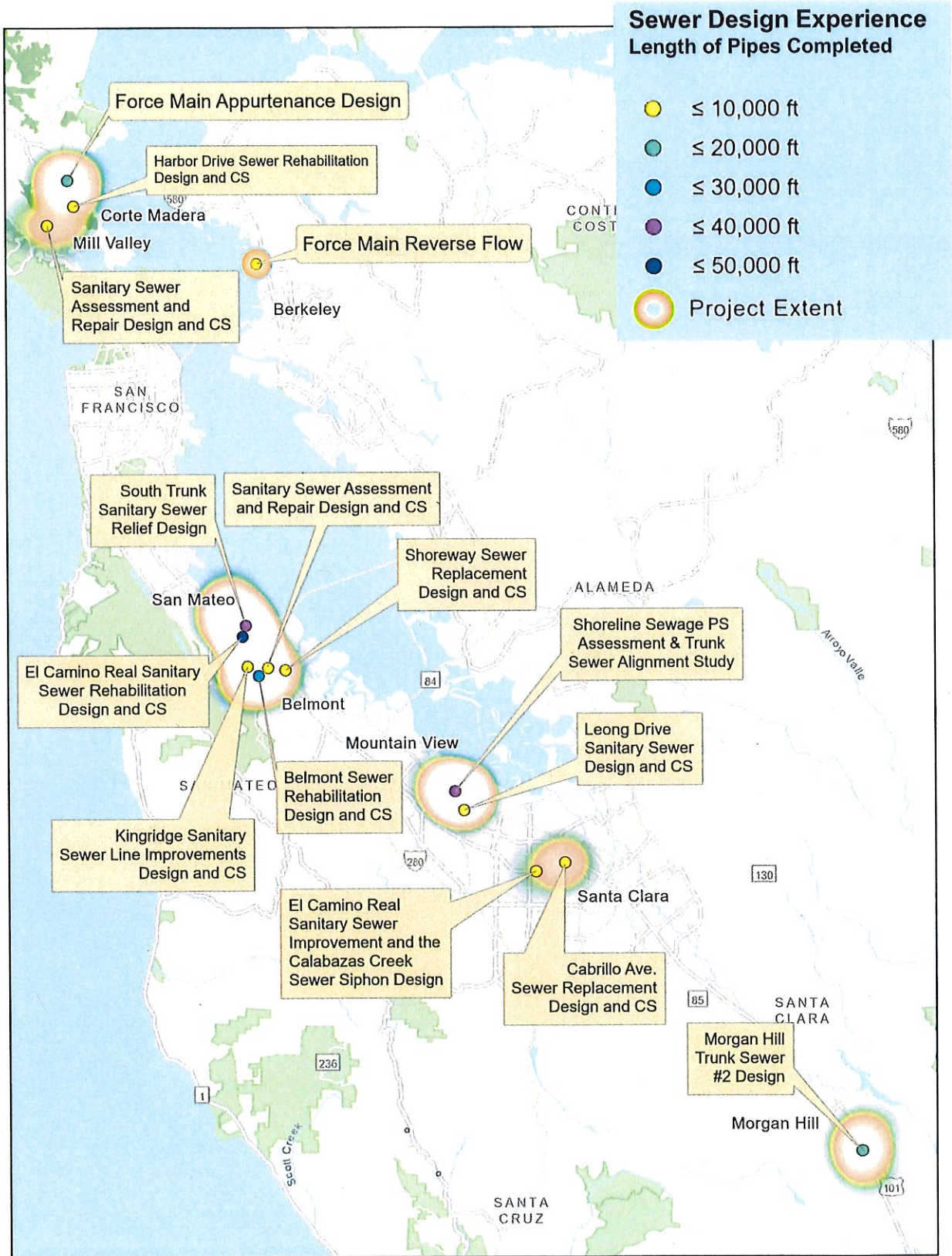


and geophysical nature. Schaaf & Wheeler is currently under contract with the City of Mill Valley for the 2019 Sewer Repair Project and the Town of Corte Madera, Sanitary District No. 2 for Harbor Drive Sewer Rehabilitation.

Ben Shick is the project manager for these sewer repair projects. In the past, our proposed project manager (Ben Shick) provided wastewater pump stations assessment and force main design services to the Ross Valley Sanitary District. He is currently providing sewer rehabilitation and replacement services to the Cities of Belmont, San Mateo, and Morgan Hill. The projects in Belmont and San Mateo are very similar in nature; with sagging sewer mains located in areas with poor soils (Bay Mud) and within residential neighborhoods.

Our engineers continue to provide wastewater resource infrastructure design and construction support services in San Francisco Bay Area. The map above shows a few similar exemplary projects only.

Our Experience with City of San Rafael: Los Gamos Drainage Study, City of San Rafael (2018) - The City of San Rafael has experienced drainage issues at the intersection of Los Gamos Drive and Oleander Drive. This intersection is low lying and drains through City and Caltrans easements to an outfall on Gallinas Creek. Schaaf & Wheeler developed a hydraulic model and evaluated the system to identify hydraulic restrictions and provide recommendations to reduce or eliminate the drainage issues. The analysis provides drainage improvements to the Los Gamos and Oleander intersection without impacting other sections of the system.





Relevant Projects with References

Relevant Projects with References

Sanitary Sewer Rehabilitation Projects for City of Belmont 2015, 2016 and 2017

Client and Contact:

Bozhena Palatnik
Associate Civil Engineer
Department of Public Works
City of Belmont
1 Twin Pines Lane
Belmont, CA 94002
Ph: 650.595.7463
bpalatnik@belmont.gov

Services Provided:

- Sewer main rehabilitation and replacement
- pipe bursting
- open trench excavation
- CIPP lining

Contract Value:

2015 - \$567,000;
2016 - \$456,961;
2017 - \$194,000

Team Members:

Benjamin L. Shick, PE
Curran L. Price, PE
Glen M. Anderson, PE

The City of Belmont selected Schaaf & Wheeler to evaluate, prioritize, and design the rehabilitation and replacement of their high priority gravity sewer lines throughout the City. The 2015 Sewer Rehabilitation project consisted of the replacement and rehabilitation of approximately 2.5 miles of gravity sewer lines and associated manholes. Schaaf & Wheeler's team provided detailed utility investigations, potholing, and sewer modeling services.

Subsequently the City requested to have Schaaf & Wheeler continue the efforts to prepare design documents for the 2016 sewer rehabilitation project which consists of evaluating and preparing design documents for approximately 5 miles of gravity sewer lines located throughout the City in back yard easements and in City streets.

Construction methods include pipe bursting, open trench excavation, and CIPP lining. Schaaf & Wheeler also applied for and obtained two separate Caltrans Encroachment Permits for sewer main and manhole work within El Camino Real.

The 2017 sewer rehabilitation projects include 2.5 miles of sewer rehabilitation throughout the City, mostly in tightly congested areas and in backyard easements. Construction methods include pipe bursting, open trench excavation, and CIPP lining. A large portion of the sewer mains included within the City of Belmont sewer rehabilitation projects are located within backyard and side yard easements with difficult access and easement issues.

Construction Cost: \$1,530,000 (2015 Project), \$1,954,215 (2016 Project), \$3,243,000 (2017 Project)





Sewer Design Services for City of San Mateo, 2008 – Present

Client and Contact:

Jimmy Vo, PE
City of San Mateo
Department of Public
Works
330 West 20th Avenue
San Mateo, CA 94403
Ph: 650- 522-7300
jvo@cityofsanmateo.org

Contract Value:

~\$1,000,000

Services Provided:

- Sanitary sewer main rehabilitation and replacement
- Pump station assessment, analysis, design and CS
- Storm drain rehabilitation and replacement
- Storm Drain Master Plan and modeling support
- FEMA analysis and CLOMR/LOMR
- Construction support services

Team Members:

Benjamin L. Shick, PE
Charles D. Anderson, PE
Glen M. Anderson, PE
Emily D. Straley, PE
Logan N. Fox, PE

El Camino Real Sanitary Sewer Rehabilitation, 2017 – 2018.
Contract Value: \$500,000.

The project includes addressing all of the City's condition related deficiencies along the El Camino Real corridor. Schaaf & Wheeler reviewed and evaluated the condition of all of the City's sanitary sewer pipes within and adjacent to El Camino Real and developed a recommended improvement project to address all significant condition related issues. Subsequently Schaaf & Wheeler designed the rehabilitation and replacement of 10,050 LF of pipe and the rehabilitation and replacement of 110 manholes. Rehabilitation methods were primarily cured-in-place pipe; however, pipe bursting and open trench replacement methods were also used.

