

**CITY OF SANTA ROSA  
PROFESSIONAL SERVICES AGREEMENT  
WITH PSOMAS  
AGREEMENT NUMBER \_\_\_\_\_**

This "Agreement" is made as of this \_\_\_\_ day of \_\_\_\_\_, 2020, by and between the City of Santa Rosa, a municipal corporation ("City"), and Psomas, a California Corporation ("Consultant").

**R E C I T A L S**

A. City desires to obtain professional construction management and inspection services for the Laguna Treatment Plant Disinfection Improvements Project. The Project will replace the existing UV system with a new UV system. Additionally, the project will install an effluent diversion pump station and pipeline to convey non-compliant effluent to the beginning of the plant for retreatment.

B. City desires to retain a qualified firm to conduct the services described above in accordance with the Scope of Services as more particularly set forth in Exhibit A to the Agreement.

C. Consultant represents to City that it is a firm composed of highly trained professionals and is fully qualified to conduct the services described above and render advice to City in connection with said services.

D. The parties have negotiated upon the terms pursuant to which Consultant will provide such services and have reduced such terms to writing.

**AGREEMENT**

**NOW, THEREFORE**, City and Consultant agree as follows:

**1. SCOPE OF SERVICES**

Consultant shall provide to City the services described in Exhibit A ("Scope of Services") Consultant shall provide these services at the time, place, and in the manner specified in Exhibit A. Exhibit A is attached hereto for the purpose of defining the manner and scope of services to be provided by Consultant and is not intended to, and shall not be construed so as to, modify or expand the terms, conditions or provisions contained in this Agreement. In the event of any conflict between this Agreement and any terms or conditions of any document prepared or provided by Consultant and made a part of this Agreement, including without limitation any document relating to the scope of services or payment therefor, the terms of this Agreement shall control and prevail.

**2. COMPENSATION**

a. City shall pay Consultant for services rendered pursuant to this Agreement at the rates, times and in the manner set forth in Exhibit B. Consultant shall submit monthly statements to City which shall itemize the services performed as of the date of the statement and set forth a progress report, including work accomplished during the period, percent of each task completed, and planned effort for the next period. Invoices shall identify personnel who have worked on the services provided, the number of hours each worked during the period covered by the invoice, the hourly rate for each person, and the percent of the total project completed, consistent with the rates and amounts shown in Exhibit B.

b. The payments prescribed herein shall constitute all compensation to Consultant for all costs of services, including, but not limited to, direct costs of labor of employees engaged

by Page 1 of 9

Consultant, travel expenses, telephone charges, copying and reproduction, computer time, and any and all other costs, expenses and charges of Consultant, its agents and employees. In no event shall City be obligated to pay late fees or interest, whether or not such requirements are contained in Consultant's invoice.

c. Notwithstanding any other provision in this Agreement to the contrary, the total maximum compensation to be paid for the satisfactory accomplishment and completion of all services to be performed hereunder shall in no event exceed the sum of four-million, four hundred seventy-one thousand, seven hundred forty-six dollars and no cents (**\$4,471,746.00**). The City's Chief Financial Officer is authorized to pay all proper claims from Charge Numbers **86509 and 86557**.

### **3. DOCUMENTATION; RETENTION OF MATERIALS**

a. Consultant shall maintain adequate documentation to substantiate all charges as required under Section 2 of this Agreement.

b. Consultant shall keep and maintain full and complete documentation and accounting records concerning all extra or special services performed by it that are compensable by other than an hourly or flat rate and shall make such documents and records available to authorized representatives of City for inspection at any reasonable time.

c. Consultant shall maintain the records and any other records related to the performance of this Agreement and shall allow City access to such records during the performance of this Agreement and for a period of four (4) years after completion of all services hereunder.

### **4. INDEMNITY**

a. Consultant shall, to the fullest extent permitted by law, indemnify, protect, defend and hold harmless City, and its employees, officials and agents ("Indemnified Parties") from all claims, demands, costs or liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, interest, defense costs, and expert witness fees), that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant, its officers, employees, or agents, in said performance of professional services under this Agreement, excepting only liability arising from the sole negligence, active negligence or intentional misconduct of City.

b. The existence or acceptance by City of any of the insurance policies or coverages described in this Agreement shall not affect or limit any of City's rights under this Section 4, nor shall the limits of such insurance limit the liability of Consultant hereunder. This Section 4 shall not apply to any intellectual property claims, actions, lawsuits or other proceedings subject to the provisions of Section 17(b), below. The provisions of this Section 4 shall survive any expiration or termination of this Agreement.

### **5. INSURANCE**

a. Consultant shall maintain in full force and effect all of the insurance coverage described in, and in accordance with, Attachment One, "Insurance Requirements." Maintenance of the insurance coverage set forth in Attachment One is a material element of this Agreement and a material part of the consideration provided by Consultant in exchange for City's agreement to make the payments prescribed hereunder. Failure by Consultant to (i) maintain or renew coverage, (ii) provide City notice of any changes, modifications, or reductions in coverage, or (iii) provide evidence of renewal, may be treated by City as a material breach of this Agreement by Consultant, whereupon City shall be entitled to all rights and remedies at law or in equity, including but not limited to immediate termination of this

Agreement. Page 2 of 9

Notwithstanding the foregoing, any failure by Consultant to maintain required insurance coverage shall not excuse or alleviate Consultant from any of its other duties or obligations under this Agreement. In the event Consultant, with approval of City pursuant to Section 6 below, retains or utilizes any subcontractors or subconsultants in the provision of any services to City under this Agreement, Consultant shall assure that any such subcontractor has first obtained, and shall maintain, all of the insurance coverages set forth in the Insurance Requirements in Attachment One.

b. Consultant agrees that any available insurance proceeds broader than or in excess of the coverages set forth in the Insurance Requirements in Attachment One shall be available to the additional insureds identified therein.

c. Consultant agrees that the insurance coverages and limits provided under this Agreement are the greater of: (i) the coverages and limits specified in Attachment One, or (ii) the broader coverages and maximum limits of coverage of any insurance policy or proceeds available to the name insureds.

## **6. ASSIGNMENT**

Consultant shall not assign any rights or duties under this Agreement to a third party without the express prior written consent of City, in City's sole and absolute discretion. Consultant agrees that the City shall have the right to approve any and all subcontractors and subconsultants to be used by Consultant in the performance of this Agreement before Consultant contracts with or otherwise engages any such subcontractors or subconsultants.

## **7. NOTICES**

Except as otherwise provided in this Agreement, any notice, submittal or communication required or permitted to be served on a party, shall be in writing and may be served by personal delivery to the person or the office of the person identified below. Service may also be made by mail, by placing first-class postage, and addressed as indicated below, and depositing in the United States mail to:

City Representative:

Mark Kasraie, PE  
Supervising Engineer  
Transportation and Public Works  
69 Stony Circle  
Santa Rosa, CA 95401  
(707) 543-3857

Consultant Representative:

Chris Davenport  
Psomas  
1660 Olympic Blvd., Suite 300  
Walnut Creek, CA 94596  
(925) 766-1127

## **8. INDEPENDENT CONTRACTOR**

a. It is understood and agreed that Consultant (including Consultant's employees) is an independent contractor and that no relationship of employer-employee exists between the parties hereto for any purpose whatsoever. Neither Consultant nor Consultant's assigned personnel shall be entitled to any benefits payable to employees of City. City is not required to make any deductions or withholdings from the compensation payable to Consultant under the provisions of this Agreement, and Consultant shall be issued a Form 1099 for its services hereunder. As an independent contractor, Consultant hereby agrees to indemnify and hold City harmless from any and all claims that may be made against City based upon any contention by any of Consultant's employees or by any third party,

including Page 3 of 9

but not limited to any state or federal agency, that an employer-employee relationship or a substitute therefor exists for any purpose whatsoever by reason of this Agreement or by reason of the nature and/or performance of any services under this Agreement.

b. It is further understood and agreed by the parties hereto that Consultant, in the performance of Consultant's obligations hereunder, is subject to the control and direction of City as to the designation of tasks to be performed and the results to be accomplished under this Agreement, but not as to the means, methods, or sequence used by Consultant for accomplishing such results. To the extent that Consultant obtains permission to, and does, use City facilities, space, equipment or support services in the performance of this Agreement, this use shall be at the Consultant's sole discretion based on the Consultant's determination that such use will promote Consultant's efficiency and effectiveness. Except as may be specifically provided elsewhere in this Agreement, the City does not require that Consultant use City facilities, equipment or support services or work in City locations in the performance of this Agreement.

c. If, in the performance of this Agreement, any third persons are employed by Consultant, such persons shall be entirely and exclusively under the direction, supervision, and control of Consultant. Except as may be specifically provided elsewhere in this Agreement, all terms of employment, including hours, wages, working conditions, discipline, hiring, and discharging, or any other terms of employment or requirements of law, shall be determined by Consultant. It is further understood and agreed that Consultant shall issue W-2 or 1099 Forms for income and employment tax purposes, for all of Consultant's assigned personnel and subcontractors.

d. The provisions of this Section 8 shall survive any expiration or termination of this Agreement. Nothing in this Agreement shall be construed to create an exclusive relationship between City and Consultant. Consultant may represent, perform services for, or be employed by such additional persons or companies as Consultant sees fit.

## **9. ADDITIONAL SERVICES**

Changes to the Scope of Services shall be by written amendment to this Agreement and shall be paid on an hourly basis at the rates set forth in Exhibit B, or paid as otherwise agreed upon by the parties in writing prior to the provision of any such additional services.

## **10. SUCCESSORS AND ASSIGNS**

City and Consultant each binds itself, its partners, successors, legal representatives and assigns to the other party to this Agreement and to the partners, successors, legal representatives and assigns of such other party in respect of all promises and agreements contained herein.

## **11. TERM, SUSPENSION, TERMINATION**

a. This Agreement shall become effective on the date that it is made, set forth on the first page of the Agreement, and shall continue in effect until both parties have fully performed their respective obligations under this Agreement, unless sooner terminated as provided herein.

b. City shall have the right at any time to temporarily suspend Consultant's performance hereunder, in whole or in part, by giving a written notice of suspension to Consultant. If City gives such notice of suspension, Consultant shall immediately suspend its activities under this Agreement, as specified in such notice.

c. City shall have the right to terminate this Agreement for convenience at any time



by giving a written notice of termination to Consultant. Upon such termination, Consultant shall submit to City an itemized statement of services performed as of the date of termination in accordance with Section 2 of this Agreement. These services may include both completed work and work in progress at the time of termination. City shall pay Consultant for any services for which compensation is owed; provided, however, City shall not in any manner be liable for lost profits that might have been made by Consultant had the Agreement not been terminated or had Consultant completed the services required by this Agreement. Consultant shall promptly deliver to City all documents related to the performance of this Agreement in its possession or control. All such documents shall be the property of City without additional compensation to Consultant.

## **12. TIME OF PERFORMANCE**

The services described herein shall be provided during the period, or in accordance with the schedule, set forth in Exhibit A. Consultant shall complete all the required services and tasks and complete and tender all deliverables to the reasonable satisfaction of City, not later than December, 2024.

## **13. STANDARD OF PERFORMANCE**

Consultant shall perform all services performed under this Agreement in the manner and according to the standards currently observed by a competent practitioner of Consultant's profession in California. All products of whatsoever nature that Consultant delivers to City shall be prepared in a professional manner and conform to the standards of quality normally observed by a person currently practicing in Consultant's profession, and shall be provided in accordance with any schedule of performance. Consultant shall assign only competent personnel to perform services under this Agreement. Consultant shall notify City in writing of any changes in Consultant's staff assigned to perform the services under this Agreement prior to any such performance. In the event that City, at any time, desires the removal of any person assigned by Consultant to perform services under this Agreement, because City, in its sole discretion, determines that such person is not performing in accordance with the standards required herein, Consultant shall remove such person immediately upon receiving notice from City of the desire of City for the removal of such person.

## **14. CONFLICTS OF INTEREST**

Consultant covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, that would conflict in any manner with the interests of City or that would in any way hinder Consultant's performance of services under this Agreement. Consultant further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor, without the written consent of City. Consultant agrees to avoid conflicts of interest or the appearance of any conflicts of interest with the interests of City at all times during the performance of this Agreement.

## **15. CONFLICT OF INTEREST REQUIREMENTS**

a. **Generally.** The City's Conflict of Interest Code requires that individuals who qualify as "consultants" under the Political Reform Act, California Government Code sections 87200 *et seq.*, comply with the conflict of interest provisions of the Political Reform Act and the City's Conflict of Interest Code, which generally prohibit individuals from making or participating in the making of decisions that will have a material financial effect on their economic interests. The term "consultant" generally includes individuals who make governmental decisions or who serve in a staff capacity.

b. **Conflict of Interest Statements.** The individual(s) who will provide services or

perform work pursuant to this Agreement are "consultants" within the meaning of the Political Reform Act and the City's Conflict of Interest Code:

  x   yes        no (check one)

If "yes" is checked by the City, Consultant shall cause the following to occur within 30 days after execution of this Agreement:

- (1) Identify the individuals who will provide services or perform work under this Agreement as "consultants"; and
- (2) Cause these individuals to file with the City Clerk the assuming office statements of economic interests required by the City's Conflict of Interest Code.

Thereafter, throughout the term of the Agreement, Consultant shall cause these individuals to file with the City Clerk annual statements of economic interests, and "leaving office" statements of economic interests, as required by the City's Conflict of Interest Code.

The above statements of economic interests are public records subject to public disclosure under the California Public Records Act. The City may withhold all or a portion of any payment due under this Agreement until all required statements are filed.

## **16. CONFIDENTIALITY OF CITY INFORMATION**

During performance of this Agreement, Consultant may gain access to and use City information regarding inventions, machinery, products, prices, apparatus, costs, discounts, future plans, business affairs, governmental affairs, processes, trade secrets, technical matters, systems, facilities, customer lists, product design, copyright, data, and other vital information (hereafter collectively referred to as "City Information") that are valuable, special and unique assets of the City. Consultant agrees to protect all City Information and treat it as strictly confidential, and further agrees that Consultant shall not at any time, either directly or indirectly, divulge, disclose or communicate in any manner any City Information to any third party without the prior written consent of City. In addition, Consultant shall comply with all City policies governing the use of the City network and technology systems. A violation by Consultant of this Section 16 shall be a material violation of this Agreement and shall justify legal and/or equitable relief.

## **17. CONSULTANT INFORMATION**

a. City shall have full ownership and control, including ownership of any copyrights, of all information prepared, produced, or provided by Consultant pursuant to this Agreement. In this Agreement, the term "information" shall be construed to mean and include: any and all work product, submittals, reports, plans, specifications, and other deliverables consisting of documents, writings, handwritings, typewriting, printing, photostatting, photographing, computer models, and any other computerized data and every other means of recording any form of information, communications, or representation, including letters, works, pictures, drawings, sounds, or symbols, or any combination thereof. Consultant shall not be responsible for any unauthorized modification or use of such information for other than its intended purpose by City.

b. Consultant shall fully defend, indemnify and hold harmless City, its officers and employees, and each and every one of them, from and against any and all claims, actions, lawsuits or other proceedings alleging that all or any part of the information prepared, produced, or provided by Consultant pursuant to this Agreement infringes upon any third party's trademark, trade name, copyright, patent or other intellectual property rights. City shall make reasonable efforts to notify Consultant not later than ten (10) days after City is served with any such claim, action, lawsuit or other

proceeding, Page 6 of 9

provided that City's failure to provide such notice within such time period shall not relieve Consultant of its obligations hereunder, which shall survive any termination or expiration of this Agreement.

c. All proprietary and other information received from Consultant by City, whether received in connection with Consultant's proposal, will be disclosed upon receipt of a request for disclosure, pursuant to the California Public Records Act; provided, however, that, if any information is set apart and clearly marked "trade secret" when it is provided to City, City shall give notice to Consultant of any request for the disclosure of such information. Consultant shall then have five (5) days from the date it receives such notice to enter into an agreement with the City, satisfactory to the City Attorney, providing for the defense of, and complete indemnification and reimbursement for all costs (including plaintiff's attorneys' fees) incurred by City in any legal action to compel the disclosure of such information under the California Public Records Act. Consultant shall have sole responsibility for defense of the actual "trade secret" designation of such information.

d. The parties understand and agree that any failure by Consultant to respond to the notice provided by City and/or to enter into an agreement with City, in accordance with the provisions of subsection c, above, shall constitute a complete waiver by Consultant of any rights regarding the information designated "trade secret" by Consultant, and such information shall be disclosed by City pursuant to applicable procedures required by the Public Records Act.

## **18. MISCELLANEOUS**

a. Entire Agreement. This Agreement contains the entire agreement between the parties. Any and all verbal or written agreements made prior to the date of this Agreement are superseded by this Agreement and shall have no further effect.

b. Modification. No modification or change to the terms of this Agreement will be binding on a party unless in writing and signed by an authorized representative of that party.

c. Compliance with Laws. Consultant shall perform all services described herein in compliance with all applicable federal, state and local laws, rules, regulations, and ordinances, including but not limited to, (i) the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, *et seq.*) ("ADA"), and any regulations and guidelines issued pursuant to the ADA; and (ii) Labor Code sections 1720, *et seq.*, which require prevailing wages (in accordance with DIR determinations at [www.dir.ca.gov](http://www.dir.ca.gov)) be paid to any employee performing work covered by Labor Code sections 1720 *et seq.* Consultant shall pay to the City when due all business taxes payable by Consultant under the provisions of Chapter 6-04 of the Santa Rosa City Code. The City may deduct any delinquent business taxes, and any penalties and interest added to the delinquent taxes, from its payments to Consultant.

d. Discrimination Prohibited. With respect to the provision of services under this Agreement, Consultant agrees not to discriminate against any person because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status of that person.

e. Governing Law; Venue. This Agreement shall be governed, construed and enforced in accordance with the laws of the State of California. Venue of any litigation arising out of or connected with this Agreement shall lie exclusively in the state trial court in Sonoma County in the State of California, and the parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such court, and consent to service of process issued by such court.

f. Waiver of Rights. Neither City acceptance of, or payment for, any service or performed

by Consultant, nor any waiver by either party of any default, breach or condition precedent, shall be construed as a waiver of any provision of this Agreement, nor as a waiver of any other default, breach or condition precedent or any other right hereunder.

g. Incorporation of Attachments and Exhibits. The attachments and exhibits to this Agreement are incorporated and made part of this Agreement, subject to terms and provisions herein contained.

## **19. AUTHORITY; SIGNATURES REQUIRED FOR CORPORATIONS**

Consultant hereby represents and warrants to City that it is (a) a duly organized and validly existing Corporation, formed and in good standing under the laws of the State of California, (b) has the power and authority and the legal right to conduct the business in which it is currently engaged, and (c) has all requisite power and authority and the legal right to consummate the transactions contemplated in this Agreement. Consultant hereby further represents and warrants that this Agreement has been duly authorized, and when executed by the signatory or signatories listed below, shall constitute a valid agreement binding on Consultant in accordance with the terms hereof.

If this Agreement is entered into by a corporation, it shall be signed by two corporate officers, one from each of the following two groups: a) the chairman of the board, president or any vice-president; b) the secretary, any assistant secretary, chief financial officer, or any assistant treasurer. The title of the corporate officer shall be listed under the signature.

## **20. COUNTERPARTS AND ELECTRONIC SIGNATURES**

This Agreement and future documents relating thereto may be executed in two or more counterparts, each of which will be deemed an original and all of which together constitute one Agreement. Counterparts and/or signatures delivered by facsimile, pdf or City-approved electronic means have the same force and effect as the use of a manual signature. Both City and Consultant wish to permit this Agreement and future documents relating thereto to be electronically signed in accordance with applicable federal and California law. Either Party to this Agreement may revoke its permission to use electronic signatures at any time for future documents by providing notice pursuant to the Agreement. The Parties agree that electronic signatures, by their respective signatories are intended to authenticate such signatures and to give rise to a valid, enforceable, and fully effective Agreement. The City reserves the right to reject any signature that cannot be positively verified by the City as an authentic electronic signature.