Construction Cost: \$3,100,000 (estimated)

Sanitary Sewer Rehabilitation Projects, 2015 – Present.

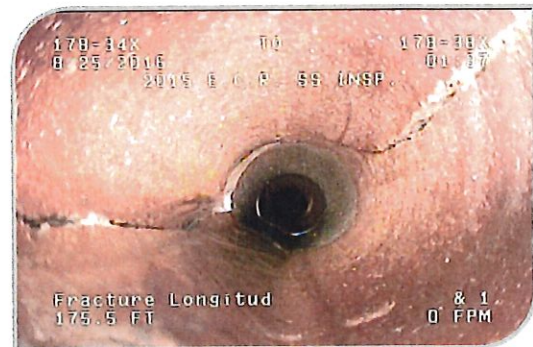
Contract Value: \$191,000. The project includes 6", 8", and 12" of 4,000+ LF of sanitary sewer rehabilitation. Schaaf & Wheeler completed site investigations, inspections, researched existing data, and developed recommended alternatives for various sewer rehabilitation projects within the City of San Mateo. The work included geotechnical investigations, easement research, topographical surveying, and environmental permitting. S&W also assisted with environmental permitting and Caltrans E.P.

Construction Cost: \$743,860; Construction Dates: June 2018 – October 2018.

Kingridge Sanitary Sewer Line Rehabilitation and Replacement, 2016, Contract Value: \$927,673.

The improvement project rehabilitated and replaced the 6-inch sanitary sewer main located within a 10-foot utility easement

in a steeply-sloped and wooded canyon behind homes on Kingridge Drive. The City has experienced very high maintenance issues with the sewer pipe and due to several operational issues, the RWQCB issued a Cease and Desist Order requiring immediate action.





The selected improvement alternative included slope stabilization, access improvements, pipe replacement, pipe rehabilitation with cured-in-place pipe (CIPP), pipe placed on structural supports, and various drainage improvements. Limited site access required the use of specialty construction methods and materials. The project also included close coordination with subconsultants for environmental permitting and mitigation, geotechnical/geological investigation, surveying, and structural design. Access to the sewer line required entry through private property. Schaaf & Wheeler worked with the City to develop and implement a project outreach program for the design and construction phases of the project. The public outreach aimed to engage residents throughout the project duration, providing transparency and a collaborative atmosphere.

Construction Cost: \$2,594,986 (All 3 Phases); Construction Dates: April 2016 – October 2016.

Shoreway Sewer Design for City of Belmont, 2017

Client and Contact:

Bozhena Palatnik
Associate Civil Engineer
Department of Public Works
City of Belmont
1 Twin Pines Lane
Belmont, CA 94002
Ph: 650.595.7463
bpalatnik@belmont.gov

Contract Value:

\$129,000

Construction Cost (2018):

\$1,857,000

**The design was completed in
time and budget.**

Team Members:

Benjamin L. Shick, PE
Curran L. Price, PE
Jonathan F. Ondracek

Schaaf & Wheeler assisted the City of Belmont with the assessment of the feasibility of eliminating the existing sanitary sewer pump station along Shoreway Drive by installing a new deeper gravity sewer main. The feasibility analysis included detailed topographic surveying, geotechnical investigations, detailed utility investigations, sewer system modeling, and alternative evaluation. The alternative of constructing a new 13 foot deep 15" PVC sewer main, demolishing and removing the existing sewer pump station, and re-routing all sewer laterals was selected as the most feasible and economical solution. Subsequently Schaaf & Wheeler developed detailed construction documents for the design and provided bid and construction support services.

Shoreway Drive is located in an area of shallow Bay Mud, high ground water, congested utilities, heavy traffic, and it parallels U.S. 101. Schaaf & Wheeler developed detailed construction documents identifying the existing conditions and requirements for excavation, trenching, shoring, dewatering, and backfilling.

The shoreway sewer project was successfully designed and constructed within budget and schedule. The project resulted in significant long term savings by eliminating an existing sewer pump station and reducing the operation and maintenance of the previously undersized flat sloped sewer mains (two sewer mains were replaced with one larger and deeper sewer main).





Mid-Peninsula Water District/City of Belmont Sewer and Water Main Replacement, 2017

Client and Contact:

Rene A. Ramirez
Operations Manager
3 Dairy Lane
Belmont, CA 94002
(650) 591-8941 office
rramirez@midpeninsulawater.org

Contract Value: \$176,000

Construction Cost:
\$ 2,638,000

Key Personnel:

Benjamin L. Shick, PE
Curran L. Price, PE
Jonathan F. Ondracek, EIT



Schaaf & Wheeler recently contracted with the Mid-Peninsula Water District and the City of Belmont to design a joint capital improvement project for the water and sewer mains along Davey Glen Road, Francis Avenue and Academy Avenue. The project consists of replacing the water mains, service lines and meters per the District's identified capital improvement projects and rehabilitating and replacing the sewer mains to address condition issues with the sewer mains. The project also includes additional street improvements. This project required close coordination and approval with multiple agencies including the City of Belmont, the Mid-Peninsula Water District, the Fire Marshal, Caltrans, and private developers. Schaaf & Wheeler prepared, submitted, and obtained a Caltrans Encroachment Permit for the work along El Camino Real.

El Camino Real Sanitary Sewer Improvement Project and the Calabazas Creek Sewer Siphon Design Projects for City of Santa Clara, 2006 – 2009

Client and Contact:

City of Santa Clara
Falguni Amin, PE
Acting Principal Engineer,
Design Division
Engineering Department
1500 Warburton Ave.
Santa Clara, CA 95050
Ph: 408.615.3015
FAmin@santaclaraca.gov

Contract Value: \$480,520

Construction Cost: \$1,316,998

Key Personnel:

Benjamin L. Shick, PE
Glen M. Anderson, PE



The El Camino Real Sewer Replacement Project included the design of 2,600 feet of parallel sewer line in El Camino Real from Flora Vista Avenue to Calabazas Boulevard. The project also included a separate design plan set for a replacement sewer siphon with dual pipes under Calabazas Creek as part of a Santa Clara Valley Water District channel improvement project. The project also included cured-in-place pipe (CIPP) lining of 2,600 feet of parallel collector sewer and reconstruction of existing lateral connections. Schaaf & Wheeler designed the relocation of existing water mains, storm drains, sewer laterals, and traffic signals to accommodate the new sewer mains. Schaaf & Wheeler coordinated and obtained a Caltrans encroachment permit for the project, which included development of traffic control plans.

Schaaf & Wheeler worked with the City to identify design criteria, capacity requirements, design flow depths, roughness, pipe material, manholes, alignment, and connections to the existing trunk and collection system. Schaaf & Wheeler prepared construction documents for the sewer replacement and coordinated with underground utilities (gas, electrical, telephone and cable). Our engineers worked with subconsultants who provided surveying and mapping; produced the geotechnical subsurface assessment, and created traffic control plans for construction within the state highway.



Cabrillo Avenue Sewer Replacement Project, City of Santa Clara, 2013 - 2014

Client and Contact:

Falguni Amin, PE
Acting Principal Engineer,
Design Division
Engineering Department
City of Santa Clara
Ph: 408.615.3015
FAmin@santaclaraca.gov

Construction Cost: \$ 988,000.

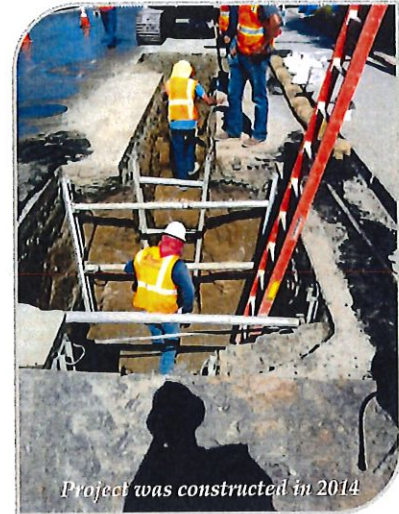
Key Personnel:

Benjamin L. Shick, PE
Glen M. Anderson, PE

Contract Value: \$104,793

The City owned and maintained a 12-inch sewer line that ran in a utility easement through residential parcels. As such, the City couldn't access the line for maintenance, inspection and cleaning. The Cabrillo Avenue Sewer Replacement Project installed a new 12-inch sewer line in Cabrillo Ave to replace the existing sewer line.

Schaaf & Wheeler designed the replacement sewer pipe, located within Cabrillo Avenue, running parallel to the existing sewer line. Design included plan and profile of a new 12-inch PVC sewer main, associated manholes; and lateral connections. Due to congested utility corridors along the project alignment, an inverted siphon was required to cross under an existing 24-inch storm drain line. The siphon consists of two 8-inch barrels, inlet structures, outlet structures, and an air jumper. In addition to the 12-inch mainline, Schaaf & Wheeler designed the replacement of several smaller sewer and storm drain lines necessary to facilitate the installation of the new sewer mainline.





Staffing Plan

Project Manager

Benjamin L. Shick, PE - Project Manager

Our Project Manager has necessary experience - Our results-oriented team for the San Rafael Sanitation District is under the strong leadership of **Benjamin L. Shick, P.E. Ben has more than 17 years of experience** in infrastructure planning and design of waste water conveyance systems, pump stations, water supply and distribution systems and stormwater systems. These projects have involved construction methods including pipe bursting, pipe reaming, horizontal directional drilling (HDD), open trench excavation, and CIPP lining.

Is an accomplished Project Manager – Benjamin L. Shick, PE is a vice president and an owner at Schaaf & Wheeler. He will be the **Project Manager** and provide his expertise in alternative analyses, design and construction support for the Woodland Avenue Sewer Improvement Project. Ben has served as project manager and project engineer of gravity sewers, forcemains, sewage lift stations, stormwater pumping stations, floodplain investigation, shoreline protection studies, drainage studies, channel design and modeling, water rights permitting, wetland analysis and design, small bridge design for public agencies throughout the Bay Area. His management skills in every phase of the project - from feasibility study to construction documentation and construction support – help complete the projects within schedule and budget.

Ben's sewer rehabilitation/replacement projects generally include siphon rehabilitation and replacement, manhole rehabilitation and replacement, pipe replacement, pipe rehabilitation with cured-in-place pipe (CIPP), pipe placed on structural supports, etc. Ben is proficient in water resources modeling tools: AutoCAD, WaterCAD, HEC-RAS, HEC-HMS, GeoRAS, MOUSE, and ArcGIS 9.0. Some of his recent sanitary sewer projects are:

- ✓ Harbor Drive Sewer Rehabilitation Design and CS, CIP Project #18-201, Town of Corte Madera
- ✓ 2019 Sewer Repair Project – City of Mill Valley
- ✓ Belmont Sewer and Water Main Replacement - Mid-Peninsula Water District
- ✓ El Camino Real Sanitary Sewer Rehabilitation - City of San Mateo
- ✓ Sanitary Sewer Rehabilitation and Replacement Rehabilitation Projects – City of Belmont
- ✓ Sanitary Sewer Rehabilitation Project – City of San Mateo
- ✓ Force Main Appurtenance Projects – Ross Valley Sanitary District
- ✓ Cabrillo Avenue Sewer Main Abandonment and Replacement – City of Santa Clara
- ✓ El Camino Real Sanitary Sewer/Water Improvement Project – BRE Properties/City of Santa Clara
- ✓ Kingridge Sanitary Sewer Improvement Project – City of San Mateo
- ✓ Assessment & Design of Multiple Sanitary Sewer Pump Stations - City of San Mateo
- ✓ Design of Sanitary Sewer Pump Stations Improvements - City of Oakland
- ✓ Sanitary Sewer Pump Station Evaluation and Design – Town of Hillsborough
- ✓ Rehabilitation and Replacement of 6 Sanitary Sewer Pump Stations – City of Fontana
- ✓ Rehabilitation and Replacement Design of 32 Sanitary Sewer Pump Station – City of Alameda

Total Years of Experience: 17

Years with Firm: 16+

Education

BSCE, Montana State University-Bozeman

MSCE, Montana State University-Bozeman

Licenses/ Registrations

Registered Civil Engineer
California C68813

Affiliations

American Society of Civil Engineers

Completed projects with construction methods including:

- pipe bursting,
- pipe reaming,
- horizontal directional drilling (HDD),
- open trench excavation, and
- CIPP lining.



Ben has in-depth experience in cost control and optimizing resources to complete projects within schedule and budget. He will be responsible for day-to-day project management and design oversight for the entire length of the project. Ben will hold regular team meetings to make sure issues are resolved effectively and to allocate resources to critical tasks. He will work closely with the District staff to make sure contractual and procedural issues are identified and resolved.

Other Key Personnel

Charles D. Anderson, P.E. – Principal-in-Charge and Quality Control and Quality Assurance - Chuck is the president and an owner of Schaaf & Wheeler. He will provide expert peer review and QA/QC for the project. He brings 30 years of experience encompassing the areas of wastewater collection and pumping, stormwater collection and pumping, water supply and distribution, flood mapping and protection design, tide gate structures, FEMA requirements, sea level rise assessment, and groundwater and surface water hydrology. Chuck has led numerous multidisciplinary project teams to deliver responsibly and responsibly from concept verification to design and construction. He has managed two large award winning levee projects for the City of Foster City and San Mateo. He has interacted often with FEMA, having completed numerous flood insurance studies (FIS) and letters of map revision (LOMRs) on behalf of public and private clients. His management skills in every phase of the project - from feasibility studies to construction document preparation and construction support - help complete projects within schedule and budget. Chuck has completed the design of more than 40 stormwater and wastewater pump stations.

Curran L. Price, P.E. – Project Engineer – Curran is an associate engineer at Schaaf & Wheeler. He brings forth 11 years of in-depth experience in infrastructure design including sewer rehabilitation, wastewater facilities, water and recycled water pipelines, flood protection, shoring systems, bridges, buildings, transportation, and slope stabilization projects. Curran has been involved with all phases from project conception to document preparation and construction support. He has completed the design of over 50 constructed projects. Curran is adept at preparing plans and specifications, performing calculations, cost estimates, and site inspections. He was Project Engineer for the 2015-2016 sewer rehabilitation projects for City of San Mateo. Currently, Curran Price is working on the design of 5 miles of sewer main rehabilitation for the City of Belmont, sanitary sewer pump station upgrades for the City of Half Moon Bay, Hillsborough, and Alameda. Curran is NASSCO PACP, MACP and LACP certified, Certificate #U-815-07000537.

Jonathan Ondracek – Project Engineer - Jonathan is an assistant engineer at Schaaf & Wheeler. He has experience in modeling and design for wastewater and stormwater infrastructure projects. He is proficient in running hydraulic models to solve drainage issues and conduct level surveys for small design projects. He is experienced at developing wastewater and stormwater projects from conception to completion. His projects have generally included design of bioretention systems and design of new storm sewer to alleviate drainage concerns. He has experience managing consultants for large-scale multidisciplinary projects during the design and construction phases. His modeling and design software skills include AutoCAD Civil3d, AutoCAD LT, EPASWMM 5, Mike Urban, and ArcGIS. Jonathan has worked with Ben and Curran on the Belmont and San Mateo sewer rehabilitation projects.



The table below presents our entire team's role, experience and qualifications.

Schaaf & Wheeler Team Experience, Qualifications and Role

Name	Role with Availability	Years of Exp.	Licenses, Certifications and Education
Benjamin L. Shick, PE	Project Manager 45%	17	Registered Civil Engineer California C68813 MSCE, Montana State University-Bozeman BSCE, Montana State University-Bozeman
Charles D. Anderson, PE	Principal-in-Charge 35%	30	Registered Civil Engineer California C43776 Hawaii 15647 Nevada 11518 Washington 39715 BCE, Georgia Institute of Technology MSCE (Water Resources Engineering), Stanford University, California
Curran L. Price, PE	Project Engineer 50%	11	Registered Civil Engineer California C74913 NASSCO PACP, MACP and LACP Certified # 7000537 CSI Construction Documents Technologist (CDT) Bachelors of Science in Civil Engineering, California State Polytechnic University, Pomona
Jonathan F. Ondracek	Project Assistant 50%	6	Registered EIT BS, Civil Engineering, Purdue University, Indiana
Subconsultants			
Scott E. Fitinghoff, PE, GE Cornerstone Earth Group	Geotechnical Engineer 35%	29	Registered Civil Engineer California C48261 Registered Geotechnical Engineer California 2379 Master of Science, Geotechnical Engineer, UC Berkeley Bachelor of Science, Civil Engineering, San Jose State University
Ryan Amaya, PLS Kier & Wright	Survey & Mapping 35%	20	Professional Land Surveyor State of California L8134
Joseph Bohorquez BESS Testlab Inc.	Potholing Utility Locating 40%	14	Licensed Contractor California No. 817532 BA Business Administration 2010, MBA Saint Mary's College of California 2016



Team's Experience of Working Together on Projects of Similar Scope and Size

The proposed Schaaf & Wheeler team has been providing wastewater conveyance and pumping infrastructure assessment, design and construction support services collaboratively to Bay Area municipalities for over thirty years. The table below presents similar projects our proposed team has together provided services for.