Executed as of the day and year first above stated.

**CONSULTANT:**

Name of Firm: Psomas

TYPE OF BUSINESS ENTITY (check one):

- ☐ Individual/Sole Proprietor  
☐ Partnership  
☒ Corporation  
☐ Limited Liability Company  
☐ Other (please specify: \_\_\_\_\_)

*Signatures of Authorized Persons:*

By: Nick Tarditti  
Nick Tarditti (Oct 15, 2020 07:33 PDT)

Print Name: Nick Tarditti

Title: Chief Financial Officer

By: Gary Skrel  
Gary Skrel (Oct 15, 2020 07:35 PDT)

Print Name: Gary Skrel

Title: Vice President

City of Santa Rosa Business Tax Cert. No.

\_\_\_\_\_

Attachments:

Attachment One - Insurance Requirements

Exhibit A - Scope of Services

Exhibit B - Compensation

**CITY OF SANTA ROSA**

a Municipal Corporation

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

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

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

APPROVED AS TO FORM:

\_\_\_\_\_  
Office of the City Attorney

ATTEST: \_\_\_\_\_

September 18, 2020

Mark Kasraie, Supervising Engineer  
City of Santa Rosa, Transportation and Public Works Department  
69 Stony Circle  
Santa Rosa, CA 95401

Subject: Proposal to Provide Construction Management and Construction Inspection Services for the Laguna Treatment Plant Disinfection and Diversion Improvements Project – C00284

Dear Mr. Kasraie:

At Psomas, we understand that protecting public health is a responsibility the City of Santa Rosa (City) takes seriously. During these unprecedented times, it has never been more important for the City to be proactive in its efforts in this regard. This legacy Project demonstrates the City's leadership and commitment to protecting public health. Couple that with the ever-increasing demands for a reliable source of recycled water, and it is clear that now is the right time to build the Laguna Treatment Plant Disinfection and Diversion Improvements Project (Project).

The City has been developing this Project for many years, enduring many challenges. We liken the City's efforts to just when it's about time to kick the ball through the goalposts, and the pesky holder pulls the ball away at the last moment! Psomas is ready to become the holder so the City can kick this Project over the goalposts.

Psomas' Walnut Creek Construction Management team has a long track record of successfully delivering treatment plant projects for agencies throughout the Greater Bay Area. We have learned the importance of coordinating construction with Plant Operations through this experience, so any impacts are 'expected' impacts. Our proposed team of professionals has the right technical expertise and communication skills to deliver the City of Santa Rosa the same project success.

Psomas is a *service* firm, and to succeed, we must provide excellent *service*. We recognize it is easy to put words on paper, so we encourage you to reach out to our listed references. They will attest how focused we are at *serving* them and their projects. We deliver.

We look forward to answering any questions you may have about our proposal. More so, we look forward to working with you, the Plant staff, and your design team. Our collective efforts will not be 'Peanuts,' and the result will leave a positive legacy on the region for years to come. Please note that Gary Skrel, Principal/VP, is authorized to bind the firm for a period up to 90 days after the proposal is submitted and the individual to whom correspondence and other contact should be directed

Sincerely,

**PSOMAS**



Gary Skrel, PE  
Regional Manager/VP  
1600 Olympic Blvd. Suite 300  
Walnut Creek, CA 94596  
[Gary.skrel@psomas.com](mailto:Gary.skrel@psomas.com)  
925.765.1130 cell



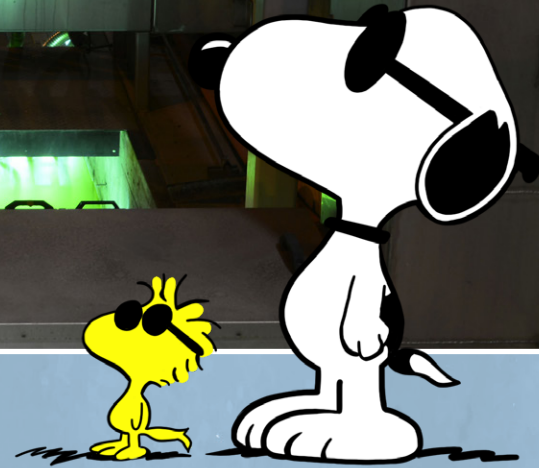
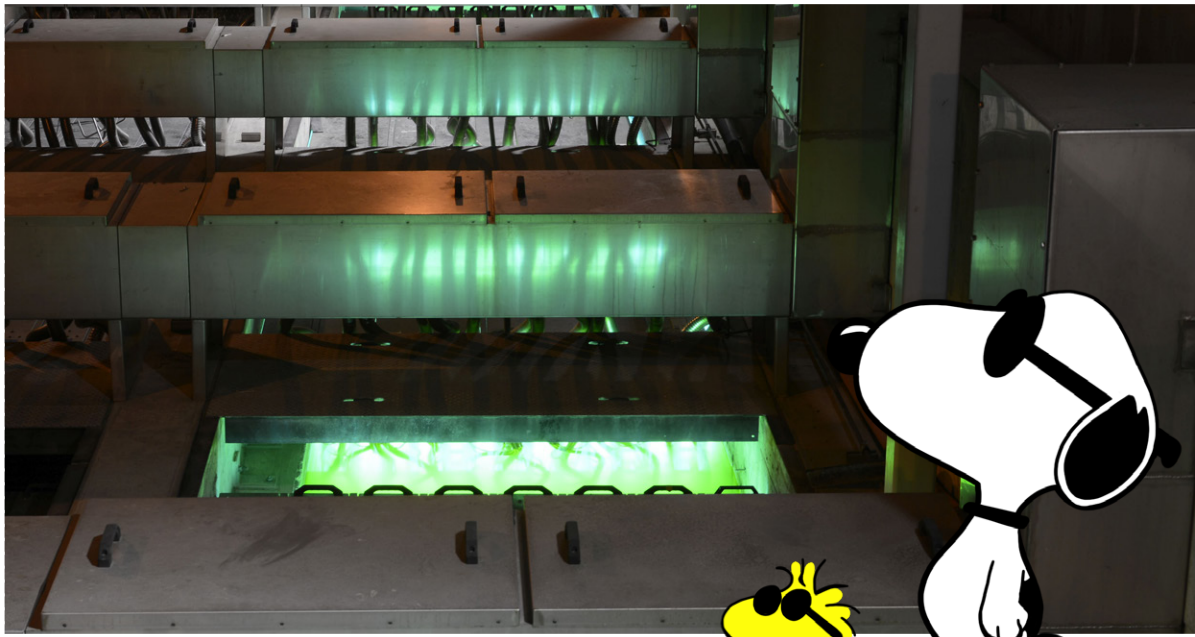
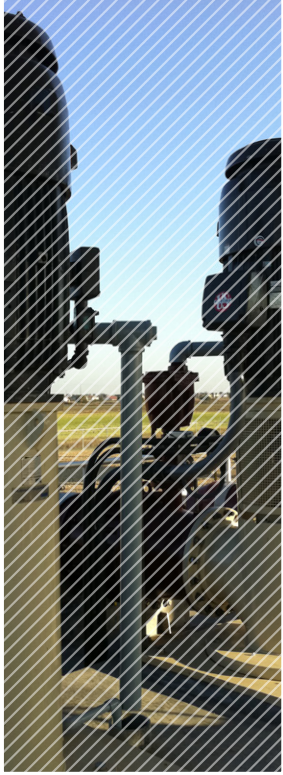
Christopher Davenport, PE  
Senior Project Manager/VP  
[chris.davenport@psomas.com](mailto:chris.davenport@psomas.com)  
925.766.1127 cell



Justin Seufert, PE  
Construction Manager  
[Justin.seufert@psomas.com](mailto:Justin.seufert@psomas.com)  
530.966.7901 cell



PSOMAS



# **CITY OF SANTA ROSA LAGUNA TREATMENT PLANT DISINFECTION AND DIVERSION IMPROVEMENTS PROJECT**

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## Section 1

# EXECUTIVE SUMMARY

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***We have assembled a team with a long and successful track record of working together to manage complex construction projects and deliver successful projects for our clients.***

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This section summarizes our understanding of the Laguna Treatment Plant Disinfection and Diversion Improvements Project (Project), approach, the strengths of our team, and why the City of Santa Rosa should select Psomas.

The Project goes back to 2013 when the City analyzed concepts for upgrading the disinfection system capacity. Once the preferred alternative was chosen, the City retained Carollo Engineers, Inc. (Carollo) for design services and recently received the 75% design submittal. Next, the City selected Calgon Carbon as the supplier of the UV equipment. Now, the City is searching for the right professional team to provide constructability review(s), construction management (CM), and inspection services.

Psomas is the right team to provide these critical services. As presented in the following pages, the combination of our partnering approach and the strength of our team's experience and skills demonstrate why we should be selected. Furthermore, our team members' strengths are embedded in our approach, which creates Psomas' Construction Management pillars: Professionalism, Purpose, Passion, and Pride.

The team's strengths are summarized as follows:

- ▶ Dedicated, caring professionals with relevant treatment plant experience
- ▶ Longevity and familiarity working together
- ▶ Proven, trusting relationship with the City's team – partners don't let partners down
- ▶ Construction management on water resources projects is our CM team's niche

Our approach consistently applies the following attributes:

- ▶ Partnering philosophy with all stakeholders
- ▶ Advanced risk awareness and timely mitigation to protect public money
- ▶ Active project leadership role employing tailored and timely communications
- ▶ Practitioners of safe, timely, and quality construction
- ▶ Flexible, practical, and efficient staffing

Psomas is proposing on this Project with one overarching goal: to build upon our existing professional relationship with the City and be selected to serve with loyalty and commitment. Our mindset in developing this proposal is consistent with our project approach and team strengths – we work harder and with more diligence than other firms to reinforce our commitment to producing successful projects. Our work ethic and commitment to the City and the industry will soon be evident.



# PROJECT TEAM

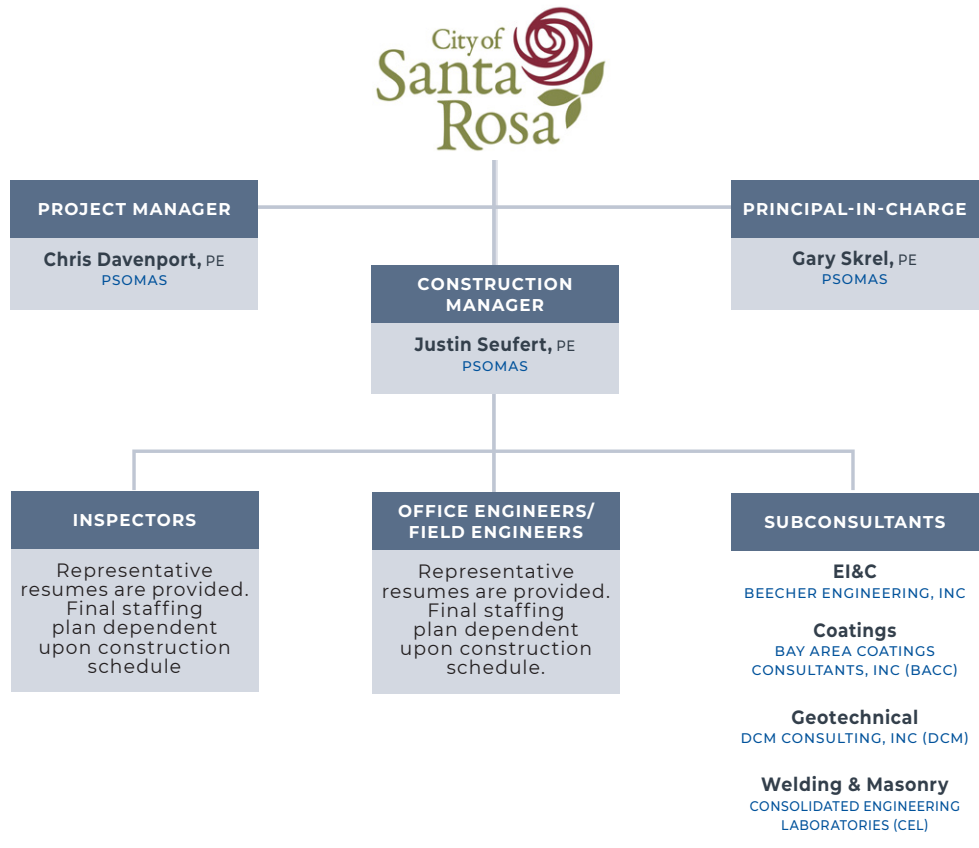
## Organizational Structure

Psomas has assembled a team tailored to the needs of the City’s Project. Our key members are Principal-in-Charge, **Gary Skrel, PE**, Project Manager, **Chris Davenport, PE**, and Construction Manager, **Justin Seufert, PE**. Gary has 40 years of water industry experience, will manage the contract with the City, and act as an advisor on all project matters. Chris has over 32 years of experience in the water industry and will be responsible for the overall management of the Project including the schedule and budget. Justin has 19

years of construction industry experience. He will be responsible for day-to-day construction activities and be the City’s primary point of contact. Figure 1 lays out the details of our organizational structure, and Table 1 outlines team availability throughout the Project.

We present the qualifications of our team in more detail in the pages that follow. Table 2 lists the roles and responsibilities of our team members. We highlight our team’s backgrounds and similar project experience in Section 3, and Appendix A includes resumes with educational and licensing credentials.

Figure 1 - Psomas Team Organization Structure



## Table 1 - Key Team Member Availability & Assigned Projects

	Preconstruction	Construction <i>(Please refer to Section 4 Work Plans for Construction Phasing Details)</i>	Other Assigned Projects During City Project
<b>Chris Davenport, PE</b> Project Manager/UV Disinfection Lead	▶ Committed for the level of effort necessary for constructability review and bid-period services	▶ Committed for an average of 40 hours/month for Phases 1, 2, and 3. For Phase 4, his level of service will increase for UV disinfection equipment installation, start-up, and testing	▶ Support and advisory role to other water resource projects in the Bay Area
<b>Justin Seufert, PE</b> Construction Manager	▶ Committed for the level of effort necessary for constructability review and bid-period services	▶ Committed for an average of 144 hours/month for the entire construction duration.	▶ Not assigned to any other projects
<b>Gary Skrel, PE</b> Principal-in-Charge	▶ Committed for the level of effort necessary for constructability review and bid-period services	▶ Available for technical assistance and advisory services on an as-needed basis	▶ Support and advisory role to other water resource projects in the Bay Area
Inspection and Office Engineer/Field Engineer	▶ N/A	▶ Full time on site for the entire construction duration.	▶ Not assigned to any other projects

## Table 2 - Team Member Roles and Responsibilities

<b>Principal-in-Charge</b> <ul style="list-style-type: none"> <li>▶ Construction Issue Resolution</li> <li>▶ Construction Schedule Advisor</li> <li>▶ Contract Manager</li> <li>▶ Constructability Reviews</li> </ul>	<b>Project Manager</b> <ul style="list-style-type: none"> <li>▶ Overall Team Performance</li> <li>▶ UV Specialist</li> <li>▶ Management of CM Staff and Resources</li> <li>▶ Client and Project Stakeholders Interface</li> <li>▶ Communications and Coordination</li> <li>▶ Constructability Review</li> </ul>	<b>Construction Manager</b> <ul style="list-style-type: none"> <li>▶ Resident Engineering</li> <li>▶ Contract Administration</li> <li>▶ Schedule Reviews</li> <li>▶ Progress Payments</li> <li>▶ Change Order Estimates and Negotiations</li> <li>▶ General Correspondence</li> <li>▶ Chair Meetings</li> <li>▶ RFI solutions</li> <li>▶ Identifying Construction issues and developing solutions</li> </ul>
<b>Office Engineer/Field Engineer</b> <ul style="list-style-type: none"> <li>▶ Submittal Processing</li> <li>▶ RFI Processing</li> <li>▶ Progress Payment Processing</li> <li>▶ Construction Documentation Control</li> <li>▶ Record Drawings</li> </ul>	<b>Inspector</b> <ul style="list-style-type: none"> <li>▶ Day-to-day verification of construction conformance with contract documents</li> <li>▶ Daily documentation (Written and Photo Logs)</li> <li>▶ Coordinate Material Testing and Specialty Inspection</li> </ul>	<b>Subconsultants</b> <ul style="list-style-type: none"> <li>▶ Technical Reviews and advisory support</li> <li>▶ Specialty Inspections <ul style="list-style-type: none"> <li>▪ Electrical</li> <li>▪ Coating</li> <li>▪ Structural</li> </ul> </li> </ul>





### Section 3

# PROJECT TEAM QUALIFICATIONS/ RESUMES

## Key Team Members

Managing construction projects for municipalities requires experienced professionals who possess the right aptitude and attitude and are committed to their clients' success. We propose a team selected for their technical expertise, experience, and successful track record, managing similar scope and complexity projects as the City's Project. The information below presents short biographies of each team member. Appendix A includes their resumes with additional details on their project experience, education, professional credentials, and licensing.

### CHRIS DAVENPORT, PE

#### Project Manager



Chris will be oversee the preconstruction and construction activities. He will also be responsible for the overall performance of our team's construction manager, field engineer, inspector, and specialty

subconsultants. With over 32 years of experience in water/wastewater treatment plant, pump station, and pipeline construction, Chris brings the understanding and know-how to manage the City's Project successfully. His background includes CM for three UV disinfection facilities giving him knowledge of Title 22 permitting and UV validation, start-up, and testing.

#### Similar Project Experience

- ▶ Program Manager/Project Manager - Dublin San Ramon Services District DERWA Recycled Water Treatment Facility Phase 2
- ▶ Project Manager/Construction Manager - Dublin San Ramon Services District Recycled

Water Facility, Dublin San Ramon Services District

- ▶ Project Manager/Construction Manager - Zone 7 Water Agency Mocho Groundwater Demineralization Plant
- ▶ Construction Manager - Delta Diablo Sanitation District. Antioch Recycled Water Project
- ▶ Assistant Construction Manager - Dublin San Ramon Services District Clean Water Revival Microfiltration/Reverse Osmosis Facility

### JUSTIN SEUFERT, PE, QSP/QSD

#### Construction Manager



Justin will be the main contact point during construction and will work with City staff to manage all construction activities and construction management services. Over the last 19 years, Justin has led multiple

projects from initial planning through construction. His portfolio includes a broad range of water/wastewater, heavy civil, transportation, and land development projects.

As a project manager/construction manager/resident engineer, he has successfully led construction management teams on numerous heavy civil construction projects. Justin has a demonstrated track record as a successful project ambassador, relying on a proactive approach to keep key stakeholders informed of construction activities. Justin's approach to monitoring project progress, safety, schedule, and budget has resulted in many successful projects for his clients. Justin will report to Chris and manage the technical staff, schedule, budget, stakeholder coordination, and dispute resolution. Justin is

currently the Construction Manager for Santa Rosa's Llano Trunk - West Third St., Brittain to Darla and Glenbrook Siphon Lining project. His experience collaborating with City staff and his understanding of City processes creates a strong foundation for the seamless continuation of our services.

### *Similar Project Experience*

- ▶ Project Manager - City of Santa Rosa Llano Trunk - West Third St., Brittain to Darla and Glenbrook Siphon Lining project
- ▶ Assistant Resident Engineer - Santa Rosa and Windsor Airport Boulevard Interchange project
- ▶ Project Manager/Construction Manager - Ironhouse Sanitary District Old Town Pipeline Improvements Project
- ▶ Construction Manager - Ross Valley Sanitary District
  - Large Diameter Gravity Sewer II-3B\*
  - Large Diameter Gravity Sewer II-3A
  - FY 2016/2017 Gravity Sewer Improvement Project
  - FY 2015/16 Gravity Sewer Improvement Project
  - FY2014/2015 Pipeline Rehabilitation

\* Justin was also the Project Manager

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## **GARY SKREL, PE**

### **Principal-in-Charge**

### **Constructability Review/Project Advisor**



Gary has over 40 years of experience in the water resources infrastructure industry. He is the Principal in Charge of Psomas' Walnut Creek Regional Office which has focused on CM for the Greater Bay Area water

resources industry for the last 25 years. His knowledge of construction scheduling, sequencing, and coordination on complicated projects will be an asset during the constructability review and construction.