Project and Client	BLS	CDA	CLP	JFO
2019 Sewer Repair Project, City of Mill Valley	X	X	X	X
Harbor Drive Sewer Rehabilitation Design and CS, Town of Corte Madera	X	X	X	X
Belmont Water/Sewer Main Replacement, Mid-Peninsula Water District	X		X	X
Sanitary Sewer Rehabilitation and Replacement Rehabilitation Projects, City of Belmont	X		X	X
El Camino Real Sanitary Sewer Rehabilitation, City of San Mateo	X		X	X
Sanitary Sewer Rehabilitation Project, City of San Mateo	X		X	X
Building M101 Sanitary Sewer Lateral Repair, Port of Oakland	X			X
Ocean Colony Gravity Sewer, City of Half Moon Bay	X		X	
PSQ Reserve Flow and URD Project, East Bay Municipal Utility District	X			
Force Main Appurtenance Projects, Ross Valley Sanitary District	X		X	
Cabrillo Ave. Sewer Main Abandonment and Replacement, City of Santa Clara	X			
El Camino Real Sanitary Sewer and Water Improvement Project, BRE Properties/City of Santa Clara	X			
Kingridge Sanitary Sewer Improvement Project, City of San Mateo	X	X		
Water Main Replacement, Mid-Peninsula Water District	X		X	X
Long-Term Capital Needs Assessment, Caspar Services Company	X			
North Road Pump Station Rehabilitation, City of Belmont	X	X	X	X
Industrial Sewage Pump Stations 1 & 2 Reconstruction, City of S. San Francisco		X		
Phase 4 Sanitary Sewer Pump Stations Upgrades, City of Alameda	X		X	
E. San Mateo Lift Station Rehabilitation, City of San Mateo	X	X	X	X
Basin 2/3 – Pump Station Alternatives, City of San Mateo	X	X	X	
Pump Station Assessment & Rehabilitation, City of Half Moon Bay	X	X	X	
Crestmoor and Lomita Pump Stations and Forcemain Replacement, City of San Bruno				
42 nd Avenue Pump Station, City of San Mateo	X			
Pump Station Improvements, City of Oakland	X	X	X	
Sanitary Sewer Pump Station Improvements, Town of Hillsborough	X		X	
Sanitary Sewer Pump Station Assessment and Design, City of Fontana	X		X	X
Sanitary Sewer Pump Station Assessment, Ross Valley Sanitary District	X		X	
Mariner's Island Pump Station #5 and #6, City of San Mateo	X	X		
Mariner's Island, City of San Mateo	X	X		
Sanitary Sewer Pump Station Assessment, CIP, and Design, City of Alameda	X	X	X	X

BLS - Benjamin L. Shick, PE
CDA - Charles D. Anderson, PE

CLP - Curran L. Price, PE
JFO - Jonathan F. Ondracek



Resumes

Benjamin L. Shick, P.E. – Project Manager – Schaaf & Wheeler

Education

BSCE, Montana
State University-
Bozeman

MSCE, Montana
State University-
Bozeman

Licenses:

Registered Civil
Engineer
California C68813

Affiliations:

American Society
of Civil Engineers;
Floodplain
Management
Association



Years of Experience: 17+

*Completed Design & Construction of 50,000 LF of Sanitary Sewer
Project Management Experience: 9+ years*

*Knowledge and Experience in Sewer Rehabilitation Trenchless
Technologies: CIPP, Pipe Bursting, Pipe Reaming, etc.*

Benjamin L. Shick, P.E., has more than 17 years of experience in water resources infrastructure planning and design of wastewater conveyance systems, water supply and distribution systems, stormwater systems, and pump stations. Ben has completed the design of 50,000+ LF of sewer main rehabilitation and replacement projects in the recent past. Ben has conducted floodplain investigation, shoreline protection studies, drainage studies, channel design and modeling, water rights permitting, wetland analysis and design, small bridge design, infrastructure design, surveying, construction management, and construction quality control testing. He has been involved with all project phases from project initiation to construction document preparation and construction support. Ben is proficient in water resources modeling tools: AutoCAD, WaterCAD, HEC-RAS, HEC-HMS, GeoRAS, MOUSE, and ArcGIS.

Relevant Projects

Mill Valley Sewer Repair Project, City of Mill Valley, 2019 – 2020, Contract Value: \$131,000. As Project Manager, Ben Shick provided evaluation, assessment, and design services for the City of Mill Valley's sanitary sewer system. This project prioritizes and develops a strategic plan to address the most critical infrastructure needs for future repairs to be constructed under the 2020 budget. Project tasks include surveys, investigations, and inspections for each project location to identify proposed improvements. Standard details for pipe lining (CIPP and/or sliplining), open trench replacement, and pipe bursting were developed. 75% and 100% design documents along with construction support will also be provided for this project.

El Camino Real Sanitary Sewer Rehabilitation, City of San Mateo, 2017 – 2018, Contract Value: \$500,000. As Project Manager, Ben Shick reviewed and evaluated the condition of all of the City's sanitary sewer pipes within and adjacent to El Camino Real and developed a recommended improvement project to address all significant condition related issues. Subsequently the rehabilitation and replacement design of 10,050 LF of pipe and the rehabilitation and replacement design of 110 manholes were also prepared. Rehabilitation methods were primarily cured-in-place pipe (CIPP), pipe bursting and open trench replacement methods were also used.

Belmont Water/Sewer Main Replacement, Mid-Peninsula Water District, 2017, Contract Value: \$87,610. As Project Manager, Ben Shick prepared engineering design for this joint capital improvement project for the water and sewer mains. The project consists of replacing the water mains, service lines and meters per the District's identified capital improvement projects and rehabilitating and replacing the sewer mains to address condition issues with the sewer mains. The project also includes additional street improvements. This project required close coordination and approval with multiple agencies including the City of Belmont, the Mid-Peninsula Water District, the Fire Marshal, Caltrans, and private developers. A Caltrans Encroachment Permit for the work along El Camino Real was prepared, submitted, and obtained.

San Mateo Sanitary Sewer Rehabilitation Projects, City of San Mateo, 2014 – 2017, Contract Value: 2015 - \$191,000; 2017 – 2018 - \$500,000. As Project Manager, Ben Shick led and completed site investigations, inspections, researched existing data, and developed recommended alternatives for various sewer rehabilitation projects within the City of San Mateo. Provided detailed design of the recommended alternatives which consisted of: replacement of sewer lines across drainage channels (both above ground on piers, and below ground); replacement of sewer lines in back yard easements with tight access; replacement of sewer lines through large drainage box culverts; sewer line rehabilitation with cured-in-place pipe (CIPP); sewer main replacement and realignment; manhole rehabilitation and replacement; the work included geotechnical investigations, easement research, topographical surveying, environmental permitting, and Caltrans Encroachment Permit.

Sanitary Sewer Rehabilitation Projects, City of Belmont 2015, 2016 and 2017, Contract Value: 2015 - \$567,000; 2016 - \$456,961; 2017 - \$194,000. As Project Manager, Ben Shick led the evaluation, prioritization, and design of the rehabilitation and replacement of their high priority gravity sewer lines throughout the City. The 2015 Sewer Rehabilitation project consisted of the replacement and rehabilitation of approximately 2 miles of gravity sewer lines and associated manholes. Under Ben's supervision, Schaaf & Wheeler team provided detailed utility investigations, potholing, and sewer



Benjamin L. Shick, P.E. – Project Manager – Schaaf & Wheeler

modeling services. The 2016 sewer rehabilitation project consisted of evaluating and preparing design documents for approximately 5 miles of gravity sewer lines located throughout the City in back yard easements and in City streets. Construction methods include pipe bursting, open trench excavation, and CIPP lining. A large portion of the sewer mains included within the City of Belmont sewer rehabilitation projects are located within backyard and side yard easements with difficult access and easement issues.

Kingridge Sanitary Sewer Improvements (6" and 8"; 3,100 LF), City of San Mateo, 2010 – 2015; Contract Value: \$927,673. As Project Manager, Ben Shick led and directed the team for system evaluation, hydraulic analysis of the existing Kingridge canyon sewer and storm drain system, development of improvement alternatives for the sewer main, and development and production of construction documents for the selected alternative of the project to replace and rehabilitate the 6-inch sanitary sewer main. Some of the key features were: Alternative evaluation for alignment and construction methods; Emergency repairs to mitigate active land movement; Capacity evaluation; Open cut pipe replacement, CIPP rehabilitation, pipe on piers, retaining walls, etc.; Securing right-of-access to project location including permanent sewer easements; Environmental permitting, mitigation, and monitoring; Construction support, special inspection, and material testing services.

El Camino Real Sanitary Sewer Improvement Project and the Calabazas Creek Sewer Siphon Design Projects, City of Santa Clara, 2006 – 2009; Contract Value: \$480,520. As Project Manager, Ben Shick led the design of 2,600 feet of parallel sewer line in El Camino Real from Flora Vista Avenue to Calabazas Boulevard. The project also included a separate design plan set for a replacement sewer siphon with dual pipes under Calabazas Creek as part of a Santa Clara Valley Water District channel improvement project. The project also included cured-in-place pipe (CIPP) lining of 2,600 feet of parallel collector sewer and reconstruction of existing lateral connections. Tasks included the design of relocation of existing water mains, storm drains, sewer laterals, and traffic signals to accommodate the design of new sewer mains.

Cabrillo Avenue Sewer Replacement Project, City of Santa Clara, 2013 – 2014; Contract Value: \$104,793. As Project Manager, Ben Shick led the installation of a new 12-inch sewer line in Cabrillo Ave to replace the existing sewer line that ran in a utility easement through residential parcels. Design included plan and profile of a new 12-inch PVC sewer main, associated manholes, and lateral connections. This project also included the design for replacement of several smaller sewer and storm drain lines necessary to facilitate the installation of the new sewer mainline.

Sanitary Sewer Lift Station Rehabilitation Design (5 Lift Stations), City of San Mateo, 2017 – 2018, Contract Value: \$314,121. The project involves condition assessments, alternatives analysis, and design services for five sanitary sewer lift stations and the associated force mains. Throughout the alternatives analysis Ben Shick identified viable options to eliminate two lift stations and extend the adjacent gravity and force main systems. Ben is currently leading the preparation of design documents to meet current City design preferences and standards as well as to provide station reliability in conformance to the Regional Water Quality Control Board (RWQCB) reliability requirements. Each lift station will have the capability to handle peak wet weather flow (PWWF), an automatic alarm and communication system, backup or redundant equipment (pumps, controls, and power supply), and the ability to perform bypass pumping.

North Road Sanitary Sewer Pump Station Design - City of Belmont (2017 – 2018), Contract Value: \$284,815. The project involves the engineering design, bid and construction support services for the rehabilitation of the pump station. As Project Manager, Ben Shick is leading the design for installation of a new wetwell, pumps, and associated equipment. He explored the option of obtaining a new easement to provide adequate space to operate and maintain the pump station. Schaaf & Wheeler design will meet all local, state, and federal requirements for this wastewater pumps station and the force main.

City of San Mateo 42nd Avenue Sanitary Sewer Pump Station, 2015, Contract Value: ~\$242,472. The project involves condition assessment and design to rehabilitate the 42nd Avenue Pump Station and force main. The station's mechanical and electrical equipment is beyond its useful life, and is showing deterioration. Additionally, many portions of the existing station do not comply with modern codes and safety standards. As Project Manager, Ben Shick designed the replacement of all mechanical equipment, addition of a backup generator, and requires detailed utility investigation and a Caltrans encroachment permit.

City of Belmont Storm Drain Improvement Projects, 2009, 2011 and 2018, Contract Value: 2009 - \$71,792; 2011 - \$66,821; 2018 – \$67,320. As Project Manager, Ben Shick helped the City identify and designed 29 separate storm drain improvement projects in 2009 and 12 projects in 2011 throughout the City to address aging storm drain infrastructure and mitigate flooding issues. The final design included installation of cured-in-place pipe (CIPP) within several aged pipes ranging from 12" to 36" in diameter; spot repairs of several collapsed pipes; installation of new inlets, pipes, and curb and gutters; and some minor channel repairs. The 2018 storm drain improvements include design of new piping systems and



Benjamin L. Shick, P.E. – Project Manager – Schaaf & Wheeler

identification of locations that need improvements.

Town of Woodside, Stormdrain Improvements, 2015 – 2016, **Contract Value: Phase 1 - \$56,030;**

Phase 2 - \$57,670. As Project Manager, Ben Shick worked with the Town to identify and design 7 separate high priority improvement projects throughout the Town. The final design includes installation of cured-in-place pipe (CIPP) within several corroded pipes ranging from 10" to 24" in diameter, rock outlet protection, headwall repair, inlet replacement, and a new 36" HDPE pipe and concrete headwall. The Phase 2 Storm Drain Repair Project included the design of 4 more high priority improvement projects of a similar nature throughout the Town. The designs also included traffic control and stormwater pollution protection measures.



Charles D. Anderson, P.E., President – Schaaf & Wheeler

Education

BCE, Georgia Institute of Technology

MSCE (Water Resources Engineering), Stanford University, California

Licenses

Registered Civil Engineer
California C43776 Hawaii
15647

Nevada 11518
Washington 39715

Affiliations

FMA, ASCE



Charles D. Anderson, P.E. has 30+ years of experience in the areas of flood control and drainage, water supply and distribution, wastewater collection and pumping, surface water hydrology and groundwater. As a project manager he is involved in all phases of project management and implementation from project feasibility to construction document preparation and construction support for a wide range of public and private clients. He has completed numerous flood insurance studies (FIS) and letters of map revision (LOMRs) for FEMA. Chuck's projects generally have multidisciplinary teams that help policy makers to arrive at reliable decisions that protect communities from flood risk and the threat of climate change, most particularly sea level rise. His San Mateo Bayfront Levee Improvement project has won several state and regional awards. Chuck has demonstrated expertise in watershed and stochastic hydrology, open channel hydraulics, closed conduit hydraulics, pump station design, and storm drainage as well. His background also includes pipeline design, storage tank design, pump station design, hydraulic network modeling, wastewater collection includes septic systems, sanitary sewer design, pump station design, sanitary sewer modeling, and master planning.

Relevant Projects

Stormwater System Planning and Design

Diridon Station Area Infrastructure Analysis – HMH Engineers (2016)

Warren Avenue Storm Drain Assessment – City of San Mateo (2016)

Storm Drain Master Plans - Half Moon Bay (2017), Santa Clara (2015), Milpitas (2012), Alameda (2008), Livermore (2006), and San Mateo (2004)

Laguna Area Storm Drain Analysis - City of Burlingame (2012)

Esplanade Storm Drain Outfall Replacement - Cotton Shires/City of Pacifica (2010)

Storm Drain Infrastructure PM and E. Laurel Creek Culvert Repair and Erosion Control - City of Belmont (2006)

Greenwood Avenue and Barroihlet Avenue Storm Drain Improvements - City of San Mateo (2006)

Soscol Area Residual Drainage Master Plan - City of Napa (2005)

Interior Drainage Analysis/LOMR for Lower Guadalupe River Project - CH2M-Hill and SCVWD (2005)

Stormwater Pump Stations

Chrysler Drive Pump Station Rehabilitation (230 cfs) – City of Menlo Park (2017)

Coyote Point and Poplar Avenue Pump Station Rehabilitation (250 cfs each) - City of San Mateo (2017)

Matadero Creek Storm Water Pump Station (390 cfs) - City of Palo Alto (2017)

PLC Programming Upgrades to 11 Stormwater Handling Sites – City of Palo Alto (2015 – 2017)

Design of Gippetti Pump Stations, Stormwater and Sewer Pump Stations – RJA & Assoc. (2015-2016)

City of Sunnyvale WPCP Master Plan and Primary Treatment Design – HDR, Inc. (2015)

Northside Pump Station Upgrades (180 cfs) - City of Alameda (2010)

San Francisquito Creek Storm Water Pump Station (300 cfs) - City of Palo Alto (2009)

Baylands Storm Water Pump Station No. 1 - City of Sunnyvale (2006)

Railroad Avenue OC Pumping Plant for Route 4 in Pittsburg - Mark Thomas & Company/Caltrans (2003)

Freedom Circle Stormwater Pump Station (70 cfs) - City of Santa Clara (2003)

Nelo-Victor Stormwater Pump Station Rehabilitation (200 cfs) - City of Santa Clara (2003)

Rambo Pump Station (150 cfs) - City of Santa Clara (2000)

Floodplain Management and Infrastructure

West Channel Enhancement – Google, Inc. (2018-2019)

San Francisquito-Adobe Creek Flood Study - Wood Rogers/ SCVWD (2016 – 2017)

Deer Island Flood Detention Basin – Marin County (2016-2017)

Drainage Review of Emergency Stabilization for Bear Gulch Road – Foundation Technologies, Inc. (2017)

Foster City Levee Improvements - City of Foster City (2016 – 2020)

Climate Change Impact Analyses - Alameda, Foster City, Menlo Park, Newark, San Jose, San Mateo (ongoing)