He was the Principal-in-Charge for two UV disinfection facility projects and participated in the constructability review for another: the City of Palo Alto Ultraviolet Disinfection Facility, City of

Watsonville Recycled Water Treatment Facility, and Dublin San Ramon Service District Clean Water Revival Microfiltration/Reverse Osmosis Facility Project.

### *Similar Project Experience*

- ▶ Principal-in-Charge/Project Manager - City of Palo Alto Ultraviolet Disinfection Facility
- ▶ Principal-in-Charge/Project Manager/Constructability Review - City of Watsonville Recycled Water Treatment Facility
- ▶ Constructability Review - Dublin San Ramon Services District Clean Water Revival
- ▶ Constructability Review - Microfiltration and Reverse Osmosis Facility Project
- ▶ Principal-in-Charge/Project Manager - City of Santa Rosa LLano Trunk Lining Phase Project
- ▶ Principal-in-Charge/Project Manager - Ross Valley Sanitary District Multiple Pump Station and Pipeline Projects

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## **Additional Team Members**

We are providing short biographies of multiple inspectors and office/field engineers representing our personnel's quality and experience. Due to the construction start date's uncertainty, it is appropriate to defer specific assignments until more accurate dates are established.

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## **STEVE BRANDT, ICC**

### **Inspector**



Steve has worked in the construction industry since 1989 providing inspection/observation and materials testing for water resources projects including pump stations, pipelines, and treatment plants. He has

experience with electrical and mechanical installations, soils, concrete, reinforcement, asphalt placement, and control systems. He has worked on UV facility projects for Ironhouse Sanitary District's Wastewater Treatment Plant Expansion and the City of Petaluma's Ellis Water Recycling Facility.

Steve's attention to detail and ability to anticipate construction issues before they occur result in quality installations. Our clients consistently request Steve on

their projects due to his technical knowledge, practical experience, and ability to cooperate effectively with all project stakeholders. His mindset is to “stay ahead” of the contractor to anticipate problems, improve construction quality, and reduce rework.

#### *Similar Project experience*

- ▶ Inspector - City of Santa Rosa Llano Trunk - West Third St., Brittain to Darla and Glenbrook Siphon Lining project
- ▶ Inspector - City of Petaluma, Ellis Creek Water Recycling Facility
- ▶ Inspector - Ironhouse Sanitary District, Wastewater Treatment Plant Expansion
- ▶ Inspector - Ross Valley Sanitary District Large Diameter Gravity Sewer Rehabilitation
- ▶ Inspector - Headworks Equipment Rehabilitation and Replacement, Napa Sanitation District

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## **JAMES WILLIAMS**

### **Inspector**



James has over 19 years of experience in construction inspection, materials testing, and construction inspector supervision on a variety of projects including recycled water and wastewater treatment

plants, pump stations, and pipelines. He has worked on UV facility projects for Novato Sanitary District's Wastewater Facility Upgrade and Wastewater the City of Petaluma's Ellis Water Recycling Facility.

#### *Similar Project Experience*

- ▶ Inspector - City of Petaluma, Ellis Creek Water Recycling Facility
- ▶ Inspector - Novato Sanitary District Wastewater Facility Upgrade
- ▶ Lead Inspector, City of Sunnyvale, Water Pollution Control Plant
- ▶ Inspector - Dublin San Ramon Services District Dublin Trunk Sewer Rehabilitation Project
- ▶ Inspector - Union Sanitary District Thickener Control Building Improvements Project

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## **LARRY CLOUGH, ICC**

### **Inspector**



With 30 years of inspection experience in the water resources industry, Larry is our team's veteran inspector who sets the standard for proactive field inspection. As Larry has proven repeatedly, our CM approach

means much more than merely observing, documenting, and verifying contract conformance of the work. Larry applies his experience to stay ahead of the contractor. He confirms what is on paper works in the field and represents the owner every step of the way. He continually helps the contractor move in the right direction and becomes a trusted ally rather than an adversary.

He was the inspector for two UV disinfection facility projects: the City of Palo Alto Ultraviolet Disinfection Facility Project and the City of Watsonville Recycled Water Treatment Facility.

#### *Similar Project Experience*

- ▶ Inspector - City of Palo Alto Ultraviolet Disinfection Facility
- ▶ Inspector - City of Watsonville Recycled Water Treatment Facility
- ▶ Inspector - Soquel Creek Water District Polo Grounds Well and Treatment Plant – Startup and Testing Support
- ▶ Inspector - Pajaro Valley Water Management Agency Recycled Water Storage and Distribution Pump Station improvements Project
- ▶ Inspector - Pajaro Valley Water Management Agency K1 Blendwell Pipelines

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## **JONATHAN COWSERT**

### **Inspector**



Jonathan has worked in the construction industry for 23 years. His experience includes quality assurance inspection and field observation for various water resources facilities,



including pump station, pipelines, and treatment plants projects.

### *Similar Project Experience*

- ▶ Inspector - Dublin San Ramon Services District DERWA Recycled Water Treatment Facility Phase 2
- ▶ Inspector - Zone 7 Water Agency Del Valle Water Treatment Plant Ozonation Project
- ▶ Inspector - Central Contra Costa Sanitary District Pump Station Upgrades Project
- ▶ Inspector - City of Redwood Water Project Distribution Pump Station Capacity Increase
- ▶ Inspector - Union Sanitary District Fremont and Paseo Padre Lift Stations Improvements

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## **BROOKE CAREY, PE**

### **Office Engineer/Field Engineer**



Since joining Psomas in 2017, Brooke has provided OE/FE services for a variety of water related projects, ranging from water treatment plants to storage tanks, and pipelines.

### *Similar Project Experience*

- ▶ OE/FE - Zone 7 Water Agency Patterson Pass Water Treatment Plant Upgrades and Ozonation Project
- ▶ OE/FE - Novato Sanitary District Recycled Water Facility Expansion
- ▶ OE/FE - Vallejo Flood & Wastewater District Mare Island Sewer and Water Main Replacement Project
- ▶ OE/FE - North Marin Water District Recycled Water Expansion Project Central Service Area
- ▶ OE/FE - Zone 7 Water Agency Del Val Water Treatment Plant Ozonation Project

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## **JOSEPH EASTERBROOK, EIT**

### **Office Engineer/Field Engineer**



Joseph has 11 years of experience taking projects from design through construction and closeout. Since joining Psomas in 2018, he has worked on pipeline and pump station rehabilitation and

improvement projects.

### *Similar Project Experience*

- ▶ OE/FE - Central Contra Costa Sanitary District Pump Station Upgrades Project
- ▶ OE/FE - Ross Valley Sanitary District PS 12 and PS 13 Greenbrae Pump Station Rehabilitation Projects
- ▶ OE/FE - Ross Valley Sanitary District PS 15 Kentfield Pump Station Improvements
- ▶ OE/FE - Marin Municipal Water District Lagunitas Creek Watershed Improvements

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## **ED O'BRIEN, PE**

### **Constructability Review/Project Advisor**



Ed has 20 years of experience providing project and construction management services for water resources infrastructure projects. His knowledge and experience as construction manager for

two UV disinfection facility projects, the Ironhouse Sanitary District Wastewater Treatment Plant Expansion and the City of Petaluma Ellis Creek Water Recycling Facility, will benefit the constructability review and our team once construction is underway.

### *Similar Project Experience*

- ▶ Construction Manager - Ironhouse Sanitary District, Wastewater Treatment Plant Expansion
- ▶ Construction Manager - City of Petaluma, Ellis Creek Water Recycling Facility

- ▶ Project Manager - Zone 7 Water Agency, Patterson Pass Water Treatment Plant and Ozonation Project
- ▶ Project Manager, City of Vallejo Mare Island Sewer and Water Main Replacement Project
- ▶ Project Manager, Napa Sanitation District Miliken-Sarco-Tulocay (MST) Recycled Water Pipeline and Booster Pump Station

## GERRIT POST, PE

### Constructability Review/Project Advisor



Gerrit will be used as an in-house resource and participate in the constructability review based on his experience working on two UV disinfection projects, the Ironhouse Sanitary District

Wastewater Treatment Plant Expansion and the City of Petaluma Ellis Creek Water Recycling Facility. He has worked on Northern California water resource projects since 1999.

### Similar Project Experience

- ▶ Construction Manager - City of Brentwood Wastewater Treatment Plant Improvements
- ▶ Assistant Construction Manager - Ironhouse Sanitary District, Wastewater Treatment Plant Expansion
- ▶ Assistant Construction Manager - City of Petaluma, Ellis Creek Water Recycling Facility
- ▶ Construction Manager - Napa Sanitation District, Soscol Water Recycling Facility Expansion Projects
- ▶ Construction Manager - City of Davis Secondary and Tertiary Improvements Project
- ▶ Construction Manager - Napa Sanitation District Headworks Equipment Replacement Project

## Special Subconsultants

Our subconsultants are an important part of our team. By partnering with firms we know and trust to produce dependable, quality services, we deliver successful projects for our clients.



Todd Beecher, EE will provide electrical, instrumentation, and controls (E, I and C)

support services. He has over 28 years of experience in the planning, design, and construction of electrical power, control, and instrumentation systems for the water and wastewater industry. He has teamed with Psomas for over 17 years and performs constructability reviews, reviews of equipment submittals, installation start-up and testing, and change order evaluation.



Bay Area Coating Consultants, Inc. (BACC) has completed thousands of coating and lining

projects over the last 33 years, and never experienced a coating or lining failure on any of their projects. This quality assurance and industry record is backed by experienced NACE qualified inspectors who have been long term employees of BACC and are trained in the firm's strict quality guidelines. Psomas has successfully partnered with BACC on numerous projects.



Since 1984, Dave Mathy, PE has provided geotechnical

engineering services evaluating soil, and groundwater conditions for the rehabilitation and construction of new infrastructure including pipelines, pump stations, water tanks, reservoirs, and water/wastewater/recycled water treatment plants.



Consolidated Engineering Laboratories (CEL) will provide welding and masonry inspections for

the City's Project. Based in San Ramon, with full service facilities in Santa Rosa, Oakland, and Sacramento, CEL has been providing materials testing, construction inspection, and geotechnical engineering for clients in the water/wastewater industry for over 32 years.





## Section 4

# WORK PLAN

## Introduction

The City's Project has multiple objectives:

1. Increase UV disinfection capacity, returning to (or exceeding) its pre re-rated capacity.
2. Provide operational flexibility for non-compliant effluent through diversion to the flow equalization basins.
3. Consolidate on-site storm drainage and discharge options.
4. Upgrade facilities to accommodate construction and provide a new training center.



The successful delivery of every project is our goal. Our approach to meeting this goal is to “serve” the project. We are a service firm, and a “project first” mentality allows us to focus on doing what’s best for the project, which ultimately is best for the client. We adopt your Project as ours and take ownership and pride in its success. To help promote this approach within our team, Carollo, and the contractor we follow these key principles:

- ▶ Develop an in-depth understanding of the project facets
- ▶ Promote timely and open communications

- ▶ Focus on solving problems, not looking for blame

Using these guiding principles allows us to build trust quickly with the other project participants. It enables us to leverage the team’s best ideas, so we all are thinking in terms of “let’s do what is right for the project” instead of “us versus them.” Keeping the team focused on doing what is best for the Project provides the greatest opportunity of delivering a fully rated wastewater system that will serve the City for generations to come.

## Project Understanding

Based on our review of the 75% Plans and Specifications and our visit to the Project site with City personnel, we have developed a good understanding of the proposed construction. This understanding has also provided us with early insight into the potential challenges of the Project. As we understand, the currently proposed construction is based on four phases, generally described as follows:

### Phase 1

The primary focus of this initial phase is preparing the UV facilities, including site clearing, utility relocations, select demolition, and completing the new Hypochlorite Storage and Feed Facility (HSFF). Construction will also start on the Diversion Wet Well/ Pump Station and the Load Center. This phase can be described as heavy civil/mechanical/electrical work. Based on the City’s 30-month construction duration forecast, our initial schedule projection suggests Phase 1 will need to be completed in  $\pm 10$  months. Specific challenges in this phase will be the deep excavation for the WetWell related to the existing effluent pipes and the timing/extent of flood wall removal.

## Phase 2

Phase 2 will essentially be an extension of Phase 1 civil/mechanical/electrical work. With the new HSFF in operation, the existing HSSF can be demolished, clearing the area for the start of the northern portion of the UV structure. The 42-inch diversion pipe will be constructed. The Effluent Diversion Junction Structure (EDJS) will also be constructed to facilitate the bypass effluent pumping required in Phase 3. Based on the City's 30-month construction duration forecast, our initial schedule projection suggests Phase 1 will need to be completed in  $\pm 8$  months. Specific challenges in this phase will be the excavations for the UV and EDJS structures and maintaining access to existing LTP facilities during the diversion pipeline

## Phase 3

This phase gets to the heart of the new treatment facilities. A bypass system must initially be installed before demolition of the existing effluent pipes. Once the effluent pipes are removed, the remainder of the UV structure will be constructed. Major mechanical equipment will be installed and tested at the Diversion and Storm Water Pump Stations. All underground construction will be completed, including the storm drains and ductbanks. This will facilitate start-up of the Load Center and Pump Stations. Based on the City's 30-month construction duration forecast, our initial schedule projection suggests Phase 1 will need to be completed in  $\pm 8$  months. Specific challenges will be the bypass system set-up, testing and operation, and the sequence of activities in a congested work site.

## Phase 4

This phase will culminate over 2 years of construction. The UV equipment will be installed and commissioned and the Pump Stations will be commissioned. The final steps will be getting the LTP back to normal operations – grading, paving, re-installing the Flood Wall, and converting the construction trailers for the use of plant personnel.

The construction phasing outlined above is well structured and presents the work in a logical sequence. As the design progresses beyond the 75% stage, the evolution of these phases will occur. Based on our initial review of the Project, we have identified several items that warrant consideration during the completion of the design. We present a few below:

1. The sequenced nature required for the Diversion and UV structures construction across multiple phases will require carefully planned and constructible structural details.
2. The excavation support systems and dewatering require further evaluation, especially as it relates to adjacent facilities.
3. The temporary removal of the Floodwall creates risks to both the City and the contractor. The timing, physical limits, and duration of the removal and the need for contingency planning must be included in the construction contract to fairly apportion these risks.
4. Maintaining LTP access, especially during the Diversion Pipeline construction, will require detailed coordination with plant personnel and must be well-defined in the construction contract.
5. Testing and start-up of the new facilities will require significant water volumes. The City will need to consider seasonal flow variations and water customer commitments.

As a result of our decades of experience working in treatment plants, we will contribute helpful insights and recommendations as we work as a team with the City and Carollo to finalize the design. This team approach will begin with preconstruction and carry over to construction.

## Approach

The following pages summarize our general approach to supporting Carollo's design team through Task 1: Preconstruction and leading the construction team in Task 2: Construction/Start-Up.



## Task 1: Preconstruction

Investing additional effort in refining the plans and specifications before bidding is like spending more time preparing a surface before painting; it yields a much better end product. We applaud the City for recognizing this and look forward to jumping right in with a constructability review and helping your Project team complete the design package. We have performed similar reviews on numerous Carollo designs.

Our approach for this phase is to have our PM, Chris Davenport, lead the preconstruction activities. He has extensive experience managing UV and other treatment plant construction, including managing Carollo-designed projects over the past 20 years. Other Psomas team members, including our on-site CM personnel, will have distinct constructability review assignments, tailored to their expertise. Also helping will be Todd Beecher (electrical engineer) and Dave Mathy (geotechnical engineer). Todd has teamed on a majority of Psomas' constructability reviews, including numerous Carollo designs, and provides electrical engineering oversight on most of our CM projects. His experience in designing and reviewing/troubleshooting field installations will improve the quality of the EI&C documents. Like Todd, Dave Mathy has partnered on many of our recent constructability review efforts. He has an in-depth knowledge of Bay Area geology and is very familiar with excavation support systems and dewatering.

Our team's goal is to improve the plans and specifications, not question the design's basis. We are a team of CM professionals, and we focus on our specialties and respect Carollo's strengths. We look for conflicts and omissions that, if gone unchecked, could become costly problems during construction.

Our review will include the specifications, plans, and appendices (if applicable) and concentrate on:

1. Conflicts, omissions, and ambiguities between the plans and specifications
2. Completeness of the bidding documents
3. Coordination between the design disciplines
4. Constructability of the project's facilities
5. Potential claim areas based on our experience with this type of work



We will transmit all written review comments electronically in a format that makes it easy for the City and Carollo to read and respond.

One area we will pay special attention to is the testing, start-up, and training section. We know that at the end of long and complicated projects, there is a tendency to rush to get things turned over to operations and maintenance staff. That is why the specifications must be consistent, clear, and pragmatic when outlining the start-up, testing, and training process. We will review both the front end and technical specifications to ensure the necessary coordination meetings and training sessions are included to meet and not overwhelms the City's needs. It is essential to include only the training City staff want and need. We find having staff sit through sessions on equipment they already know quickly loses their attention and eagerness to attend other sessions.

We also propose to work with Carollo to develop a detailed preliminary construction schedule that will support the finalization of the construction phasing and associated durations, sequencing, and constraints. This schedule will require a coordinated effort with plant staff.

### Assistance During Bid Period and Award

When the Project hits the streets, our support role continues. Carollo will remain active by answering contractor questions and leading the pre-bid meeting. We will help track the contractor questions, supplementing answers, documenting meetings, and reviewing addenda. When the bids are opened, we will assist in evaluating them for responsiveness and responsibility. We will provide a written recommendation to award that can be used to support the staff report.



## Task 2: Construction

To successfully deliver the Project, your CM must keep an equal focus on managing each of its parts. The challenges of building a UV facility, pump stations, and major pipelines in the middle of an operating treatment plant are numerous. We understand these difficulties and are proposing an approach that capitalizes on the strengths of our team. This strategy allows us to provide individuals with extensive experience in that particular aspect of public works construction. This approach also allows us to streamline the administrative process, expedite RFI and submittal review times, reduce consultant costs, and speed up the actual work.

Justin Seufert, PE, will lead our CM team. Justin's strengths align with the construction aspects of the Project. As described above, most of the Project is heavy civil/mechanical/electrical construction. Over the past several years, Justin and Psomas have successfully managed many projects for the Ross Valley Sanitary District, including six pipelines and three pump stations since 2017. Justin compliments his pipeline experience with his experience on various large, heavy civil and structure projects. He served as Assistant Resident Engineer on the \$50+ million Airport Boulevard Interchange project in Windsor and Santa Rosa. The multi-year project included over 100,000 CY of earthwork, the construction of multiple new structures, including bridges, soundwalls, deep foundations, ground improvements, and the relocation of utilities for multiple owners, including PG&E, Comcast, and Sonoma County Water Agency. Coordination with several contractors and the numerous project stakeholders was key to the project's success.

Chris Davenport, PE, will support Justin during the first three phases of construction, providing input on technical issues, sequencing, and process-related questions. Chris has managed multiple UV projects, and he will be very involved in Phase 4 during the installation, start-up, and testing of the UV system.

A full-time onsite Office/Field Engineer (OE/FE) and inspector will support Justin and Chris. The OE/FE will play an important support role in contract administration and resident engineer activities. Our approach will also include a full-time senior inspector. There may be a short duration when multiple inspectors could be necessary, depending primarily on the contractor's schedule. Our personnel roster

has numerous dedicated and experienced wastewater treatment plant inspectors that will professionally fulfill all contract requirements.

In the following discussion, we describe our CM approach in additional detail. This approach has produced successful projects over the past 25 years and numerous repeat clients.