Berryessa/Penitencia Watershed Flood Study - Wood Rogers/SCVWD (2016)

Palo Alto Flood Basin Sea Level Rise Impact Study - SCVWD (2016)

Lower Penitencia Creek Improvements - Wood Rogers/SCVWD (2016)



Charles D. Anderson, P.E., President – Schaaf & Wheeler

Annual Levee Inspection - City of San Mateo (2016)
Colma Creek Floodplain Analysis – City of South San Francisco (2016)
Guadalupe River Bridge Hydraulics at Railyard Place - Biggs Cardosa Associates (2016)
Upper Llagas Creek Flood Protection Project - RMC Water & Environment/SCVWD (2016)
Permanente Creek Flood Protection Project - Hatch Mott MacDonald/SCVWD (2016)
Storm Water Detention Basins at Truckee River Floodwall - Reno-Sparks Indian Colony (2016)
San Francisquito Creek Hydrology Study Peer Review – SCVWD (2015)
Christopher Ranch Flood Study (2015)
Bayfront Canal Redwood City Flooding Issues – Stanford Real Estate (2015)
Old Mountain View Alviso Rd. Bridge Replacement Hydraulic Study - Biggs Cardosa Associates (2015)
Highway 101 Pedestrial/Bicycle Overcrossing at Adobe Creek – Biggs Cardosa Associates (2015)
Wrigley-Ford Creek Long Term Monitoring – HT Harvey & Associates (2015)
North Gilroy Neighborhood District Urban Services Area Amendment – EMC Planning Group (2014-2015)
Silicon Valley BART Extension Floodplain Analysis - Santa Clara Valley Transportation Authority (2013)
Bayfront Levee Improvement Project - City of San Mateo (2012)
San Tomas Aquino Creek Flood Study - Santa Clara Valley Water District (2012)
Recertification of Uvas, Stevens and Lower Penitencia Creek Levees – SCVWD (2009)
Truckee River Levee and Floodwall System - CFA Engineers (Sparks, NV) (2008)
O'Neill Slough Tide Gate Structure - City of San Mateo (2007)
Julian Street and William Street Bridge Retrofits at Coyote Creek - Biggs Cardosa Associates (2007)
S. Sutter County Flood Control Alternatives - Sacramento Area Flood Control Agency (2004)
SW Lemmon Valley Flood Control Master Plan/Channel Improvements - CFA, Inc. (Reno, NV) (2003)
Wooster Avenue Bridge Replacement - Advanced Engineering Design (San Jose) (2001)



Curran L. Price, P.E. – Associate Engineer - Schaaf & Wheeler

Education

Bachelors of Science in Civil Engineering, California State Polytechnic University, Pomona

Licenses

Registered Professional Engineer California C74913
NASSCO PACP, MACP and LACP Certified 7000537

Affiliations

Redwood Empire ASCE



Curran Price, P.E., has over 11 years of experience in infrastructure design including wastewater facilities, water pipelines, shoring systems, bridges, buildings, transportation, and slope stabilization projects. Curran has been involved with all phases from project conception to document preparation and construction support. Curran is adept at preparing plans and specifications, performing calculations, cost estimates, and site inspections. He has completed the design of over 100 constructed projects. Curran has provided engineering services for the replacement of sewer mains and water pipelines using trenchless construction methods in Caltrans right of way.

Relevant Projects

Wastewater Systems

Shoreway Road Sanitary Sewer Replacement - City of Belmont (2017 - 2018)
North Road Pump Station Rehabilitation - City of Belmont (2017 - 2018)
Sanitary Sewer Rehabilitation Projects - City of Belmont (2015 - 2018)
Sanitary Sewer and Manhole Rehabilitation Project - City of San Mateo (2015 - 2018)
Sewer Pump Station Improvements Project - Town of Hillsborough (2016 - 2018)
Ocean Colony Sanitary Sewer and Force Main Rehabilitation Project - City of Half Moon Bay (2016 - 2018)
Sanitary Sewer Pump Station Rehabilitation Project - City of Oakland (2016 - 2018)
Sanitary Sewer Main Emergency Repair - City of Half Moon Bay (2017)
Pump Station Rehabilitation - City of Alameda (2016 - 2017)
Mechanical Engineering Services - Bayfair Hall Pumps, Paru Pump Station - City of Alameda (2015 - 2016)
Force Main Appurtenance Project - Ross Valley Sanitary District (2015 - 2016)
Sanitary Sewer Pump Station Evaluation - City of Half Moon Bay (2015)
Trunk Main Replacement Phase 4 - Sonoma (2014)
Agua Caliente Creek Trenchless Replacement of Sewer Trunk Main with Double Barrel Siphon - Sonoma (2014)
Sanitation Local Hazard Mitigation Plan - Sonoma & Guerneville (2014)
Lateral Sewer Replacement Program - Occidental (2014)
Gloria Meekland Sewer and Water Replacement - Santa Rosa (2013)

Water Delivery Systems

Sanitary Sewer and Water Rehabilitation Project - City of Belmont & Mid-Peninsula Water District (2017 - 2018)
McGill Road Recycled Water Pipeline - Sonoma (2014)
Fifth Street East Recycled Water Pipeline - Sonoma (2014)
Seismic Hazards Mitigation for 48-inch Pipeline at Russian River Crossing - Forestville (2014)
Alternative Pipe Material for Corrosion Resistance, Collector 6 Chlorine Lines - Forestville (2013)

Storm Water, Hydrology and Hydraulics, and Floodplain Management

Storm Drain Master Plan - City of Alameda (2016 - 2017)
Storm Drain Rehabilitations for Detriorated Culverts - Town of Woodside (2015 - 2017)
Cove Stormwater Pump Station Evaluation - Marin County (2016)
Flood Study Green Valley Creek Crossing - Graton (2014)

Other Projects

Shoring Systems Design for Water Pipelines at 405 Freeway - Los Angeles (2011)
Soil Nail Wall Design for Hyrum Water Tanks - Provo, Utah (2011)
Excavation Design for Transbay Transit Center - San Francisco (2012)
Project Management of Soil Nail, MSE, and Soldier Pile Walls Rambla Vista Dr. - Malibu (2011)
Perimeter Wall Deisgn for Protection from Liqueifiable Soils - Kaiser Hospital, Redwood City (2011)



Jonathan F. Ondracek – Assistant Engineer - Schaaf & Wheeler

Education

BS, Civil Engineering,
Purdue University, Indiana

License

Registered EIT Indiana

Certifications

Dale Carnegie
Management Training



Jonathan Ondracek has experience in modeling and design for stormwater and wastewater infrastructure projects. He is proficient in running hydraulic models to solve drainage issues and conduct level surveys for small design projects. As the Engineering Associate with the City of Fort Wayne, Indiana, Jonathan designed and managed over 20 stormwater projects from conception to completion. The projects varied from the design of bioretention systems, to the design of new storm sewer to alleviate drainage concerns. He has experience managing consultants for large-scale multidisciplinary projects during the design and construction phases. Jonathan managed and designed 15 Long Term Control Plan projects as well. His modeling and design software skills include AutoCAD Civil3d, AutoCAD LT, EPASWMM 5, Mike Urban, and ArcGIS.

Relevant Projects

Wastewater System Planning and Design

North Road Pump Station Rehabilitation Project – City of Belmont (2018 – on-going)
Building M101 Sanitary Sewer Lateral Repair – Port of Oakland (2018)
Tamarind Sanitary Sewer Pump Station Odor Control Improvements – City of Fontana (2018)
Industry and Tamarind Pump Station Improvement – City of Fontana (2017 – on-going)
Shoreway Sewer Replacement Project – City of Belmont (2017 – on-going)
El Camino Real Sanitary Sewer Rehabilitation Project – City of San Mateo (2017 – on-going)
East San Mateo Sanitary Sewer Lift Station Rehabilitation Project – City of San Mateo (2017 – on-going)
Bypass Pumping Connections at Northside and Rabello Pump Stations – City of Santa Clara (2017)
2017 Sanitary Sewer Rehabilitation Project – City of Belmont (2017)
Delta Diablo Pump Station Improvements – County of Contra Costa (2017 - on-going)
Glasgow Regulator Modifications – City of Fort Wayne (2016)
Gathings Lift Station Rehabilitation – City of Fort Wayne (2016)
St. Joe Combined Sewer Overflow Relief Connections – City of Fort Wayne (2014 - 2015)

Stormwater Systems Planning and Design

Athlone Pump Station Upgrade – City of Atherton (2018 – on-going)
2018 Storm Drain Improvement Project – City of Belmont (2018 – on-going)
Little Wolf Creek Sinkhole Stabilization Project – City of Grass Valley (2017)
Huffman Putnam Sewer Separation – City of Fort Wayne (2015 - 2018)
Lakeside Sewer Separation – City of Fort Wayne (2015 - 2017)
200 E. Berry Pervious Pavement Improvements – City of Fort Wayne (2015 - 2016)
Reed Road Storm Drainage Improvement – City of Fort Wayne (2015 - 2016)
Engle Road Sewer Separation – City of Fort Wayne (2014 - 2016)
Taylor Hale Sewer Separation Phase I – City of Fort Wayne (2013 - 2015)
Ewing Street East/West Phase II Sewer Separation – City of Fort Wayne (2013 - 2014)
Maplecrest Road Storm Drainage Improvement – City of Fort Wayne (2013)
Becky Lane Storm Drainage Improvement – City of Fort Wayne (2012)
Karpeles Museum Rain Garden – City of Fort Wayne (2012)
Imagine Schools/Science Central Rain Gardens – City of Fort Wayne (2012)
Hazelett Road Storm Drainage Improvement – City of Fort Wayne (2011)
Balmoral and Hadley Storm Drainage Improvement – City of Fort Wayne (2010)

Hydrology & Hydraulics

Los Gamos and Oleander Drainage Study – City of San Rafael (2018)
Schick Storm Sewer Capacity Analysis – City of Fort Wayne (2012)



Scott E. Fitinghoff, P.E., G.E. Principal Engineer

Scott E. Fitinghoff, P.E., G.E., Principal Engineer, has over 30 years of experience in geotechnical engineering. He has performed pavement designs and rehabilitation investigations for private developments, public streets, Caltrans pavements, FAA airport pavements, and special facilities handling buses and garbage trucks throughout the San Francisco Bay Area. Mr. Fitinghoff also has significant experience in foundation design, excavation shoring and dewatering, soil stabilization, earthwork operations, geologic hazards evaluations, liquefaction analysis, ground improvement, linear infrastructure, retaining structures, slope stability, and geotechnical value engineering.

Relevant Project Experience

Mr. Fitinghoff's representative local experience includes the following projects.

- Kingridge Sewer Evaluation, San Mateo
- Poplar Pump Station Trash Capture Devices, San Mateo
- Coyote Point-Poplar Avenue Pump Stations, San Mateo
- Mariner's Island Pump Station, San Mateo
- Monterey Avenue Sewer Evaluation, San Mateo
- Sanitary Sewer Lift Station Rehabilitation – Kehoe Avenue, Laurie Meadows Drive, Los Prados Street, San Mateo
- El Camino Sanitary Sewer Rehabilitation, San Mateo
- Ocean Colony Pump Station and Force Main, Half Moon Bay
- Glen Park Pump Station/Tank Facility Improvements, Brisbane
- Underground Membrane Filtration Vault, South San Francisco
- Crestmoor-Lomita Pump Stations, San Bruno
- Belmont 2011 and 2015 Storm Drain Improvements, Belmont
- Shoreway Road Sanitary Sewer Main Replacement, Belmont
- North Road Pump Station Rehabilitation, Belmont
- San Carlos Sewer Improvements, San Carlos
- Natoma Road Sanitary Sewer, Los Altos Hills
- Rollins Road Pump Station and Storm Drain Crossing at US Highway 101, Burlingame
- Shoreway Rd Sanitary Sewer Main Replacement, Belmont
- North Road Pump Station Rehabilitation, Belmont
- San Carlos Sewer Improvements, San Carlos
- Marsten Road Pump Station, Burlingame
- Sanchez Bypass and Neighborhood Sewer Rehabilitation, Burlingame
- Mitten Sanitary Pump Station Force Main, Burlingame
- El Camino Real and Oak Grove Sewer Crossing, Hillsborough
- Cherry Creek Water Pump Station, Hillsborough

Education

Master of Science, Geotechnical Engineering, University of California at Berkeley, 1989

Bachelor of Science, Civil Engineering, San Jose State University, San Jose, 1987

Professional Registrations

Registered Civil Engineer: No. 48261, State of California

Registered Geotechnical Engineer: No. 2379, State of California

Professional Organizations

ASCE - American Society of Civil Engineers

CELSOC - Consulting Engineers and Land Surveyors of California

U.C. Berkeley Geotechnical Society



RYAN AMAYA, PLS
PRINCIPAL, SURVEY PROJECT MANAGER



Registration: Professional Land Surveying License (PLS) State of California
L 8134

Professional Affiliations: California Land Surveyors Association (CLSA)

Role & Responsibilities: Mr. Amaya will manage all schedules, manage all office surveying personnel, coordinate with field crews, meet all deadlines and ensure quality control for all surveying services provided throughout the duration of this project. He will serve as the project manager and primary point of contact for all project surveying services.

Background: Mr. Amaya has 20 years of experience in the surveying field. His experience includes construction surveying, boundary surveying, mapping, and subdivision work related to land development. Specific survey experience includes construction staking, topographic surveys, benchmark-level circuits, elevation monitoring surveys, tentative maps, parcel maps, final maps, condominium plans, plats and legal descriptions, lot line adjustments, lot combinations, reversion to acreage maps and ALTA/ACSM Land Title Surveys.

Representative Project Experience:

CITY OF SAN MATEO, SOUTH TRUNK SANITARY SEWER RELIEF LINE

This project included 8,000 linear feet of sewer improvements in the City's sanitary sewer improvement scope. Kier & Wright managed and coordinated the entire survey scope including aerial photogrammetry, field survey, traffic control and coordination with State, County and local agencies for permits. Kier & Wright was contracted under Schaaf & Wheeler to provide complete topographic survey and right-of-way mapping to Schaaf & Wheeler for sanitary sewer design.

CITY OF SUNNYVALE, WATER LINE REPLACEMENT

This project included 5,360 linear feet of water line replacement. Kier & Wright managed and coordinated the entire survey scope, including aerial photogrammetry, field survey, drafting and traffic control. Kier & Wright was contracted under Carollo Engineers to provide complete topographic survey and right-of-way mapping to Carollo Engineers for water line design over Bartlett Avenue, California Avenue, Acacia Avenue, Birch Avenue, Cedar Avenue and Dwight Avenue.

CITY OF HALF MOON BAY, KEHOE DITCH IMPROVEMENTS

This project included surveying of a 3,000-linear-foot ditch for a feasibility study to improve the flow of water into Pilarcitos Creek. Kier & Wright managed and coordinated the entire survey scope, including field survey and drafting. Kier & Wright was contracted by Schaaf & Wheeler to provide the topographic survey for their hydrologic/hydraulic analysis.

CITY OF SANTA CLARA, EL CAMINO SANITARY SEWER IMPROVEMENTS,

This project included 2,600 linear feet of sewer improvements in the City's sanitary sewer improvement scope. Kier & Wright managed and coordinated the entire survey scope including aerial photogrammetry, field survey, traffic control and coordination with State, County and local agencies for permits. Kier & Wright was contracted under Schaaf & Wheeler to provide complete topographic survey and right-of-way mapping to Schaaf & Wheeler for sanitary sewer design.



KIER & WRIGHT CIVIL ENGINEERS & SURVEYORS, INC.

3350 Scott Boulevard, Bldg. 22 • Santa Clara, California 95054 • 408-727-6665 • 408-727-5641 • kierwright.com



Joseph Bohorquez General Manager

BESS

TESTLAB, INC.



Joseph has managed numerous utility locating projects over the past 14 years for various DOT's, municipalities, public and private sector clients. He will be responsible for the management and coordination of utility services. He will develop multiple department services schedules and maintain those schedules throughout the duration of the project. He will prepare staff hours and fee estimates for the combined project teams. He will review the progress of services to ensure that the standards, time goals and budget requirements are met.

Professional Experience

2010 – Present

Bess Testlab, Inc.

General Manager

Responsible for project planning and progress, budgets, large capital expenditure recommendations, department coordination and integration, strategic planning, customer relationships, safety, quality control, and senior management functions.

2008 – 2011

Bess Testlab, Inc.

Project Manager

Responsible for customer request and preparing proposals. Facilitated securing subcontracts for work requested. Managed labor efficiencies and project budgets for several projects simultaneously. Developed and implemented training, and operations materials and procedures. Prepared deliverables to clients. Approved final billing statements.

2003– 2010

Geovac, a division of Bess Testlab Inc.

Laboratory Assistant/ Field Technician

Field operations including: Utility Locating, Potholing, and Ground Penetrating Radar. Collected samples for metallographic analysis.