### Communication/Coordination

We emphasize the need to communicate with treatment plant staff early and often with the intent to eliminate all surprises. We work with the contractor to develop work plans that preserve the plant staff's safe access to existing facilities. When a portion of the new construction needs to interrupt the existing process, we work with the contractor and plant staff to develop thoughtful and vetted shutdown plans, listed as the Method of Procedures (MOP) process Section 01140 in the 75% Plans and Specifications. The MOP process provides early notification of upcoming activities that will directly impact existing plant operations and provide a platform for discussing the plan. The work steps, the availability of materials, and the contingency plan in the event difficulties are encountered that could prolong the outage or otherwise jeopardize plant operations are all addressed. The contractor will prepare the MOP and submit it to Psomas for the initial review. Justin will take an active review in the MOP process and is a firm believer in doing walkthroughs before execution.

### Safety

Project and worker safety for all employees and employers are our highest priority and essential for project success. The contractor has the prime responsibility for safety on the project site. Their safety measures and procedures need to be outlined in their project-specific safety work plan to protect everyone, directly and indirectly, involved with the construction process. Our CM team members are Competent Person, Confined Space, and CPR trained and certified. They will emphasize and reinforce the importance of compliance with CalOSHA Safety Standards and adherence to their own site Safety Plan.

### Baseline Schedule and Updates

The first and most important effort is developing a realistic baseline schedule. The schedule is the roadmap for the construction of the Project and is the

basis for evaluating time impacts that may occur as construction proceeds. Too often, this is left solely up to the contractor to develop.

To help with the knowledge transfer from the preconstruction team, we advocate following a cooperative approach to developing the baseline schedule. We recommend that Psomas lead a schedule workshop that includes City staff, the contractor, and Carollo. We find that this is the best and most practical path to developing an accurate and useable project schedule based on our past projects.

The baseline is just the first step in this process. No plan is ever perfect, and that is why the contractor must spend time and effort to provide timely and meaningful schedule updates. Too many times, the project team stops the scheduling work as soon as the baseline is accepted. We will work with the contractor to help them maintain their focus on submitting regular and accurate schedule updates.

## Document Control

We utilize Procore as our cloud-based, document management software. We recommend Procore over the requirement in the 75% Plans and Specifications to employ EADOC. Procore is an industry leader in the project management field. It is easy to use and can be accessed from any computer or mobile device with an internet connection. Procore shall be the primary means of tracking and maintaining all correspondence, submittals, requests for information reports, and other project-related documents. Procore's drawing tool allows the project's drawing to be uploaded and as-built in real time as unknown utilities are encountered in the field. The files can then be exported into interactive PDFs, and modified by commonplace software programs, such as Bluebeam. Procore also promotes easy project closeout as it can export all of the project's documentation and communication into searchable PDFs.

## Progress Reporting

For large high profile projects like the City's, we understand how important it is to keep the City Management Team, the Board of Public Utilities, and City Council up to date. We draft our monthly construction progress reports with all these audiences in mind. Appendix B includes an example.

In addition to the monthly summary report, we plan to set up time-elapsd cameras at the treatment plant. Our field team uses photos to create simple movies that capture site progress. Several of our clients upload the film to their websites and social media platforms to promote the project and the progress. The following is a link showing an example from the [Dublin San Ramon Services District Recycled Water Facility Expansion](#).

## Weekly Progress Meetings

Our approach to the weekly progress meetings is to promote open dialogue. As part of our no surprise approach, we pay special attention to the 3-week look ahead schedule to track upcoming work activities. We discuss the forthcoming critical decision points and actions. This allows Carollo to prioritize RFI and submittal reviews and the City's Operations and Maintenance staff to plan around existing equipment or processes interruptions.

Safety is paramount on every project, and it is why we discuss the topic early on the agenda. Communicating existing and new potential hazards, whether it is an existing plant operation or the contractor's upcoming work, is critical to keeping everyone involved safe. Appendix C includes an example of a project meeting agenda.

## RFI Process

Every project design continues to evolve after the bid. Our job goes beyond being a pass-through for design-related questions. We know the most effective use of Carollo's limited time and resources is to forward RFIs that have been vetted and make sense. Our team will not forward an RFI without clearly understanding what the contractor is asking and confirm the question is not already answered in the Project Plans and Specifications. Sometimes an RFI may be about an existing piece of equipment or how Operations and Maintenance staff would like something laid out. In those cases, we will work with Carollo and the applicable City staff members to answer the RFI.

## Submittal Process

Like our approach to RFIs, we will not just pass submittals through to Carollo. We will check the submittals for completeness and compliance with the specifications. Similarly, we review Carollo's submittal responses for clarity and accuracy. The phasing of the Project will require expedited submittals for the

Phase 1 construction, particularly for the new HSFF, excavation support system, and Diversion Wet Well/ Pump Station.

## **CCO/PCO Review and Tracking Process**

All projects have changes- it is how issues and individuals are treated during the change process that can affect the overall success of the project. Our approach as 'project first' helps us achieve fair and timely resolutions. We work hard to build trust with the contractor and once achieved, become our partner who often provides valuable input and ideas that allow the project team to quickly and amicably resolve project issues.

The keys to the successful negotiation of change orders are a well-defined scope and accurate construction estimating. In our dispute resolution services experience, the initial disparity in contractor's cost proposals and owner's estimate is typically related to a difference in interpretation of the changed work scope. Thus, the City, Carollo, and Psomas must work together to provide an accurate description of the scope change. Once the work is clearly described, we can develop an estimate of the cost to use as a check against the contractor's quote. Our estimates rely on our construction experience and estimating knowledge to prepare fair and reasonable estimates.

Whenever it becomes apparent that a project challenge has the potential to affect either budget or schedule, we create an "issue file," which is our term for a risk registry. We collect and keep all relevant information in one easy to access location. Our issue files contain typical information such as copies of daily reports, pricing data, contractor letters, emails, field conversations, and photographs.

## **Progress Payment Requests Process**

Before forwarding any contractor pay requests, it is important to first develop and agree on an acceptable schedule of values (SOV). The SOV will be the basis for payment throughout the Project, and so the SOV must work for all parties. Before we recommend accepting an SOV, we will review it in detail to ensure the contractor has not 'front-loaded' the SOV and that there is adequate detail to allow for our monthly review.

After the SOV is accepted, we will review the contractor's monthly progress payment request

and determine whether the amount requested reflects the actual status of the contractor's work in place, materials on-site, and conforms to the contract requirements. We perform the appropriate administration, preparation, and processing of the monthly progress payments so the City can complete processing and make payment by the time periods outlined in the Public Contract Code. We will prepare a summary cover sheet for each progress payment request that lists all contract financial information.

## **Testing, Training, Start-Up, and Handover Process**

The Project will add new equipment, ranging from large to small pumps, electrical components, and a UV disinfection system to the existing plant. Long before any start-up and testing, we will develop an asset management spreadsheet to confirm all equipment has received the proper testing, calibration, and adjustments before being put into service. The spreadsheet will also confirm that delivery of O&M manuals to the City.

Since there are new systems and equipment, effective training for the plant staff is essential. The most effective training occurs when the systems are physically in place, and staff can see and "feel" the equipment while engaging with the trainer. This opportunity presents itself during check-out and start-up of the facility. This training will be planned and coordinated in advance to maximize the benefit.

Psomas identifies all training defined in the specifications and works with the contractor, suppliers, and plant operation staff to develop a training plan. To facilitate and manage this process, we prepare a log of all required training and update it as training occurs, so there is a record of who was trained on what equipment and when. We will coordinate with the contractor to schedule the training to fit the Operations and Maintenance staff needs and schedule. If it is necessary to have multiple sessions to accommodate the schedules of the Operations and Maintenance staff or construction sequencing, these sessions are also identified in advance and tracked. These sessions will include both classroom and in the field hands-on training. This diligence results in well-planned and effective training for the City.

## Construction Inspection - QA/QC

Psomas' approach to construction inspection goes beyond observing and documenting the fieldwork. Our inspectors anticipate upcoming activities and potential field-related problems before they impact the work. They understand that preventing deficiencies avoids rework, which enhances schedule performance, avoids unnecessary expense, and builds a positive relationship with the contractor. Contractors quickly realize that our inspector is an asset, not an adversary, to completing their work.

Anticipating and avoiding problems is key to timely completion. Just as critical is the need to properly document what actually happened. Our inspector will document the work performed, labor, equipment on-site, materials used, problems encountered, and corresponding corrective actions in a daily report.

Psomas' inspectors use the Procore system to create detailed and timely daily reports. They can access Procore on both their mobile devices and tablets, allowing them to input real-time information. This access also allows inspectors to easily reference submittals and RFIs while in the field to conform material and equipment compliance with the contract documents and technical submittals.

All of our field staff supplement their daily reports by taking digital photographs of the work. All photos are uniquely labeled to define their content and identify the area and facility depicted. We will work with the City at the beginning of the Project to define a labeling convention. That allows for easy access during construction and long after closeout documentation has been turned over to the City. We understand the importance of high quality, long term documentation.

## Special Testing

The RFP states that the City will be responsible for asphalt, concrete, and soil compaction specialty inspections and testing. Our team includes specialty inspection firms that will inspect field welding, masonry, and coatings, as required. Our subconsultant partners confirm the work conforms to the contract and applicable permit requirements. Our Psomas team appends the specialty inspection reports to our inspector's daily logs and uploads copies in separate Procore folders. The document maintenance process makes it easy for anyone trying to find a report later.

## Approach Summary

The previous pages presented a summary of our approach, philosophy, and tools. These are time tested and proven means that have allowed us to deliver quality treatment plant projects for our satisfied clients.

## Schedule

The RFP indicates that for proposal purposes, we should assume a 30-month construction duration. Based on our treatment plant experience and review of the 75% Plans and Specifications, we developed a summary schedule based on the RFP phasing. To achieve completion in the RFP-prescribed 30 months, a breakdown by phase produced the preliminary conclusion shown in Table 3 below.

**Table 3 - Summary Schedule**

Phase	Approximate Duration
1	± 10 months
2	± 8 months
3	± 8 months
4	± 4 months
Total	30 months

The details presented in the 75% Plans and Specifications require further development to produce a higher degree of accuracy on phasing and overall construction durations.

As mentioned earlier, during our preconstruction task, we propose to develop a detailed preliminary construction schedule. We note that Carollo's design scope includes preparation of a construction schedule. We humbly suggest that Psomas' construction manager apply his construction expertise and develop the preliminary construction schedule in cooperation with Carollo.

This schedule will benefit the entire construction team when finalizing:

- ▶ Project phasing requirements, start dates, finish dates, and durations
- ▶ Specific constraints related to existing LTP operations



- ▶ Specific sequencing pertaining to the new facilities
- ▶ Weather (and potential flood) considerations
- ▶ Overall Project duration and potential milestones

The result will be information that helps produce a comprehensive bid package and can assist the contractor during the development of the baseline schedule. This schedule will also assist the City with their professional support services agreements with Carollo and Psomas.

## Summary and Recommendations

It is our recommendation, if fortunate to be selected, that the City initially authorize Psomas to proceed with Task 1 services. During Task 1 services, which will be many months, the City and Psomas will reach a

better understanding of Project details and durations, thus allowing a more accurate means for finalizing resources and level of effort for Task 2 construction management services.

Based on the above, Psomas affirms that we have the necessary resources to support the schedule and deliver a successful Project. For Task 1, Chris, Justin, Gary, and other specialists are committed to the constructability review and other preconstruction services on an as-needed basis. For Task 2, Chris, Justin, and Gary are committed for the duration of the Project. A full-time OE/FE and an inspector will support them, and due to the uncertainty of the actual start of construction, it is most fair to the City and Psomas to finalize these two individuals once firm construction dates are established.



The Geysers





## Section 5

# REFERENCE PROJECTS

The following descriptions highlight our experience working on projects with elements similar to the City's Project. Teams employed by Covello managed these UV system wastewater projects. Psomas acquired Covello in 2018, and the Psomas Walnut Creek team is now the former Covello team. In addition to these projects, our portfolio includes numerous other recent projects for water resources public agencies. We list some of these agencies in Table 3 below with references and the team members, proposed for the City's Project, who worked on those agencies' projects.

Table 3 - Water Resources References		
Agency	Reference	Psomas Team Members
Ross Valley Sanitary District	Steve Miksis - 415.686.1540 Steve Moore - 415.259.2949	Chris Davenport Justin Seufert Joseph Easterbrook Gary Skrel
Zone 7 Water Agency (Alameda County)	Brandon Woods - 925.454.5078	Chris Davenport Gary Skrel Ed O'Brien Brooke Carey
Vallejo Sanitary District	Mark Tomko - 707.644.8949 x231	Ed O'Brien Brooke Carey Gary Skrel
Napa Sanitation District	Andrew Damron - 707.258.6000 x507	Ed O'Brien Justin Seufert Gary Skrel

## Recycled Water Treatment Facility Phase 2

Dublin, CA/DERWA

### RELEVANCE TO THIS PROJECT

- ▶ UV Disinfection Facility
- ▶ Chemical Systems
- ▶ Pump Stations

The project expands the treatment capacity of the existing recycled water facility from 9.2 to 16.4 MGD. The construction features include a new Actiflo ballasted flocculation process, modifications to the existing Alum and Polymer chemical systems, UV disinfection facility, expansion of two pump stations, and a potable water backup connection.



Project Groundbreaking

### CLIENT CONTACT NAME AND NUMBER

Steve Delight  
925.875.2254

### CONSTRUCTION DATES

2016 - 2018

### CONSTRUCTION ESTIMATE

\$13.4 million

### ACTUAL CONSTRUCTION COST INCLUDING CHANGE ORDERS AND CLAIMS

\$14 million

### SERVICES

Constructability Review  
Construction Management  
Construction Inspection

# Wastewater Treatment Plant Expansion

Oakley, CA/Ironhouse Sanitary District

## RELEVANCE TO THIS PROJECT

- ▶ UV Disinfection Facility
- ▶ Electrical Building
- ▶ Large Diameter Pipelines
- ▶ Hypochlorite Facility

The project constructed a new 4.3 MGD average dry weather flow wastewater treatment plant (WWTP). The work consisted of integrating the existing wastewater treatment facilities, constructing an influent treatment pipeline from the existing WWTP to the new WWTP, installing a discharge pipeline, outfall, and diffuser off the north shore of Jersey Island for discharge of treated effluent into the San Joaquin River. The process components included influent sewer, influent pump station, major electrical system, influent metering, coarse screening, grit removal, process metering, fine screening, anoxic basins, transfer pumps, membrane filtration, permeate filtrate pumps, aeration and membrane blowers, ultraviolet disinfection facilities, utility water pump station, chemical feed and storage facilities, effluent pump station, effluent metering, solids handling, odor control facilities, standby power, effluent pipeline, and outfall. A new 21 kV power service was included in the work.



## CLIENT CONTACT NAME AND NUMBER

Jenny Skrel (Former Ironhouse District Engineer, now with HDR)  
925.584.4868

## CONSTRUCTION DATES

2009 - 2012

## CONSTRUCTION ESTIMATE

\$54.4 million

## ACTUAL CONSTRUCTION COST INCLUDING CHANGE ORDERS AND CLAIMS

\$55.5 million

## SERVICES

Constructability Review  
Construction Management  
Construction Inspection

# Wastewater Facility Upgrade

Novato, CA/Novato Sanitary District

## RELEVANCE TO THIS PROJECT

- ▶ UV Disinfection Facility
- ▶ Electrical Building
- ▶ Chemical Feed and Storage Facility

The facility upgrade constructed a new wastewater treatment plant adjacent to the existing operating treatment plant. The new treatment facility employs a conventional activated sludge process and has an average daily capacity of 8.0 MGD and a maximum daily capacity of 31.0 MGD. The upgrade included new headworks, primary clarifiers, aeration basins, secondary clarifiers, UV disinfection, GBT, and digester. The new Ignacio Pump Station processes 2.5 MGD, and the new Ignacio Conveyance Pipeline installed 11,000 LF of pipeline between the Ignacio Pump Station and the Novato Treatment Plant. The work also included the demolition of various existing facilities. Close coordination was required with Novato Sanitary District staff to simultaneously construct the new facilities while maintaining and minimizing the impacts to the existing treatment facilities.



## CLIENT CONTACT NAME AND NUMBER

Steve Krautheim  
415.892.1694

## CONSTRUCTION DATES

2007 - 2010

## CONSTRUCTION ESTIMATE

\$66.4 million

## ACTUAL CONSTRUCTION COST INCLUDING CHANGE ORDERS AND CLAIMS

\$68.1 million

## SERVICES

Constructability Review  
Construction Management  
Construction Inspection

# Ellis Creek Water Recycling Facility

Petaluma, CA/City of Petaluma

## RELEVANCE TO THIS PROJECT

- ▶ UV Disinfection Facility
- ▶ Chemical Feed
- ▶ Large Diameter Pipeline
- ▶ Electrical Building

This \$116 million project treats an average dry weather wastewater flow of 6.7 MGD. The new wastewater facility includes headworks, oxidation ditches, secondary clarifiers, tertiary treatment with sand filtration and UV disinfection, and solids treatment with digesters, gravity belt thickeners, and screw press. The plant also includes 17 miles of underground pipe, installation of numerous valves, 8 miles of electrical duct banks, and levee construction for 20 acres of polishing wetlands with a trail access system for the community. This project won the American Public Work Association (APWA) 2010 Project of the Year Award.



Aerial view of construction site

## CLIENT CONTACT NAME AND NUMBER

Michael Ban (now at Marin Municipal Water District)  
415.945.1435

## CONSTRUCTION DATES

2005 - 2009

## CONSTRUCTION ESTIMATE

\$110 million

## ACTUAL CONSTRUCTION COST INCLUDING CHANGE ORDERS AND CLAIMS

\$115.8 million

## SERVICES

Constructability Review  
Construction Management  
Construction Inspection

# Recycled Water Treatment Facility

Watsonville, CA/City of Watsonville

## RELEVANCE TO THIS PROJECT

- ▶ UV Disinfection Facility
- ▶ New Electrical Building
- ▶ New Facility Construction in Parallel to Existing

This project constructed a new recycled treatment facility adjacent to the existing City wastewater treatment facility. The new facility included installing new sedimentation, clarification, and UV Disinfection processes, and a new electrical building to house the main electrical switchgear, VFDs, and MCCs. This project installed packaged treatment systems from three (3) different manufacturers, including all mechanical and electrical systems, and a complete SCADA control system that integrated each system's controls. A new 21kV service drop/switchgear and power distribution system were also constructed. The final treated water is pumped via four (4) 50-hp pumps into a distribution system to deliver approximately 4,000 acre-feet of water to local agriculture within 10 miles of the facility.



New electrical building sheetrock

## CLIENT CONTACT NAME AND NUMBER

Steve Palmisano  
Director, Public Works and Utilities  
831.768.3176

## CONSTRUCTION DATES

2007 - 2009

## CONSTRUCTION ESTIMATE

\$24.5 million

## ACTUAL CONSTRUCTION COST INCLUDING CHANGE ORDERS AND CLAIMS

\$25.5 million

## SERVICES

Constructability Review  
Construction Management  
Construction Inspection



# Recycled Water Treatment Plant

Dublin, CA/Dublin San Ramon Services District

## RELEVANCE TO THIS PROJECT

- ▶ UV Disinfection Facility
- ▶ Pump Station
- ▶ Electrical and Control buildings
- ▶ Hypochlorite Storage Facility

This project constructed a new recycled water treatment plant and pump station. The major construction elements included a new tertiary influent pump station, new holding basin for effluent pump station, new rapid mixing and flocculation tanks, new upflow sand filters, new UV disinfection facilities, new electrical and control buildings, new chemical and compressor building, new sodium hypochlorite storage facility, new recycled water pipeline connection (called Reach AB), including installation tunnel, modifications to HB4 to accommodate the project, two new 21kV electrical transformers, and all associated piping, equipment, pumps, structures, electrical, instrumentation, and connections to existing facilities.



UV Disinfection Facility

## CLIENT CONTACT NAME AND NUMBER

Dave Requa (Retired  
Assistant General Manager)  
925.323.6623

## CONSTRUCTION DATES

2004 - 2007

## CONSTRUCTION ESTIMATE

\$18.1 million

## ACTUAL CONSTRUCTION COST INCLUDING CHANGE ORDERS AND CLAIMS

\$19.4 million

## SERVICES

Constructability Review  
Construction Management  
Construction Inspection

# Clean Water Revival Microfiltration/Reverse Osmosis

Dublin, CA/Dublin San Ramon Services District

## RELEVANCE TO THIS PROJECT

- ▶ UV Disinfection System
- ▶ Large Diameter Pipeline

The project consisted of five construction and procurement contracts. Additions to the treatment plant included installing microfiltration/reverse osmosis (MF/RO) units and a UV disinfection system and constructing a 20,000 LF pipeline and injections wells.



Reverse Osmosis

## CLIENT CONTACT NAME AND NUMBER

Dave Requa (Retired  
Assistant General Manager)  
925.323.6623

## CONSTRUCTION DATES

1996 - 1997

## CONSTRUCTION ESTIMATE

\$16 million

## ACTUAL CONSTRUCTION COST INCLUDING CHANGE ORDERS AND CLAIMS

\$17.1 million

## SERVICES

Constructability Review  
Construction Management  
Construction Inspection



## Section 6

# DETAILED SCOPE OF SERVICES

This section presents the detailed Scope of Services for Task 1 and Task 2. We recommend the City consider initial authorization of Task 1 only. Task 1 will have a duration of many months and will help refine the duration and resource deployment for Task 2.

The Scope of Services for Task 2 is patterned and nearly identical to our existing Scope of Services with the City. The scope for Task 2 was previously reviewed and accepted by the City.

## Preconstruction Services

### 1. Biddability/Constructability (B/C) Reviews

#### a. Meetings:

1. 90% design submittal meeting. Psomas team will attend the kickoff meeting that is led by Carollo. They will present the Project and summarize the design intent and critical areas that should be focused on during the review.
2. Other: Psomas preconstruction team shall attend up to four (4) additional review meetings as directed by the Owner.

- b. 90% Document review will focus on conflicts, omissions, and ambiguities within the plans and specifications; completeness of the bidding documents, coordination between the design disciplines; constructability of the project's facilities; sequence, constraints, and schedule; and potential claim areas based on our experience with this type of work. Written review comments will be provided on an electronic form to the City and Carollo. Written response to comments should be provided by Carollo.

The Constructability Review will not include a comprehensive review of all technical specifications or plans but will concentrate on the areas where our experience has shown the greatest potential for value is generally found. The Review will not include a review for

building code compliance, design peer review, design plan check or value engineering. We also do not guarantee that all deficiencies in the bidding documents. The main purpose of a B/C review is to mitigate potential costly problems and changes during construction. Elimination of changes, design errors or omissions, and conflicts in the design are never completely achieved.

- c. 100% Document review will focus on verification of addressing the 90% comments and additional review of updated drawings and specifications.
2. Pre-bid Meeting: City/Carollo will lead the meeting. Psomas will assist as requested during the meeting and take lead in preparing the Record of Discussions to be issued as a Bid Addendum.
3. Addenda: Carollo is responsible for reviewing Bidders' questions and preparing addenda. Psomas will assist with review of addenda, prior to issuance, as requested by the City.
4. Bid Review; Psomas will assist the City with evaluating the contractors' bid proposals to confirm submission is responsive and responsible. If requested by the City, Psomas will make a formal recommendation regarding award of the Contract.
5. Psomas will assist City with examination, organization, and inventory the escrow bid documents of the two lowest bidders, if applicable.

## Construction Services

### 1. Preconstruction Conference (Meeting)

- a. Psomas will prepare the agenda, lead the meeting, draft and distribute the Records of Discussion. The City, Carollo and contractor team will attend the meeting.
- b. As an extension of the meeting Psomas will facilitate a Team Building discussion to include

- ‘rocks in the road’ (project challenges) and development of a Dispute Resolution Matrix.
2. Preconstruction Walk/Photos/Video
  3. Psomas will conduct preconstruction inspections documenting conditions using digital photographs and video.
  4. Administration and Office Set-Up
    - a. Psomas will setup the files for the project prior to commencement of construction and coordinate with the Owner and contractor for office trailer set-up.
    - b. Contractor will provide office trailer, furniture, copier, internet service, etc. Psomas will coordinate the requirements in the construction contract documents.
  5. Construction Administration
    - a. Project Coordination: Psomas will act as the project coordinator and be the contractor’s main point of contact.
    - b. Document Tracking System: Psomas will establish, implement and maintain an online system for tracking all correspondence and documents on the Project. Psomas will use Procore as its online document tracking system.
    - c. Construction Administration Services: Psomas will receive all correspondence from the contractor and address all inquiries from the contractor and construction related correspondence. Carollo will be responsible for providing any design input.
  6. Meetings
    - a. Psomas will prepare the agenda for progress meetings and other construction meetings required during the Project. Progress meetings will generally be held weekly. Other construction meetings will be scheduled as needed which may include submittal reviews, critical activity coordination, schedule reviews, SCADA planning/coordination, change orders and startup and testing.
    - b. Psomas will facilitate and prepare records of discussions for the progress meetings and other construction related meetings.
  7. Outside Agency Coordination: City/contractor will obtain necessary permits. Psomas will coordinate with outside agencies and review contractor’s compliance with permit requirements.
  8. Submittals
    - a. Psomas will use Procore to process submittals.
    - b. Psomas will receive contractor submittals and check for general conformity with the Contract requirements. Submittals that don’t conform shall be returned to the contractor for correction, those that do conform shall be forwarded to Carollo for review and comment.
    - c. Psomas will return the reviewed submittal back to the contractor.
    - d. Psomas will review Carollo comments to determine if additional follow-up with the City and/or contractor is warranted to identify any scope changes.
  9. Clarification Process
    - a. Psomas will receive all requests for information (RFIs) from the contractor through Procore and determine if the request is a valid RFI; if not, Psomas will return the RFI to the contractor.
    - b. Psomas will provide a response to any administrative and/or general RFIs. Psomas will route all design related RFIs to Carollo (and cc the City) for review and response.
    - c. Psomas will review the Carollo’s response to confirm it answers the question and doesn’t constitute a material change before transmitting back to the contractor.
    - d. Psomas may generate its own questions that will be transmitted to the Carollo via a CM-RFI.
    - e. If a detail, specification or plan sheet needs amending, Carollo will be responsible for preparing the Design Clarification. Non-substantive items shall be transmitted back to the contractor. Items that Psomas believes constitute a change shall be transmitted to the contractor along with a Request for Quote (RFQ).
  10. Change Order Preparation, Negotiation & Processing
    - a. Carollo will prepare design details for change requests. Psomas will prepare and issue the change request to the contractor with the appropriate supporting design documents.
    - b. Psomas will prepare an independent cost estimate and/or review the acceptability of the contractor’s cost proposal for each change request.
    - c. In the event the contractor encounters a time sensitive problem, Psomas will issue a field order. All work done under a field order will be completed on a time and material basis. Psomas will advise the City of the issuance of the field

- order, and the City will review and authorize Psomas to execute the Field Order.
  - d. City/Psomas will negotiate change orders with the contractor. Upon agreement, Psomas will prepare change orders for execution by the City and contractor.
  - e. Psomas will implement and maintain a system for logging and tracking changes.
11. Progress Payment
    - a. Psomas will review and approve the initial cost breakdown prepared by the contractor.
    - b. Psomas will review and process the contractor's monthly progress payment requests.
    - c. Psomas will prepare a summary cover sheet for the progress payments which will be executed by Psomas, the contractor, and the City.
  12. Scheduling
    - a. Psomas will review the contractor's initial Baseline schedule submittal to determine it conforms with the Contract Documents including incorporation of interim milestones, specified sequence and constraints, shows completion by contract Substantial Completion date and contains no major conflicts. Psomas will provide review comments.
    - b. Psomas will review the schedule updates and provide written comments as necessary.
    - c. Psomas will review, evaluate and make written recommendations to the City of any contractor requested Contract Time extensions.
  13. Reporting to Staff/Board/City Council: Psomas will prepare weekly and monthly as required by the City. All Project documentation, including submittals, daily reports, weekly statements of working days, RFIs field orders, budget, schedule, change order status, representative construction photos and other pertinent information requested by City. Psomas when requested by the City, will attend Board/Council meetings to assist City staff.
  14. Field Quality Control
    - a. Psomas will provide periodic field inspection/ observation services to monitor compliance with the contract documents and using Procore, will prepare daily inspection reports documenting observed field activities, field crews, contractor equipment, and field problems. City to have access to daily reports.
    - b. No allowance is included in the budget for overtime inspection
  - c. Psomas will upload photographs of the work that will be attached to Daily Reports and separately uploaded to the Photos tab of Procore.
  - d. Psomas will monitor the contractor's record documents on a monthly basis to confirm they are being maintained as required by the contract.
  - e. Special Inspections: Psomas will contract with specialty firms to furnish the materials testing and Special Inspections that are not performed by the City. This will likely include observation of coatings and linings, welding and masonry.
  - f. Psomas will schedule and coordinate the all material testing services and have oversight responsibility for the specialty inspections and testing services.
  - g. Psomas will retain a subconsultant for technical support, assistance and periodic observation of the installation and testing of the critical components of the electrical and instrumentation portions of the Work.
  - h. No provision has been included in the scope of work or budget for observation, testing and handling of hazardous material.
15. Methods of Procedures
    - a. Psomas will facilitate/coordinate system shutdowns and tie-ins that are requested by the contractor and executed/supported by the City.
    - b. Psomas will review the contractor's Methods of Procedures (MOP) before forwarding to the City for approval. Psomas will assist with the coordination/communication between the contractor and City's field forces to successfully implement a system outage.
  16. Means and Methods of Construction: Psomas will not have responsibility for directing the means and methods of construction. The contractor shall be solely responsible for the means and methods of construction.
  17. Safety
    - a. Psomas will comply with appropriate regulatory, project and City regulations regarding necessary safety equipment and procedures used during performance of Psomas' work and shall take necessary precautions for safe operation of Psomas' work, and the protection of Psomas' personnel from injury and damage from such work.



- b. Neither the professional activities of Psomas, nor the presence of Psomas' employees or sub-consultants at the construction/project site, shall relieve the contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending, or coordinating their work in accordance with the Contract Documents, City regulations, and any health or safety precautions required by any regulatory agencies. Psomas and its personnel have no authority to exercise any control over any contractor or other entity or their employees in connection with their work or any health or safety precautions.
  - c. Psomas staff will adhere to current Sonoma County Health Department and City mandated COVID-19 Safety Protocols.
18. Spare Parts: Psomas will prepare a list of required spare parts from the specifications. Psomas will work with the contractor to inventory and transfer spare parts to the City.
  19. Operation and Maintenance (O&M) Manuals: Psomas will prepare a list of anticipated O&M Manuals and track the submittal and review process similar to "Submittals" above and transfer final copies to the City.
  20. Testing and Training
    - a. The Scope and Budget do not include Psomas' participation in factory witness testing.
    - b. Psomas will facilitate the development of the Startup Plan with the contractor, Carollo and the City.
    - c. Psomas will provide oversight, coordination, and administration of training and testing. Carollo will provide design assistance during testing operations.
    - d. Psomas will observe start-up and testing as the City's representative and maintain copies of start-up documentation in an organized binder that will be turned over at the end of the project.
    - e. Psomas will attend training sessions and collect attendance sheets and copies of training material.
  21. Corrective Work Item List
    - a. Psomas will maintain a Corrective Work Item list throughout the project for all noted non-conforming items that will be transmitted to the contractor regularly. Items will be removed from the list after Psomas has confirmed they have been completed.
    - b. Upon declaration of Substantial Completion, all uncompleted Corrective Work Items shall be moved to the punch list.
  22. Substantial Completion
    - a. When the contractor has met the contract requirements for Substantial Completion, Psomas shall prepare a Certificate for execution by the City and the contractor. The Substantial Completion Certificate will include the Punchlist as an attachment.
    - b. Punchlist: Psomas with input from Carollo and City will prepare the list of outstanding deficiencies and issue them as a punchlist(s).
    - c. Final Inspection and Payment
      1. Psomas will have primary responsibility for conducting the final inspection and review the punchlist work for completeness.
      2. The City shall make the final determination of the acceptability of the Work.

## Post Construction

1. Project Closeout
  - a. Psomas will prepare necessary City documentation recommending acceptance of the completed work by the Board/Council or duly designated representative.
  - b. Psomas will turnover project documentation to the City after completion of the project.
  - c. Psomas shall have full and complete access available to all files created by Psomas during the Project for up to ten (10) years after the completion of the Project. Such access shall include the right to copy any and/or all such files at Psomas' expense.
2. Warranty Coordination
  - a. Coordination of warranty work after the Contract Period is not included in this Scope of Work or budget.
3. Dispute Resolution
  - a. Dispute resolution requiring extraordinary efforts or services beyond those listed above are not included in this Scope of Work.



## Appendix A | Resumes



## Christopher Davenport, PE

### Project Manager

Chris is a registered professional engineer who has been working in the water industry his whole career. He began working for public agencies and transitioned to private consulting to expand his opportunities to work on a wide variety of water projects for various public clients. He has participated in the planning, design, and construction of projects, ranging from raw water conveyance to advanced filtration and disinfection treatment plants. Water projects in California are never simple and straight forward. With all of the competing interests for the state's lifeblood, he understands that the best 'technical' solution isn't always the final solution. He works hard to understand all competing perspectives. He knows the best way to get anything done is to develop solutions that work for the majority, if not all, of the affected stakeholders. It is a balance of the political and technical.

#### REGISTRATION

1991/CA/Civil  
Engineer/47195

#### EDUCATION

1987/BS/Civil Engineering/  
University of California,  
Berkeley

#### PROFESSIONAL AFFILIATIONS

Association of California  
Water Agencies  
Bay Area Water Works  
Association  
California Association of  
Sanitation Agencies  
California Water  
Environment Association  
WaterReuse

#### TRAINING

Advanced Management  
Institute Effective  
Negotiations  
Competent Person Trained  
Confined Space  
CPR/First Aid  
Fall Protection (General)  
Occupational Safety &  
Health Administration  
Supervisor- Safety Training  
Trenching and Excavation  
Standards of California

#### EXPERIENCE

With Psomas for 23 years;  
with other firms for 9 years

### Experience

#### **DERWA Recycled Water Treatment Facilities - Phase 2 – Pleasanton, CA:**

Principal, Project Manager, and Construction Manager for this \$18.2 million project for DERWA that produces irrigation water for the Tri-Valley. The project expanded the existing recycled water treatment facility's capacity from 9.7 to 16.2 MGD. The existing facility consists of a tertiary influent pump station, tertiary influent screening, rapid mix facilities, flocculation basins, tertiary filters, ultra violet disinfection, and pump station R1, which pumps the treated water to the distribution system.

#### **Clean Water Revival Microfiltration/Reverse Osmosis - Pleasanton, CA:**

Assistant construction manager for this \$16 million project for the Dublin San Ramon Services District which consisted of five construction and procurement contracts. Additions to the treatment plant included installing microfiltration/reverse osmosis (MF/RO) units and a UV disinfection system and constructing a 20,000 LF pipeline and injections wells.

#### **Recycled Water Treatment Plant- Pleasanton, CA:**

Project Manager for this \$19 million project for the Dublin San Ramon Services District that constructed a new recycled water treatment plant and pump station. The major construction elements included a new tertiary influent pump station, new holding basin for effluent pump station, new rapid mixing and flocculation tanks, new upflow sand filters, new UV disinfection facilities, new electrical and control buildings, new chemical and compressor building, new sodium hypochlorite storage facility, new recycled water pipeline connection (called Reach AB), including installation tunnel, modifications to HB4 to accommodate the project, two new 21kV electrical transformers, and all associated piping, equipment, pumps, structures, electrical, instrumentation, and connections to existing facilities.

#### **Primary Sedimentation Expansion and Improvements – Pleasanton, CA:**

Project Manager for this \$13 million project for the Dublin San Ramon Services District which increases the wastewater treatment plant's primary process capacity with the construction of a new grit tank and two new primary

clarifiers. All of the electrical, control, and mechanical equipment for the primary process will be replaced with new motor control centers, automation (PLCs), variable frequency drives, pumps, and sludge and scum collection equipment. The project will provide the District with a primary process capable of treating the full state 4 capacity goal of 17 MGD ADWF.

**Anaerobic Digester 4 and F.O.G. Facility – Pleasanton, CA:** Project Manager for this \$7.8 million project for the Dublin San Ramon Services District which constructed a new 1-million-gallon reinforced concrete tank with roof mounted mixers and methane gas appurtenances, at grade heat exchanger, circulating sludge chopper pump, piping, and associated electrical systems. Also included was the construction of a fats, oils, and grease (FOG) receiving facility that includes a chopper pump, heat exchanger, 10,000 gallon stainless steel tank, pipe heat tracing, and associated electrical and instrumentation. The project required close coordination with the District's Operations group to minimize operational impacts to the three existing online digesters.

**Dublin Trunk Sewer Rehabilitation Upgrade Project – Dublin, CA:** Project Manager for this \$5.5 million project for the Dublin San Ramon Services District which installed a cured-in-place pipe (CIPP) liner within the existing 33-inch, 36-inch, 39-inch, and 42-inch diameter trunk sewers, rehabilitated existing manholes, and required extensive temporary bypass pumping, traffic control, pavement repair, and other miscellaneous work.

**PS 12 Bon Air and PS 13 Greenbrae Pump Station Rehabilitation Projects – Marin County, CA:** Project Manager for this \$6.5 million project for the Ross Valley Sanitary District which rehabilitated Pump Station (PS) 12 Bon Air and PS 13 Greenbrae to improve capacity, operation, and reliability. The project included extensive flow bypassing, new variable frequency drives and pumps, all new instrumentation, control, and automation equipment (PLCs), ventilation and odor control system improvements, and concrete repair and coatings. Andy Deal was the CM for this project.

**Del Valle Water Treatment Plant Ozonation Project – Livermore, CA:** Project Manager for this \$49 million project for Zone 7 Water Agency to construct a new ozone facility that includes an ozone generation building and ozone generators, a concrete ozone contactor structure(s) with fine bubble diffusion and stainless steel piping. The project also includes modifications to existing filters including air scour addition, gravel-less underdrains retrofit, concrete rehabilitation/coating and new media configuration. Upgrades will also be made to the electrical facilities and standby generator. A new carbon dioxide and LOX systems and modifications to existing chemical systems as necessary for the new ozone facility, and associated piping and connections to the existing facilities.



## Justin Seufert, PE, QSD/QSP

### Construction Manager

Justin Seufert has 19 years of experience leading projects from initial planning through construction. His portfolio includes a broad range of transportation, water/wastewater treatment and conveyance, and land development projects. His experience as resident engineer and project manager includes projects for numerous local transportation agencies including Caltrans. As a project manager/resident engineer, he has successfully lead construction management teams on a wide variety of construction projects. Justin has a demonstrated track record as a successful project ambassador, relying on a proactive approach to apprising key stakeholders and the public of construction activities; Justin's approach to monitoring project progress, safety, schedule, quality, SWPPP compliance, and budget has resulted in numerous successful projects in Marin County.

### Experience

**Llano Trunk Lining Phase 2 - Brittain Lane to Darla Drive – Santa Rosa, CA:** Project Manager for this project for the City of Santa Rosa to rehabilitate approximately 3,800 LF of 54-inch diameter sanitary sewer trunk line within the West 3rd Street corridor from Brittain Lane to Darla Drive in Santa Rosa using cured-in-place pipe (CIPP) technology. The project will also rehabilitate the Glenbrook Sewer Siphon which crosses Santa Rosa Creek approximately 200 yards west of Stony Point Road. The Glenbrook Sewer Siphon is a four-barrel (12-inch, 18-inch, 27-inch, and 36-inch diameter) siphon. The project will line the 18-inch, 27-inch, and 36-inch barrels using CIPP and abandon the 12-inch barrel. Also included in the project is the rehabilitation of six manholes via epoxy lining.