Education

Saint Marys College,
Masters of Business
Administration

California
State
University San
Jose, BA
Business
Administration

Skills

Operations Management
Project Management
Service Operations
Management

Applied
Organizational
Behavior

Strategic Management.

Utility
Locating GPR

Related Experience

PG&E Gas Transmission and Distribution, California

Locating Master Service Agreements – Managed day to day operations of a \$3.9M utility locating project and a staff of 13 utility locators in multiple locations. Project tracked the centerline of multiple transmission lines from Antioch – Gilroy California. Responsible for production, field trouble shooting, and cost controls.

AECOM (URS) - Northern & Central, California

Supervised department operations and budgeting for Locating & Potholing Services – Sonoma US 101 Central A HOV Lanes, Cotati and Rohnert Park CA – US 101 Auxiliary Lanes, Santa Clara County – Sonoma US 101 Central B HOV Lanes, Petaluma CA – Sonoma US 101 Petaluma River Bridge & HOV Lanes, Petaluma CA – I-80 San Pablo Dam Road Interchange, San Pablo CA – US 101 Broadway Interchange Replacement Project, Burlingame CA, SR 25 Safety Project, Santa Clara and San Benito Counties, Caltrans On-Call 03A1103, 06A1146 & 04A4320 .

ARB Inc., - Northern & Southern, California

Perform utility investigation services using industry acceptable methods (i.e., electronic pipe and cable locating equipment, Ground Penetrating Radar (GPR), Pipeline Current Mapper (PCM), etc.) to determine the approximate horizontal position and count of existing utilities within the areas designated by ARB throughout Northern and Central California.

Hayward (Corporate) | Fresno | Los Angeles | T. (408) 988-0101 | F. (408) 988-0103 - www.besstestlab.com

**Schaaf & Wheeler
Fee Proposal - November 19, 2019**

		Senior Engineer	Associate Engineer	Assistant Engineer	Schaaf & Wheeler Subtotal	Cornestone Earth Group - Geotechnical	Kier & Wright - Surveying	Bess Testlabs - Potholing	Project Expenses	Subconsultant and Expenses Markup (10%)	Total
Hourly Rate		\$210	\$190	\$175							
Task 1	Project Management	48	16	0	\$ 13,120	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,120
1.1	Project Management & QA/QC Reviews	40			\$ 8,400					\$ -	\$ 8,400
1.2	Kickoff Meeting	2	4		\$ 1,180					\$ -	\$ 1,180
1.3	Design Review Meetings (3 Meetings)	6	12		\$ 3,540					\$ -	\$ 3,540
Task 2	Design	68	128	268	\$ 85,500	\$ 24,430	\$ 37,100	\$ -	\$ 800	\$ 6,233	\$ 154,063
2.1	Utility Investigation, Topographic Surveying & Basemapping	6	8	16	\$ 5,580		\$ 37,100			\$ 3,710	\$ 46,390
2.2	Geotechnical Investigations and Design Memorandum	2	4		\$ 1,180	\$ 22,750				\$ 2,275	\$ 26,205
2.3	35% Design Submittal	12	16	40	\$ 12,560				\$ 200	\$ 20	\$ 12,780
2.4	65% Design Submittal	24	48	100	\$ 31,660	\$ 1,680			\$ 200	\$ 188	\$ 33,728
2.5	95% Design Submittal	16	32	80	\$ 23,440				\$ 200	\$ 20	\$ 23,660
2.6	Final Design Documents	8	20	32	\$ 11,080				\$ 200	\$ 20	\$ 11,300
Task 3	District Board and Public Outreach Support	24	28	72	\$ 22,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,960
3.1	Alternative Evaluation & Coordination	8	12	24	\$ 8,160					\$ -	\$ 8,160
3.2	District Board Presentation	8		8	\$ 3,080					\$ -	\$ 3,080
3.3	Community Outreach	8	16	40	\$ 11,720					\$ -	\$ 11,720
Task 4	Final Bid Phase and Bid Phase Support	8	12	6	\$ 5,010	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,010
4.1	Bid Phase Support	4	6		\$ 1,980					\$ -	\$ 1,980
4.2	Post Bid Package	2		6	\$ 1,470					\$ -	\$ 1,470
4.3	Review Bids	2	6		\$ 1,560					\$ -	\$ 1,560
Task 5	Design Support during Construction	36	68	44	\$ 28,180	\$ -	\$ -	\$ -	\$ 200	\$ 20	\$ 28,400
5.1	Preconstruction conference	2	4		\$ 1,180					\$ -	\$ 1,180
5.2	Site Visits During Construction (3)	6	6		\$ 2,400					\$ -	\$ 2,400
5.3	Respond to RFIs	4		8	\$ 2,240					\$ -	\$ 2,240
5.4	Submittal Review	4	16	24	\$ 8,080					\$ -	\$ 8,080
5.5	Assist with Contract Change Orders	2	4		\$ 1,180					\$ -	\$ 1,180
5.6	Weekly Meeting Attendance (15)	8	30		\$ 7,380					\$ -	\$ 7,380
5.7	Final Walk Through and Punch List	6	8		\$ 2,780					\$ -	\$ 2,780
5.8	Record Drawings	4		12	\$ 2,940				\$ 200	\$ 20	\$ 3,160
TOTAL DESIGN AND CONSTRUCTION TASKS		184	252	390	\$ 154,770	\$ 24,430	\$ 37,100	\$ -	\$ 1,000	\$ 6,253	\$ 223,553

OPTIONAL TASKS											
Task A1	Utility Potholing	2	6	0	\$ 1,560	\$ -	\$ -	\$ 11,000	\$ -	\$ 1,100	\$ 13,660
A	Utility Potholing	2	6		\$ 1,560			\$ 11,000		\$ 1,100	\$ 13,660
TOTAL DESIGN, CONSTRUCTION AND OPTIONAL TASKS		186	258	390	\$ 156,330	\$ 24,430	\$ 37,100	\$ 11,000	\$ 1,000	\$ 7,353	\$ 237,213



Rate Schedule

Schaaf & Wheeler

CONSULTING CIVIL ENGINEERS

Hourly Charge Rate Schedule

Personnel Charges

Charges for personnel engaged in professional and/or technical work are based on the actual hours directly chargeable to the project.

Current rates by classification are listed below:

Classification	Rate/Hr	Classification	Rate/Hr
Principal Project Manager	\$240	Construction Manager	\$225
Senior Project Manager	\$225	Senior Resident Engineer	\$200
Senior Engineer	\$210	Senior Scientist	\$200
Associate Engineer	\$190	Associate Scientist	\$180
Assistant Engineer	\$175	Resident Engineer	\$180
Junior Engineer	\$165	Assistant Resident Engineer	\$165
Designer	\$155		
GIS Analyst	\$150		
Technician	\$150		
Engineering Trainee	\$120		

Litigation Charges

Work done in preparation for litigation and other very high level-of-expertise assignments is charged at \$350 per hour. Court or deposition time as an expert witness is charged at \$450 per hour.

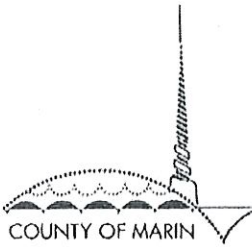
Materials and Services

Subcontractors, special equipment, outside reproduction, data processing, computer services, etc., will be charged at 1.10 times cost.

Effective 1/1/20

8.a.

OFFICE OF THE
COUNTY COUNSEL



November 14, 2019

Brian E. Washington
COUNTY COUNSEL

Jack F. Govi
ASSISTANT COUNTY COUNSEL

Renee Giacomini Brewer
CHIEF DEPUTY COUNTY COUNSEL

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Board of Directors **CONFIDENTIAL**
San Rafael Sanitation District (SRSD)
P.O. Box 151560
San Rafael, CA 94915-1560

Re: Closed Session – Public Employee Performance Evaluation

Dear Commissioners:

I request that you conduct a closed session during your regular meeting on November 22, 2019, to discuss the following matter: (1) public employee performance evaluation of the District's District Manager. In my opinion, public discussion of this matter would prejudice your position.

The specific reasons and the legal authority for the closed session are:

X (1) Government Code Section 54957 A legislative body of a local agency may hold closed sessions to consider the evaluation of performance of a public employee.

It should be noted that Government Code Section 54954.5 requires the Board to post a Closed Session item on the Board Agenda. With respect to the above referenced matter, you should include the fact that you are conducting a public employee performance evaluation, the code section involved, and the title of the employee involved as set forth below.

PUBLIC EMPLOYEE PERFORMANCE EVALUATION
California Government Code Section 54957
Title: District Manager

Should you have any further questions, please contact me.

Very truly yours,

Jack F. Govi
Assistant County Counsel