**Old Town Pipeline Improvements – Oakley, CA:** Project Manager/Construction Manager for this project for the Ironhouse Sanitary District to remove 1.8 miles of existing gravity sewer pipeline and replace it with open-cut 6-inch and 8-inch diameter pipeline.

**Laurel Grove Sewer Rehabilitation Project – Kentfield, CA:** Project Manager for this project for the Ross Valley Sanitary District to rehabilitate sanitary sewer truck lines within Sir Francis Drake Boulevard and Laurel Grove Avenue using a variety of methods including pipe bursting, and open cut removal and replacement. The project also includes replacement of lower laterals as well as manhole removal and replacement, rechanneling, and pavement rehabilitation.

**Large Diameter Gravity Sewer Rehabilitation – Marin County, CA:** Construction Manager for this \$11 million rehabilitation project for the Ross Valley Sanitary District comprised of four separate projects (II-1, II-2, II-3A, and II-3B) to rehabilitate Techite and non-reinforced concrete pipe ranging in size from 18-inch to 36-inch in diameter. Rehabilitation methods included UV, steam, and water Cured-In-Place Pipe (CIPP). The projects required extensive

#### REGISTRATION

2009/CA/Professional  
Engineer/Civil/73718

#### EDUCATION

2000/BS/Environmental  
Engineering/California  
Polytechnic State  
University, San Luis Obispo

#### CERTIFICATIONS

Water Distribution  
Operator/State of California,  
State Water Resources  
Control Board

NASSCO/CIPP Inspector/  
CIPP-0717-0202140

QSD/QSP/California  
Stormwater Quality  
Association/00194

#### PROFESSIONAL AFFILIATIONS

American Society of Civil  
Engineers

California Water  
Environment Association

#### TRAINING

Competent Person Trained  
Confined Space

Excavation and Trenching  
Occupational Safety &  
Health Administration

First Aid, CPR & AED  
National Safety Council

Supervisor- Safety Training

#### EXPERIENCE

With Psomas for 2 years;  
with other firms for 17 years



stakeholder coordination and community outreach as the construction of the trunk sewer occurred on property located in residential neighborhoods, busy downtown business districts, and at a public school. Construction also involved multiple creek crossings, work on private easements, extensive bypass pumping operations, and wet weather constraints.

**FY 2016-2017 Gravity Sewer Rehabilitation Project – Marin, CA:** Project Manager for Ross Valley Sanitary District's annual capital improvement project. The \$9.8 million project rehabilitated approximately 42,000 LF of six-inch to ten-inch pipeline using various techniques including open cut, cured-in-place-pipe (CIPP), horizontal directional drilling (HDD) and pipe bursting.

**FY 2016/17 Gravity Sewer Improvements Project Butterfield/Meadowcroft-Arroyo – San Anselmo, CA:** Construction Manager for this annual capital improvement project for the Ross Valley Sanitary District. This \$5.5 million project constructed approximately 1,800 LF of new 18-inch diameter PVC sanitary sewer pipeline at depths exceeding 20 feet using open-cut construction. The project also constructed approximately 600 LF of 18-inch diameter VCP (no-dig) sanitary sewer main using pilot tube guided boring methods.

**FY 2015-2016 Gravity Sewer Rehabilitation Project – Marin, CA:** Construction Manager for Ross Valley Sanitary District's annual capital improvement project. The \$7.6 million project rehabilitated approximately 36,000 LF of six-inch to ten-inch pipeline using various techniques including open cut, cured-in-place-pipe (CIPP), horizontal directional drilling (HDD) and pipe bursting.



## Gary Skrel, PE

Principal-in-Charge | Constructability Review | Project Advisor

Gary has worked in the engineering profession with an emphasis in construction since 1979. He has experience in dispute resolution and claims analysis, scheduling, construction management, program management, project management and design of public water resources facilities for various municipal agencies.

### REGISTRATION

1987/CA/Professional  
Engineer/Civil/43547

### EDUCATION

/BS/Civil Engineering/  
University of Michigan

### PROFESSIONAL AFFILIATIONS

Association of California  
Water Agencies

American Water Works  
Association

Bay Area Water Works  
Association

Bay Planning Coalition

Construction Management  
Association of America

City of Walnut Creek

Construction Management  
Association of America

### TRAINING

Competent Person Trained  
Confined Space

CPR/First Aid

Supervisor- Safety Training

### EXPERIENCE

With Psomas for 26 years;  
with other firms for 15 years

## Experience

**UV Disinfection Project – Palo Alto, CA:** Principal for the City of Palo Alto's \$6.5million project, which constructed a new (UV) disinfection facility on the existing plant site adjacent to an old gaseous chlorine storage building. One portion of this building became the electrical Motor Control Center (MCC) for the new UV facility. The work included driving concrete support piles for the foundation and constructing a concrete and steel-reinforced structure atop the piles and building: 1. a new concrete diversion structure and installing an 84-inch diameter pipe, 2. a 480V electrical power system for all new equipment, and 3. new mechanical equipment, including sluice gates, pumps, and various sized gate valves. The UV equipment installed was the Trojan UV3000 Plus system through a memorandum of agreement with the City of Palo Alto before the bid process.

**Recycled Water Treatment Facility - Watsonville, CA:** Principal for the City of Watsonville's \$24.5 million project to construct a new recycled water supply adjacent to the existing City wastewater treatment facility. The new facility included installing new sedimentation, clarification, and UV Disinfection processes, and a new electrical building to house the main electrical switchgear, VFDs, and MCCs. This project installed packaged treatment systems from three (3) different manufacturers, including all mechanical and electrical systems, and a complete SCADA control system that integrated each system's controls. A new 21kV service drop/switchgear and power distribution system were also constructed. The final treated water is pumped via four (4) 50-hp pumps into a distribution system to deliver approximately 4,000 acre-feet of water to local agriculture within 10 miles of the facility.

**Clean Water Revival Microfiltration/Reverse Osmosis - Pleasanton, CA:** Biddability/constructability review for this \$16 million project for the Dublin San Ramon Services District which consisted of five construction and procurement contracts. Additions to the treatment plant included installing microfiltration/reverse osmosis (MF/RO) units and a UV disinfection system and constructing a 20,000 LF pipeline and injections wells.

**Del Valle Water Treatment Plant Ozonation Project – Livermore, CA:** Principal for this \$49 million project for Zone 7 Water Agency to construct a new ozone facility that includes an ozone generation building and ozone generators, a concrete ozone contactor structure(s) with fine bubble diffusion

and stainless steel piping. The project also includes modifications to existing filters including air scour addition, gravel-less underdrains retrofit, concrete rehabilitation/coating and new media configuration. Upgrades will also be made to the electrical facilities and standby generator. A new carbon dioxide and LOX systems and modifications to existing chemical systems as necessary for the new ozone facility, and associated piping and connections to the existing facilities.

**Large Diameter Gravity Sewer Rehabilitation – Marin County, CA:**

Principal for this \$11 million rehabilitation project for the Ross Valley Sanitary District comprised of four separate projects (II-1, II-2, II-3A, and II-3B) to rehabilitate Techite and non-reinforced concrete pipe ranging in size from 18-inch to 36-inch in diameter. Rehabilitation methods included UV, steam, and water Cured-In-Place Pipe (CIPP). The projects required extensive stakeholder coordination and community outreach as the construction of the trunk sewer occurred on property located in residential neighborhoods, busy downtown business districts, and at a public school. Construction also involved multiple creek crossings, work on private easements, extensive bypass pumping operations, and wet weather constraints.

**Patterson Pass WTP Upgrades and Ozonation Project – Livermore, CA:**

Principal for this \$76 million project. The Project will improve treated water quality by replacing aging equipment. It will increase treated water storage capacity and will double the plant's production capacity to 24 million gallons a day (mgd). The project will also add new ozonation facilities, replace the existing ultrafiltration (UF) membrane filters with six new conventional filters. There will also add a new five million gallon (mg) treated water storage tank.

**PS 12 Bon Air and PS 13 Greenbrae Pump Station Rehabilitation Projects**

– Marin County, CA: Project Manager for this \$6.5 million project for the Ross Valley Sanitary District which rehabilitated Pump Station (PS) 12 Bon Air and PS 13 Greenbrae to improve capacity, operation, and reliability. The project included extensive flow bypassing, new variable frequency drives and pumps, all new instrumentation, control, and automation equipment (PLCs), ventilation and odor control system improvements, and concrete repair and coatings. Andy Deal was the CM for this project.



## Steven Brandt, icc

### Construction Inspector

Mr. Brandt has worked in the construction industry since 1989. His experience includes construction inspection/observation and materials testing for water resources pump stations, facilities, and pipelines. Mr. Brandt has experience with electrical and mechanical installations, soils, concrete, reinforcement, asphalt placement, and control systems.

## Experience

### TRAINING

Competent Person Trained  
Concrete Field Testing  
Technician Grade I  
American Concrete  
Institute

First Aid, CPR & AED  
National Safety Council

ICC - Reinforced Concrete  
Special Inspector Associate  
International Code Council

ICC - Structural Masonry  
International Code Council

ICC - Structural Steel and  
Bolting International Code  
Council

NASSCO-CIPP NASSCO

OSHA 10-hour Safety

OSHA Trench Safety  
Occupational Safety &  
Health Administration

Permit Required/Non-  
Permit Required Confined  
Space Entrant Training  
and Occupational Safety &  
Health Administration

Radiation Safety

### EXPERIENCE

With Psomas for 16 years;  
with other firms for 15 years

**Ellis Creek Water Recycling Facility – Petaluma, CA:** Inspector for this \$116 million water recycling facility project for the City of Petaluma, which treats an average dry weather wastewater flow of 6.7 MGD. The new wastewater facility includes headworks, oxidation ditches, secondary clarifiers, tertiary treatment with sand filtration and UV disinfection, and solids treatment with digesters, gravity belt thickeners, and screw press. The plant also includes 17 miles of underground pipe, installation of numerous valves, eight (8) miles of electrical duct banks, and levee construction for 20 acres of polishing wetlands with a trail access system for the community. This project won the American Public Work Association (APWA) 2010 Project of the Year Award.

**Wastewater Treatment Plant Expansion – Oakley, CA:** Inspector for this \$55 million project for the Ironhouse Sanitary District that constructed a new 4.3 MGD average dry weather flow wastewater treatment plant. Work consisted of integrating the existing wastewater treatment facilities, constructing an influent treatment pipeline from the existing wastewater treatment plant to the new wastewater treatment plant through existing treatment ponds and berms, installing a discharge pipeline, outfall, and diffuser off the north shore of Jersey Island for discharge of treated effluent into the San Joaquin River and extension of a 24-inch diameter pipeline on Jersey Island including several berm and levee crossings. The Process Components included: influent sewer, influent pump station, influent metering, coarse screening, grit removal, process metering, fine screening, anoxic basins, transfer pumps, membrane filtration, permeate filtrate pumps, aeration and membrane blowers, ultraviolet disinfection facilities, utility water pump station, effluent pump station, effluent metering, solids handling, odor control facilities, standby power, effluent pipeline, numerous valves and appurtenances and river discharge and outfall.

**Mare Island Sewer and Water Main Replacement Project – Vallejo, CA:** Inspector for this \$12.5 million project for the Vallejo Flood and Wastewater District. The project constructed two 48-inch diameter HDD bores across Napa River between Mare Island and City of Vallejo. One bore included dual 18-inch water mains and dual 4.5-inch fiber optic lines. The other bore included a 22-inch sewer main, 12.75-inch recycled water main, and dual 4.5-inch fiber optic lines. New installations continued via open cut to tie in points including multiple valve vaults and manholes. The project included two jack and bore



railroad crossings. The total pipeline footage was: HDD - 2,600 LF, sewer open cut - 3,100 LF, and water open cut - 3,000 LF.

**Recycled Water Expansion Project Central Service Area – Marin, CA:**

Inspector for this \$12 million project for the North Marin Water District, which consisted of four separate contracts for the installation of two pipeline segments (totaling 5.8 miles in length), rehabilitation of a recycled water storage tank, and a pipe installation under Highway 101 done by guided auger boring to enable service to various public sites and private sites.

**Headworks Equipment Rehab-Replace – Napa, CA:** Inspector for this \$2.8 million project for the Napa Sanitation District that replaced major headworks screenings and grit handling equipment. Construction occurred within the existing wastewater treatment plant and was sequenced to maintain existing operations. The scope of the project included CIPP rehabilitation of a 36-inch raw sewer pipeline within the treatment plant, replacement of mechanical bar screens, screenings conveyance, screenings washer and compactor, grit washing equipment, and foul air system upgrades.

**Headworks Improvement Project – Antioch, CA:** Construction Inspector for this \$9.5 million project, currently under construction, for Delta Diablo Sanitation District, which replaces the majority of the District's headworks influent screenings and grit removal equipment. Concurrently, extensive structural concrete repair of hydrogen sulfite (H<sub>2</sub>S) damage and subsequent coating of the headworks channels will occur. To maintain the existing wastewater treatment plant operations, full plant flow temporary bypass pumping, and temporary screening systems will be installed and operated for 12 weeks. The project's scope includes replacement of mechanical bar screens, screenings conveyor, screenings washer and compactor, aerated grit blowers, grit pumps, slide gates, and foul air system and control system upgrades.

**Large Diameter Gravity Sewer Rehabilitation – Marin County, CA:**

Inspector for this \$11 million rehabilitation project for the Ross Valley Sanitary District consists of four separate projects (II-1, II-2, II-3A, and II-3B) to rehabilitate Techite and non-reinforced concrete pipe ranging in size from 18-inch to 36-inch in diameter. Rehabilitation methods included UV, steam, and water Cured-In-Place Pipe. The projects required extensive stakeholder coordination and community outreach as the construction of the trunk sewer occurred on property located in residential neighborhoods, busy downtown business districts, and at a public school. Construction also involved multiple creek crossings, work on private easements, extensive bypass pumping operations, and wet weather constraints.



## James Williams

### Inspector

James has worked in the construction industry since 2001. His experience includes inspection, materials testing, and construction management supervision on a variety of projects including wastewater and recycled water treatment plants, pump stations, and pipelines.

### Experience

#### TRAINING

125AC, 125AGG, 216,  
540, 231, 375,533, and  
539 Construction Site  
Management Caltrans  
Advanced Management  
Institute Effective  
Negotiations  
Competent Person Trained  
Confined Space  
Excavation and Trenching  
Occupational Safety &  
Health Administration  
Fall Protection (General)  
Occupational Safety &  
Health Administration  
First Aid, CPR & AED  
National Safety Council  
Permit Required/Non-  
Permit Required Confined  
Space Entrant Training  
Occupational Safety &  
Health Administration

#### EXPERIENCE

With Psomas for 15 years;  
with other firms for 4 years

**Ellis Creek Water Recycling Facility – Petaluma, CA:** Inspector for this \$116 million water recycling facility project for the City of Petaluma, which treats an average dry weather wastewater flow of 6.7 MGD. The new wastewater facility includes headworks, oxidation ditches, secondary clarifiers, tertiary treatment with sand filtration and UV disinfection, and solids treatment with digesters, gravity belt thickeners, and screw press. The plant also includes 17 miles of underground pipe, installation of numerous valves, eight (8) miles of electrical duct banks, and levee construction for 20 acres of polishing wetlands with a trail access system for the community. This project won the American Public Work Association (APWA) 2010 Project of the Year Award.

**Wastewater Facility Upgrade - Novato, CA:** Lead Inspector for the \$68.9 million facility upgrade project for the Novato Sanitary District. The project constructed a new wastewater treatment facility adjacent in the existing site. The new 8.0 MGD treatment facility included new headworks, primary clarifiers, aeration basins, secondary clarifiers, UV disinfection, gravity belt thickeners (GBT), and digester. The new Ignacio Pump Station processes 2.5 MGD and the new Ignacio Conveyance Pipeline installed 11,000 LF of pipeline between the Ignacio Pump Station and the Novato Treatment Plant. The project included a 2,000 LF horizontal directional drill under Novato Creek and two bore and jack operations. The work also included the demolition of various existing facilities. Close coordination was required with Novato Sanitary District staff to simultaneously construct the new facilities while maintaining and minimizing the impacts to the existing treatment facilities.

**Water Pollution Control Plant – Sunnyvale, CA:** Inspector for this \$100 million project for the City of Sunnyvale which consists of two packages: 1) Primary Treatment Facility - Package 1 is a \$6.2 million project which demolished the existing sludge drying facility (including a drying bed, lagoon, structures, concrete, and piping) that covered approximately 6.5 acres. The project also bypassed/rerouted an open stormwater channel from the perimeter of the site via three 63-inch diameter High Density Polyethylene (HDPE) pipes, a junction box concrete structure, storm drains, area piping, and the import and placement of approximately 90,000 CY of backfill/preload, and 2) Primary Treatment Facility - Package 2 is a \$93.8 million project to construct a new wastewater treatment facility with electrical service, influent pump station, headworks (grit handling/screenings), and primary sedimentation tanks.

**Dublin Trunk Sewer Rehabilitation Upgrade Project – Dublin, CA:**

Inspector for this \$5.5 million project for the Dublin San Ramon Services District which installed a cured-in-place pipe (CIPP) liner within the existing 33-inch, 36-inch, 39-inch, and 42-inch diameter trunk sewers, rehabilitated existing manholes, and required extensive temporary bypass pumping, traffic control, pavement repair, and other miscellaneous work.

**Anaerobic Digester 4 and F.O.G. Facility – Pleasanton, CA:** Inspector for this \$7.8 million project for the Dublin San Ramon Services District which constructed a new 1-million-gallon reinforced concrete tank with roof mounted mixers and methane gas appurtenances, at grade heat exchanger, circulating sludge chopper pump, piping, and associated electrical systems. Also included was the construction of a fats, oils, and grease (FOG) receiving facility that includes a chopper pump, heat exchanger, 10,000 gallon stainless steel tank, pipe heat tracing, and associated electrical and instrumentation. The project required close coordination with the District's Operations group to minimize operational impacts to the three existing online digesters.

**Thickener Control Building Improvements Project TO #2 – Union City, CA:** Inspector for this \$10 million project for the Union Sanitary District which constructed a new Thickener Control Building (TCB) area with a new Thickener Control & Electrical Building, existing PLC & MCC replacements, a temporary bypass system to allow the demolition of the existing TCB, and the construction of the associated TCB area piping, HVAC, electrical, and control components. In addition, equipment, piping, mechanical, electrical, and control improvements were made within the existing sludge Pump Rooms and Heat & Mixing Buildings.



## Larry Clough, icc

### Inspector

Larry has worked in the construction industry since 1978. He is Psomas' veteran and lead inspector and serves as a mentor and example to all inspection staff. He has extensive real-world practical knowledge culled from decades of inspection experience on various construction projects, including pump stations, pipelines, tanks, and treatment facilities. In addition, he has experience in soils, concrete, reinforcement, and asphalt placement. Larry has also provided numerous clients throughout the Monterey/Santa Cruz area and Greater Bay Area with startup and testing expertise, acting as lead inspector responsible for the scheduling and sequencing of the startup, commissioning, and operational testing of equipment and SCADA Systems on numerous wastewater, water distribution, and treatment facilities.

#### EDUCATION

Coursework/Programmable Logic Controllers Concepts I/Hartnell College

Coursework/Controllers Analog Concepts/Hartnell College

Coursework/Water Technology Program/Hartnell College

#### CERTIFICATIONS

Reinforced Concrete Special Inspector/International Code Council

#### PROFESSIONAL AFFILIATIONS

California Water Environment Association

#### TRAINING

ACI - Concrete Field Testing Technician Grade I American Concrete Institute

Competent Person Trained Confined Space CPR/First Aid

Excavation and Trenching Occupational Safety & Health Administration

ICC - Reinforced Concrete Special Inspector Associate International Code Council Supervisor- Safety Training

#### EXPERIENCE

With Psomas for 18 years; with other firms for 24 years

## Experience

**UV Disinfection Project – Palo Alto, CA:** Inspector for the City of Palo Alto's \$6.5million project, which constructed a new (UV) disinfection facility on the existing plant site adjacent to an old gaseous chlorine storage building. One portion of this building became the electrical Motor Control Center (MCC) for the new UV facility. The work included driving concrete support piles for the foundation and constructing a concrete and steel-reinforced structure atop the piles and building: 1. a new concrete diversion structure and installing an 84-inch diameter pipe, 2. a 480V electrical power system for all new equipment, and 3. new mechanical equipment, including sluice gates, pumps, and various sized gate valves. The UV equipment installed was the Trojan UV3000 Plus system through a memorandum of agreement with the City of Palo Alto before the bid process.

**Recycled Water Treatment Facility - Watsonville, CA:** Inspector for the City of Watsonville's \$24.5 million project to construct a new recycled water supply adjacent to the existing City wastewater treatment facility. The new facility included installing new sedimentation, clarification, and UV Disinfection processes, and a new electrical building to house the main electrical switchgear, VFDs, and MCCs. This project installed packaged treatment systems from three (3) different manufacturers, including all mechanical and electrical systems, and a complete SCADA control system that integrated each system's controls. A new 21kV service drop/switchgear and power distribution system were also constructed. The final treated water is pumped via four (4) 50-hp pumps into a distribution system to deliver approximately 4,000 acre-feet of water to local agriculture within 10 miles of the facility.

**DERWA Recycled Water Treatment Facilities – Pleasanton, CA:** Inspector for this \$18.2 million project that produces irrigation water for the Tri-Valley. The project expanded the existing recycled water treatment facility's capacity



from 9.7 to 16.2 MGD. The existing facility consists of a tertiary influent pump station, tertiary influent screening, rapid mix facilities, flocculation basins, tertiary filters, ultra violet disinfection, and pump station R1, which pumps the treated water to the distribution system.

**Wastewater Treatment Plant Upgrade – Paso Robles, CA:** Inspector for this \$36.4 million plant upgrade for the City of Palo Robles. The project constructed a new headworks, rehabilitated primary clarifiers, and installed a new Biological Nutrient Removal (BNR) system, new secondary clarifiers, chloramination disinfection, effluent polishing channel, Dissolved Air Flotation tank (DAFT), cogeneration system, new plant SCADA system, new 12kV service, and a new operations building. The project was financed with a SRF loan.

**Blanco Drain and Reclamation Ditch Diversion Facilities – Marina and Salinas, CA:** Staff Team for Monterey One Water's \$7.3 million Alternate Source Water Diversion Project. The project consists of two pumping diversion facilities, 8,350 LF of pipeline and related tower and standpipe repeater station antennae towers, and SCADA controls. The project captures alternative water sources consisting of farmers' fields runoff from Blanco Drain in Marina and industrial wastewater from the Reclamation Ditch located in the City of Salinas.

**Recycled Water Storage & Distribution Pump Station Improvements – Watsonville, CA:** Inspector for this \$4.9 million project for the Pajaro Valley Water Management Agency to provide additional recycled water storage. The improvements increased recycled wastewater supply to their customers by 750 acre-feet per year, and improved the efficiency of their treatment and distribution system. The project also constructed a 1.5 MG, cast-in-place concrete storage tank, associated 20-inch welded steel piping, replaced the existing 500 hp pumps, and added new distribution pumps for higher system efficiency.

**Salinas Stormwater Grant Project Phase 1B – Salinas, CA:** Staff Team for this Monterey One Water project to construct a new pump station to connect to the existing 36-inch Salinas force main interceptor pipeline and a pump station adjacent to the Industrial Waste Treatment Facility (IWTF) Pond 3 to convey industrial wastewater and stormwater stored at the ponds to the Regional Treatment Plant (RTP). The project is vital to maximizing the yield of stormwater and other source waters that can be recycled.

**Soquel Pump Station Force Main Replacement – Soquel, CA:** Inspector for this \$3M force main and pump station improvements project for the Santa Cruz County Sanitation District. The project replaced 1,150 LF of 24-inch force main and included odor control and mechanical/electrical improvements to an existing pump station.



## Jonathan Cowsert

### Inspector

Jonathan has worked in the construction industry since 1997. His experience includes quality assurance inspection and field observation for various water resources facilities, including associated pump station, pipeline, and building projects.

## Experience

### PROFESSIONAL AFFILIATIONS

California Water  
Environment Association

### TRAINING

Advanced Management  
Institute Effective  
Negotiations  
Competent Person Trained  
Confined Space  
CPR/First Aid  
Supervisor- Safety Training

### EXPERIENCE

With Psomas for 17 years;  
with other firms for 5 years

#### **Del Valle Water Treatment Plant Ozonation Project – Livermore, CA:**

Inspector for this \$49 million project for Zone 7 Water Agency to construct a new ozone facility that includes an ozone generation building and ozone generators, a concrete ozone contactor structure(s) with fine bubble diffusion and stainless steel piping. The project also includes modifications to existing filters including air scour addition, gravel-less underdrains retrofit, concrete rehabilitation/coating and new media configuration. Upgrades will also be made to the electrical facilities and standby generator. A new carbon dioxide and LOX systems and modifications to existing chemical systems as necessary for the new ozone facility, and associated piping and connections to the existing facilities.

#### **DERWA Recycled Water Treatment Facilities - Phase 2 – Pleasanton, CA:**

Inspector for this \$18.2 million project to produce irrigation water for the Tri-Valley. The project expanded the existing recycled water treatment facility's capacity from 9.7 to 16.2 MGD. The existing facility consists of a tertiary influent pump station, tertiary influent screening, rapid mix facilities, flocculation basins, tertiary filters, ultra violet disinfection, and pump station R1, which pumps the treated water to the distribution system.

**Pump Station Upgrades - Contra Costa County, CA:** Inspector for **this** project to upgrade Central Contra Costa County's existing wastewater infrastructure including three of its 18 pump stations, the Moraga Pump Station, Orinda Crossroads Pump Station, and Flush Kleen Pump Station. **The** projects are highly visible with complex sequencing and significant construction challenges.

#### **Redwood City Recycled Water Project Distribution Pump Station Capacity Increase - Redwood City, CA:**

Inspector for this \$1.3 million project for the City of Redwood City. This work involved upgrading an existing recycled water pump station including five new 250 HP vertical turbine pumps and motors in existing cans, five new variable frequency drives, one new 5,000 gallon accumulator tank, installing 8-inch and 24-inch magnetic flow meters, HVAC upgrades and a temporary recycled water pumping system. This project required heavy coordination to perform necessary shutdowns while maintaining recycled water delivery to customers.

#### **Fremont and Paseo Padre Lift Stations Improvements - Fremont, CA:**

Inspector for Union Sanitary District's lift stations reliability improvements

**Fremont and Paseo Padre Lift Stations Improvements - Fremont, CA:**

Inspector for Union Sanitary District's lift stations reliability improvements project. Work included automation and SCADA upgrades, and coordination with plant operations and maintenance personnel was required daily.

**Anaerobic Digester 4 and F.O.G. Facility – Pleasanton, CA:** Construction

Inspector for this \$7.8 million project for the Dublin San Ramon Services District which constructed a new 1-million-gallon reinforced concrete tank with roof mounted mixers and methane gas appurtenances, at grade heat exchanger, circulating sludge chopper pump, piping, and associated electrical systems. Also included was the construction of a fats, oils, and grease (FOG) receiving facility that includes a chopper pump, heat exchanger, 10,000 gallon stainless steel tank, pipe heat tracing, and associated electrical and instrumentation. The project required close coordination with the District's Operations group to minimize operational impacts to the three existing online digesters.



## Brooke Carey, PE

### Office/Field Engineer

Since joining Psomas in 2017, Brooke has provided OE/FE services for a variety of water related projects, ranging from water treatment plants to storage tanks, and pipelines.

## Experience

### **Patterson Pass WTP Upgrades and Ozonation Project – Livermore, CA:**

Office Engineer/Field Engineer for this \$76 million project. The project will improve treated water quality by replacing aging equipment. It will increase treated water storage capacity and will double the plant's production capacity to 24MGD. The project will also add new ozonation facilities, replace the existing ultrafiltration (UF) membrane filters with six new conventional filters. There will also add a new five million gallon MG treated water storage tank.

### **Recycled Water Facility Expansion Project – Novato, CA:**

Office Engineer/Field Engineer for this \$1.9 million project. The project consist of but is not limited to the following: Modifications of the existing WWTP, including process structures and buildings, civil/site work and protective coatings. Principal elements include Demolition of existing facilities; Installation of new equipment; Site development; and Process Instrumentation and Control Systems.

### **Mare Island Sewer and Water Main Replacement Project – Vallejo, CA:**

Office Engineer/Field Engineer for this \$12.5 million project for the Vallejo Flood and Wastewater District. The project constructed two 48-inch diameter HDD bores across Napa River between Mare Island and the City of Vallejo. One bore included dual 18-inch water mains and dual 4.5-inch fiber optic lines. The other bore had a 22-inch sewer main, 12.75-inch recycled water main, and dual 4.5-inch fiber optic lines. New installations continued via open cut to tie in points, including multiple valve vaults and manholes. The project included two jack and bore railroad crossings. The total pipeline footage was: HDD - 2,600 LF, sewer open cut - 3,100 LF, and water open cut - 3,000 LF.

### **Recycled Water Expansion Project Central Service Area – Marin, CA:**

Office Engineer/Field Engineer for this \$12 million project for the North Marin Water District, which consisted of four separate contracts for the installation of two pipeline segments (totaling 5.8 miles in length), rehabilitation of a recycled water storage tank, and a pipe installation under Highway 101 done by guided auger boring to enable service to various public sites and private sites.

### **Del Valle Water Treatment Plant Ozonation Project – Livermore, CA:**

Office Engineer/Field Engineer for this \$49 million project for Zone 7 Water Agency to construct a new ozone facility that includes an ozone generation building and ozone generators, a concrete ozone contactor structure(s) with fine bubble diffusion and stainless steel piping. The project also includes modifications to existing filters including air scour addition, gravel-less underdrains retrofit, concrete rehabilitation/coating and new media

#### **REGISTRATION**

CA/Engineer in Training/

#### **EDUCATION**

BS/Civil Engineering/  
University of California,  
Davis

#### **TRAINING**

Electrical Safety Awareness  
and Lockout Tagout  
Occupational Safety &  
Health Administration

Excavation and Trenching  
Occupational Safety &  
Health Administration

Fall Protection (General)  
Occupational Safety &  
Health Administration

First Aid, CPR & AED  
National Safety Council

Permit Required/Non-  
Permit Required Confined  
Space Entrant Training  
Occupational Safety &  
Health Administration

#### **EXPERIENCE**

With Psomas for 3 years;  
with other firms for 0 years



Brooke Carey, EIT  
(Continued)

configuration. Upgrades will also be made to the electrical facilities and standby generator. A new carbon dioxide and LOX systems and modifications to existing chemical systems as necessary for the new ozone facility, and associated piping and connections to the existing facilities.



## Joseph Easterbrook, EIT

### Office Engineer/Field Engineer

Joseph has 11 years of experience taking projects from design through construction and closeout. Since joining Psomas in 2018, he has worked on pipeline and pump station rehabilitation and improvement projects.

## Experience

### **PS 12 Bon Air and PS 13 Greenbrae Pump Station Rehabilitation Projects**

– **Marin County, CA:** Office Engineer/Field Engineer for this \$6.5 million project for the Ross Valley Sanitary District which rehabilitated Pump Station (PS) 12 Bon Air and PS 13 Greenbrae to improve capacity, operation, and reliability. The project included extensive flow bypassing, new variable frequency drives and pumps, all new instrumentation, control, and automation equipment (PLCs), ventilation and odor control system improvements, and concrete repair and coatings. Andy Deal was the CM for this project.

**Pump Station Upgrades - Contra Costa County, CA:** Office Engineer/Field Engineer for this project to upgrade Central Contra Costa County's existing wastewater infrastructure including three of its 18 pump stations, the Moraga Pump Station, Orinda Crossroads Pump Station, and Flush Kleen Pump Station. The projects are highly visible with complex sequencing and significant construction challenges.

**PS 15 Kentfield Pump Station Improvements Project TO #3 – Marin County, CA:** Office Engineer/Field Engineer for this \$2.1 million project for the Ross Valley Sanitary District which rehabilitated portions of the existing PS 15 Kentfield pump station and included furnishing and installing new variable frequency drives (VFDs), electrical, instrumentation, and controls systems improvements, automation of existing sliding gate, ventilation and odor control systems improvement, inlet channel modifications and piping for grit removal, concrete repairs, concrete coating, miscellaneous equipment re-coating, manhole modification and rehabilitation; bypass pumping connections, tile beautification at two off-site existing air release valve vaults, miscellaneous demolition, and ancillary work.

**Large Diameter Gravity Sewer Rehabilitation – Marin County, CA:** Office Engineer/Field Engineer for this \$11 million rehabilitation project for the Ross Valley Sanitary District comprised of four separate projects (II-1, II-2, II-3A, and II-3B) to rehabilitate Techite and non-reinforced concrete pipe ranging in size from 18-inch to 36-inch in diameter. Rehabilitation methods included UV, steam, and water Cured-In-Place Pipe (CIPP). The projects required extensive stakeholder coordination and community outreach as the construction of the trunk sewer occurred on property located in residential neighborhoods, busy downtown business districts, and at a public school. Construction also involved multiple creek crossings, work on private easements, extensive bypass pumping operations, and wet weather constraints.

### REGISTRATION

2016/CA/EIT/159389

### EDUCATION

Coursework/Civil  
Engineering/University of  
New Hampshire

### TRAINING

Confined Space Entrant  
Training  
Fall Protection (General)  
Occupational Safety &  
Health Administration  
First Aid, CPR & AED  
National Safety Council  
Permit Required/Non-  
Permit Required Confined  
Space Entrant Training  
Occupational Safety &  
Health Administration

### EXPERIENCE

With Psomas for 2 years;  
with other firms for 9 years

project. Work included automation and SCADA upgrades, and coordination with plant operations and maintenance personnel was required daily.

**Anaerobic Digester 4 and F.O.G. Facility – Pleasanton, CA:** Construction Inspector for this \$7.8 million project for the Dublin San Ramon Services District which constructed a new 1-million-gallon reinforced concrete tank with roof mounted mixers and methane gas appurtenances, at grade heat exchanger, circulating sludge chopper pump, piping, and associated electrical systems. Also included was the construction of a fats, oils, and grease (FOG) receiving facility that includes a chopper pump, heat exchanger, 10,000 gallon stainless steel tank, pipe heat tracing, and associated electrical and instrumentation. The project required close coordination with the District's Operations group to minimize operational impacts to the three existing online digesters.



#### REGISTRATION

1999/CA/Civil  
Engineer/59142

#### EDUCATION

1996/BS/Civil Engineering/  
California Polytechnic State  
University, San Luis Obispo

#### PROFESSIONAL AFFILIATIONS

American Public Works  
Association  
California Association of  
Sanitation Agencies (CASA)  
California Water  
Environment Association  
California Water  
Environment Association

#### TRAINING

Advanced Management  
Institute Effective  
Negotiations  
Competent Person Trained  
First Aid, CPR & AED  
National Safety Council  
Permit Required/Non-  
Permit Required Confined  
Space Entrant Training  
Supervisor- Safety Training  
Trenching and Excavation  
Standards of California

#### EXPERIENCE

With Psomas for 20 years;  
with other firms for 0 years

## Ed O'Brien, PE

### Constructability Review/Project Advisor

Mr. O'Brien has worked in the engineering profession since 1996. Ed is a Construction and Project Manager dedicated to serving water resources infrastructure projects since 2000. His specialty is in the treatment, conveyance and collection of recycled water and wastewater. Mr. O'Brien's versatility and ability to guide teams makes him a valuable member of any construction team.

## Experience

#### **Patterson Pass WTP Upgrades and Ozonation Project – Livermore, CA:**

Project Manager for this \$76 million project. The Project will improve treated water quality by replacing aging equipment. It will increase treated water storage capacity and will double the plant's production capacity to 24 million gallons a day (mgd). The project will also add new ozonation facilities, replace the existing ultrafiltration (UF) membrane filters with six new conventional filters. There will also add a new five million gallon (mg) treated water storage tank.

#### **Mare Island Sewer and Water Main Replacement Project – Vallejo, CA:**

Project Manager for this \$12.5 million project for the Vallejo Flood and Wastewater District. The project constructed two 48-inch diameter HDD bores across Napa River between Mare Island and the City of Vallejo. One bore included dual 18-inch water mains and dual 4.5-inch fiber optic lines. The other bore had a 22-inch sewer main, 12.75-inch recycled water main, and dual 4.5-inch fiber optic lines. New installations continued via open cut to tie in points, including multiple valve vaults and manholes. The project included two jack and bore railroad crossings. The total pipeline footage was: HDD - 2,600 LF, sewer open cut - 3,100 LF, and water open cut - 3,000 LF.

#### **Del Valle Water Treatment Plant Ozonation Project – Livermore, CA:**

Project Manager for this \$49 million project for Zone 7 Water Agency to construct a new ozone facility that includes an ozone generation building and ozone generators, a concrete ozone contactor structure(s) with fine bubble diffusion and stainless steel piping. The project also includes modifications to existing filters including air scour addition, gravel-less underdrains retrofit, concrete rehabilitation/coating and new media configuration. Upgrades will also be made to the electrical facilities and standby generator. A new carbon dioxide and LOX systems and modifications to existing chemical systems as necessary for the new ozone facility, and associated piping and connections to the existing facilities.

**Wastewater Treatment Plant, Ironhouse Sanitary District:** Construction Manager for this \$54 million project, which constructed a new 4.3 mgd average dry weather flow, membrane bioreactor wastewater treatment plant. Ed was responsible for coordinating startup and testing of all mechanical, electrical,



and instrumentation systems as well as all process startup and testing. Construction included a new influent pump station at the headworks facilities, as well as three miles of effluent pipeline and new outfall and diffusers in the San Joaquin River.

**Ellis Creek Water Recycling Facility, City of Petaluma:** Started as the Resident Engineer responsible for the day to day activities on site and completed the project as the Construction Manager for the City's new \$116 million Water Recycling Facility Project. Ed was responsible for coordinating startup and testing of all mechanical, electrical and instrumentation systems as well as comprehensive process startup and testing. The completed facility treats an average dry weather wastewater flow of 6.7 MGD. The plant includes 30 acres of polishing wetlands with public access trails and 30 acres of treatment wetlands. Including all process pump stations, diversion structures, and facilities there were 40 structures and 9 pump stations. This project won the American Public Work Association (APWA) 2010 Project of the Year Award.



## Gerrit Post, PE

### Constructability Review/Project Advisor

Gerrit Post is a registered civil engineer with over 20 years of experience providing construction management services. His experience includes constructability reviews, construction management, scheduling, design and technical drawing on recycled water, wastewater and water resources projects throughout Northern California. His excellent leadership and communication skills in the field are beneficial for project success.

#### REGISTRATION

2010/CA/Civil  
Engineer/76886

#### EDUCATION

2002/BS/Civil Engineering/  
Zwolle University, The  
Netherlands

#### PROFESSIONAL AFFILIATIONS

California Water  
Environment Association

#### TRAINING

Advanced Management  
Institute Effective  
Negotiations  
Competent Person Trained  
Electrical Safety Awareness  
and Lockout Tagout  
Occupational Safety &  
Health Administration  
Fall Protection (General)  
Occupational Safety &  
Health Administration  
First Aid, CPR & AED  
National Safety Council  
P6 Primavera Scheduling  
Permit Required/Non-  
Permit Required Confined  
Space Entrant Training  
Occupational Safety &  
Health Administration  
Supervisor- Safety Training  
Trenching and Excavation  
Standards of California

#### EXPERIENCE

With Psomas for 15 years;  
with other firms for 6 years

## Experience

**Soscol Water Recycling Facility Expansion Projects – Napa, CA:** Assistant Construction Manager for this \$28 million project for Napa Sanitation District consisting of three concurrent projects at the treatment plant, the Phase 1 Recycled Water Expansion Project, the Influent Pump Station Expansion Project, and the Pond Aeration Project. The Phase 1 Recycled Water Expansion Project consisted of secondary effluent equalization, sand filters, pond pump station expansion, and conversion of an existing flocculating clarifier to a dissolved air flotation clarifier. The Influent Pump Station Expansion Project constructed a new self-cleaning trench type, 60 MGD pump station adjacent to the existing IPS, and sliplining of 2,000 LF of 54-inch overflow pipe. The Pond Aeration Project installed an additional 125-hp of aeration capacity to the ponds. All three projects included modifications to the 12kV electric service and SCADA system.

**Headworks Equipment Rehabilitation and Replacement – Napa, CA:** Construction Manager for this \$2.8 million project for the Napa Sanitation District that replaced major headworks screenings and grit handling equipment. Construction occurred within the existing wastewater treatment plant and was sequenced to maintain existing operations. The scope of the project included CIPP rehabilitation of a 36-inch raw sewer pipeline within the treatment plant, replacement of mechanical bar screens, screenings conveyance, screenings washer and compactor, grit washing equipment, and foul air system upgrades.

**Headworks Improvement Project – Antioch, CA:** Construction Manager for this \$9.5 million project, currently under construction, for Delta Diablo Sanitation District, which replaces the majority of the District's headworks influent screenings and grit removal equipment. Concurrently, extensive structural concrete repair of hydrogen sulfite (H<sub>2</sub>S) damage and subsequent coating of the headworks channels will occur. To maintain the existing wastewater treatment plant operations, full plant flow temporary bypass pumping, and temporary screening systems will be installed and operated for 12 weeks. The project's scope includes replacement of mechanical bar screens, screenings conveyor, screenings washer and compactor, aerated grit blowers, grit pumps, slide gates, and foul air system and control system upgrades.

**Ellis Creek Water Recycling Facility – Petaluma, CA:** Office Engineer/Field Engineer for this \$116 million water recycling facility project for the City of Petaluma, which treats an average dry weather wastewater flow of 6.7 MGD.

The new wastewater facility includes headworks, oxidation ditches, secondary clarifiers, tertiary treatment with sand filtration and UV disinfection, and solids treatment with digesters, gravity belt thickeners, and screw press. The plant also includes 17 miles of underground pipe, installation of numerous valves, eight (8) miles of electrical duct banks, and levee construction for 20 acres of polishing wetlands with a trail access system for the community. This project won the American Public Work Association (APWA) 2010 Project of the Year Award.

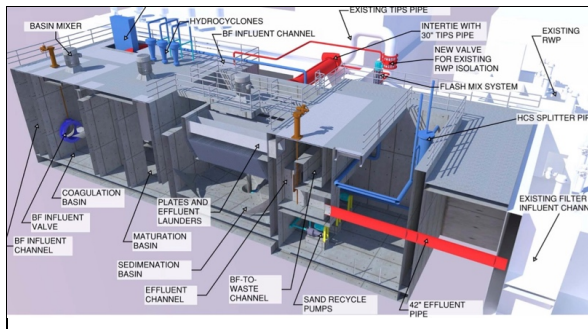
**Wastewater Treatment Plant Expansion – Oakley, CA:** Assistant Construction Manager for this \$55 million project for the Ironhouse Sanitary District that constructed a new 4.3 MGD average dry weather flow wastewater treatment plant. Work consisted of integrating the existing wastewater treatment facilities, constructing an influent treatment pipeline from the existing wastewater treatment plant to the new wastewater treatment plant through existing treatment ponds and berms, installing a discharge pipeline, outfall, and diffuser off the north shore of Jersey Island for discharge of treated effluent into the San Joaquin River and extension of a 24-inch diameter pipeline on Jersey Island including several berm and levee crossings. The Process Components include: influent sewer, influent pump station, influent metering, coarse screening, grit removal, process metering, fine screening, anoxic basins, transfer pumps, membrane filtration, permeate filtrate pumps, aeration and membrane blowers, ultraviolet disinfection facilities, utility water pump station, effluent pump station, effluent metering, solids handling, odor control facilities, standby power, effluent pipeline, numerous valves and appurtenances and river discharge and outfall.

**Secondary and Tertiary Improvements – Davis, CA:** Project Manager for this \$72 million fast-track Design-Build project. The City of Davis built new secondary and tertiary treatment facilities at their existing wastewater treatment plant. The project was one of the first Design-Build wastewater projects of this size to be constructed in California. The project included new aeration basins, secondary clarifiers, disk filters, chlorine contact basin, rotating drum thickeners, screw presses, new 12kv system, standby and co-generators, several pump stations, piping up to 36-inch diameter and support facilities.

## **Appendix B |** Monthly Progress Report Example



## Appendix A | Example of Monthly Progress Report



### Dublin San Ramon Services District DERWA Recycled Water Treatment Facilities Phase 2

June 2017 Project Update

Prepared by Christopher Davenport, P.E.  
The Covello Group, Inc.

#### **Special Items of Note**

- The structural aspects of the project; installing rebar, vertical formwork and placing concrete dominate the field work. OV has shifted their hours to start earlier in the morning to avoid working in the heat of the day.
- Project staff provided a progress update to the DERWA Board at their June 26, 2017 meeting.

#### **Field Work**

##### **Site Work**

- HGH, OV's electrical subcontractor continued installing the underground chemical and electrical duct banks in the north road. At the same time, OV's crews finished installing the new chemical ductbank.

##### **Ballasted Flocculation Basin**

- OV completed wall pours 1 and 2. Wall pours are sequenced to continue into August.
- OV mechanical crews started work on the chemical piping inside of the existing Chemical Building O.

#### **Testing**

- Construction Testing Services (CTS), checked slump, air entrainment and conducted strength tests on the structural concrete placed this month. They confirmed the concrete continues to meet the contract requirements.

#### **Safety Issues**

- There were no issues or Recordable Accidents this reporting period.

#### **Project Administration**

The project team held weekly progress meetings on June 7, 14, 21 and 28, 2017. The record of discussions (meeting minutes) for the meetings were distributed to the project team and uploaded to the online project site.

- **Submittals** –OV furnished 10 new and 7 resubmittals during the month of June. Carollo reviewed and returned comments on 21 submittals.
- **RFIs** – OV submitted 21 new Requests for Information (RFIs) in June. Carollo answered 18 of the 21 requests along with the 5 open RFIs from the last reporting period.
- RGM, continues to monitor labor compliance. No issues raised during the current reporting period.

#### **Project Schedule**

- OV submitted their third schedule update at the end of June and it still shows the critical path running through the electrical equipment delivery and installation. Eaton (electrical equipment supplier) finally furnished the submittals in mid-June, which Carollo is currently reviewing. OV requested that the project team hold a conference call before Carollo returns the submittal comments. The conference call provides Eaton an avenue to get clarification from Carollo on any comments, which will expedite the resubmittal turn-around time and increase the probability Carollo will approve. The team is keeping an eye on this item since it has the greatest potential to delay the startup and testing of the new Actiflo system. Besides the electrical equipment submittal, the other work is progressing well and as planned.
- No time extensions have been issued and so the contract durations remain unchanged.

**Contract Dates**

Milestone A – Cofferd Dam Shoring	March 31, 2017
Milestone B – UV Equipment Delivered to the Site	October 1, 2017
Milestone C – UV Channel 1 Work Completed	November 20, 2017
Milestone D – Pleasanton Potable Water Backup System	April 30, 2017
Substantial Completion (420 days)	March 02, 2018

**Contract Change Orders/Field Orders/PCOs/RFPs****CCOs/Field Orders**

No change or field orders were executed during the current reporting period.

**PCOs/RFPs**

- Change order four was not issued as planned during June. A few of the required cost items were not submitted in time to get the change order finalized by the end of the month. Since the final amount of CCO 4 is expected to be a credit, OV was fine with deferring the change order until next month's invoice cycle.
- Carollo is preparing drawings to add lighting to the new Coagulant area that was inadvertently left out of the original design drawings.

**Budget Status**

OV submitted their fifth request for payment in the amount of \$727,596.62 for work done in the month of June.

A. Original Contract Amount	\$13,374,000.00
B. Change Orders & Field Orders	-\$174,373.00
C. Revised Contract Amount (A + B)	\$13,199,627.00
D. Progress Payments to date	\$3,123,759.16
E. Remaining to Pay	\$9,949,754.02

## Progress Photos:



**Photograph #1** – Wall Pour #1, Southwest Corner of the Ballasted Flocculation Structure



**Photograph #2** – Installing Rebar for the new Ballasted Flocculation Structure





**Photograph #3 – Installing new Chemical Piping in Building O**



**Photograph #4 – Placing new Coagulant Area Base Slab Concrete**

## **Appendix C** | Progress Meeting Agenda Example





Psomas  
1660 Olympic Boulevard, Suite #300  
Walnut Creek, California 94596  
Phone: (925) 933-2300

**Project:** 2018.002 - DSRSD Primary Sedimentation Expansion & Improvements Project  
7399 Johnson Dr.  
Pleasanton, California 94588

## Meeting #51

### Weekly Progress Meeting Agenda Record of Discussion

**MEETING DATE:** 04/07/2020

**MEETING TIME:** 9:00 AM - 10:00 AM

**MEETING LOCATION:** DSRSD WWTP Administration Building

#### OVERVIEW:

Weekly Progress Meeting

**Zoom Meeting, Call (due to high call volume Zoom suggest trying a different number if you receive a busy signal).**

**1 646 558 8656**

**1 253 215 8782**

**1 301 715 8592**

**1 312 626 6799**

**Meeting ID: 556 255 6748**

Join Zoom Meeting  
<https://psomas.zoom.us/j/5562556748>

#### NOTES:

#### ATTACHMENTS:

[Primary Submittal Log 4.7.20.pdf](#) [Primary - CCO Summary 2020.04.07.pdf](#) [Primary RFI Log 4.7.20.pdf](#) [Primary 3WK 4.7.20.pdf](#)

#### ATTENDEES:

Name	Company	Phone Number	Email	Attendance
Kevin Anderson	Anderson Pacific Inc	(650) 815-5665	kanderson@andpac.com	
Thomas Carranza	Anderson Pacific Inc	(408) 992-5328	thomas@andpac.com	
Steve Haslam	Anderson Pacific Inc	(925) 964-3366	steve@andpac.com	
Jay Rogell	Anderson Pacific Inc	(805) 423-5210	jay@andpac.com	
Steven Delight	Dublin San Ramon Services District		delight@dsrsd.com	
Jackie Yee	Dublin San Ramon Services District	(925) 875-2258	yee@dsrsd.com	
Maurice Atendido	Dublin San Ramon Services District - Plant	(925) 570-4372	atendido@dsrsd.com	
Russel Baker	Dublin San Ramon Services District - Plant	(925) 570-8292	baker@dsrsd.com	
Aaron Castro	Dublin San Ramon Services District - Plant		castro@dsrsd.com	
Levi Fuller	Dublin San Ramon Services District - Plant	(925) 570-8775	fuller@dsrsd.com	
Diane Griffin	Dublin San Ramon Services District - Plant		griffin@dsrsd.com	

This record of discussion is believed to be an accurate reflection of those items discussed and the conclusions that were reached during the referenced meeting.

Please contact Psomas if there are any discrepancies or questions with the content of the record



# Meeting #51

Shawn Quinlan	Dublin San Ramon Services District - Plant	(925) 570-7878	quinlan@dsrsd.com	
Virgil Sevilla	Dublin San Ramon Services District - Plant	(925) 875-2317	sevilla@dsrsd.com	
David Greenfield	HDR	(614) 546-8885	david.greenfield@hdrinc.com	
Andy Deal	Psomas - Walnut Creek	(925) 262-3864	andy.deal@psomas.com	
Mark Pulgarin	Psomas - Walnut Creek	(925) 933-2300	mark.pulgarin@psomas.com	
Amara Cairns	West Yost Associates		acairns@westyost.com	
Bill Schilling	West Yost Associates	(916) 306-2228	bschilling@westyost.com	

## Announcements, Agenda Changes, R.O.D. Comments

No	Title	Assignment	Due Date	Priority	Status
1.1	ROD Comments				Open
<b>Description:</b> Provide ROD comments via E-mail or at the next meeting.					
<b>Official Record of Discussion:</b> (None)					

## Safety & Site Security

No	Title	Assignment	Due Date	Priority	Status
2.1	General Safety				Open
<b>Description:</b> Besides General Safety it is always good to check if there are any issues with Contractor Signage, Traffic & Parking etc.					
<b>Official Record of Discussion:</b> (None)					
2.2	COVI-19 Virus				Open
<b>Description:</b> <ul style="list-style-type: none"> <li>Discuss the rapidly changing situation related to new coronavirus and any impacts to project meetings, gatherings, work, etc.</li> <li>Confirm if any Subcontractors are coming on site in the next three weeks. They will need to provide Social Distancing information as per the County Shelter in Place Order.</li> </ul>					
<b>Official Record of Discussion:</b> (None)					

## Owner Coordination

No	Title	Assignment	Due Date	Priority	Status
3.2	SORs				Open
<b>Description:</b> Discuss any upcoming SORs.					
<b>Official Record of Discussion:</b> (None)					

This record of discussion is believed to be an accurate reflection of those items discussed and the conclusions that were reached during the referenced meeting.

Please contact Psomas if there are any discrepancies or questions with the content of the record



## Meeting #51

3.3	District Supplied Material			Low	Open
<b>Description:</b> Blower Frame					
<b>Official Record of Discussion:</b> (None)					
3.4	District work in Chlorine Contact Basin				Open
<b>Description:</b> DSRSD has repairs to do in the Chlorine Contact Basin and will need to divert to HB#1.					
<b>Official Record of Discussion:</b> (None)					
3.5	SCADA Screens Workshop				Open
<b>Description:</b> Telstar has noted they would like to host the first SCADA Screens workshop.					
<b>Official Record of Discussion:</b> (None)					

Look Ahead Schedule					
No	Title	Assignment	Due Date	Priority	Status
4.1	3-week Look Ahead				Open
<b>Description:</b> See attached 3WK look ahead schedule.					
<b>Official Record of Discussion:</b> (None)					

Field Work/Quality Control					
No	Title	Assignment	Due Date	Priority	Status
5.1	General				Open
<b>Description:</b> Nothing noted or discussed.					
<b>Official Record of Discussion:</b> (None)					

RFIs/Clarifications					
No	Title	Assignment	Due Date	Priority	Status
6.1	RFI Log				Open
<b>Description:</b> See attached RFI Log.					
<b>Official Record of Discussion:</b> (None)					
6.5	Baffles, Troughs & Hydo Analysis				Open
<b>Official Record of Discussion:</b> (None)					

This record of discussion is believed to be an accurate reflection of those items discussed and the conclusions that were reached during the referenced meeting.

Please contact Psomas if there are any discrepancies or questions with the content of the record



## Meeting #51

Submittals and O&M Manuals					
No	Title	Assignment	Due Date	Priority	Status
7.1	Submittals for Discussion				Open
<b>Description:</b> See attached Submittal Log					
<b>Official Record of Discussion:</b>		(None)			

Change Management					
No	Title	Assignment	Due Date	Priority	Status
8.1	CCO/PCO Review				Open
<b>Description:</b> See attached PCO Log.					
<b>Official Record of Discussion:</b>		(None)			
8.2	Soil Analysis				Open
<b>Description:</b> AP has provide a PCO for review.					
<b>Official Record of Discussion:</b>		(None)			
8.5	RFQ 15 Bldg H Conduit Route to Gallery				Open
<b>Official Record of Discussion:</b>		(None)			

Progress Payment Requests					
No	Title	Assignment	Due Date	Priority	Status
9.8	Progress Payment				Open
<b>Description:</b> PP#12 March 2020					
<b>Official Record of Discussion:</b>		(None)			

General Project Admin - New					
No	Title	Assignment	Due Date	Priority	Status
10.2	Additional Items				Open
<b>Description:</b> Other					
<b>Official Record of Discussion:</b>		(None)			

This record of discussion is believed to be an accurate reflection of those items discussed and the conclusions that were reached during the referenced meeting.

Please contact Psomas if there are any discrepancies or questions with the content of the record



1600 Olympic Blvd.  
Suite 300  
Walnut Creek, CA 94596

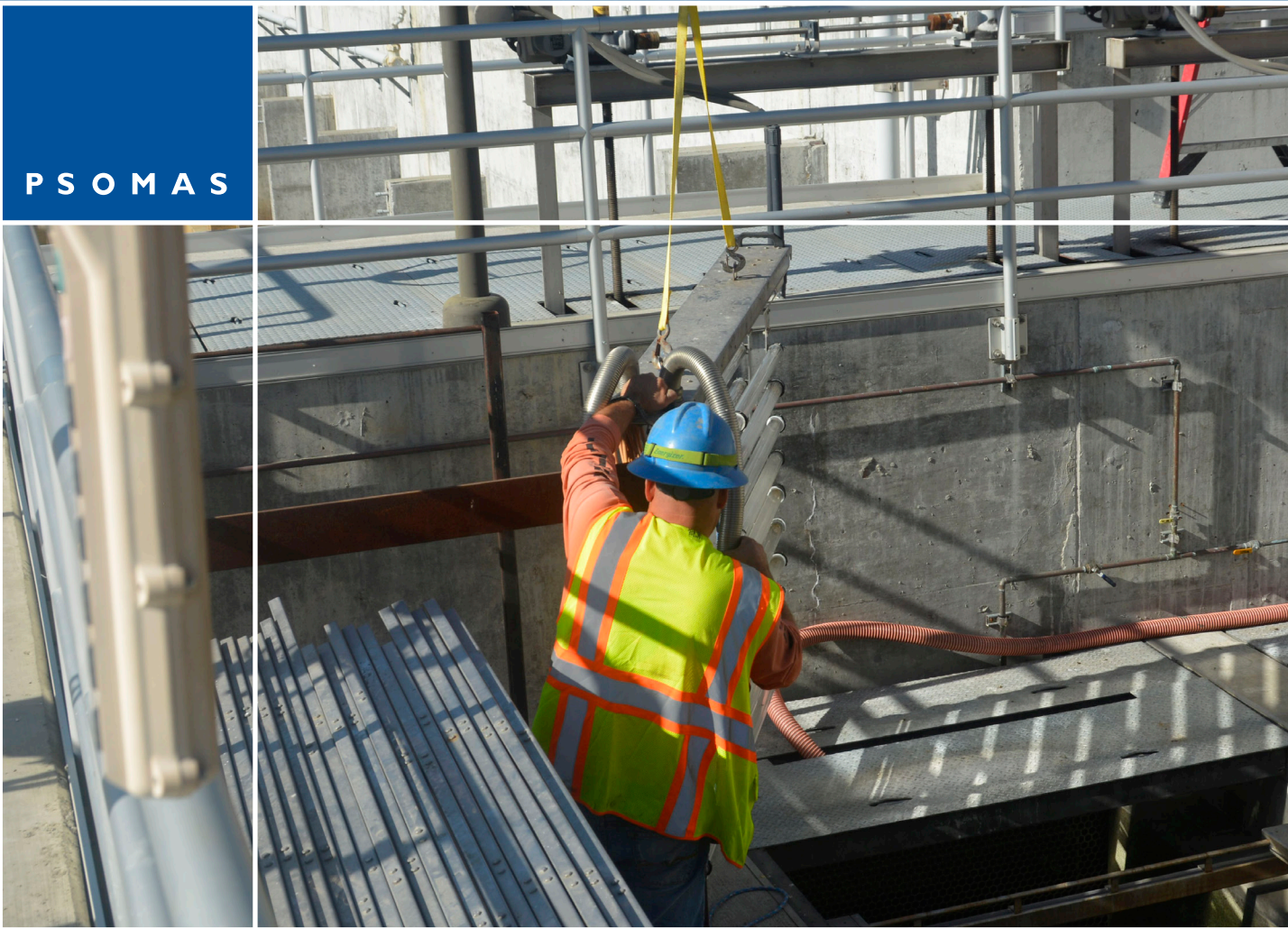
925.933.2300 Phone

[www.Psomas.com](http://www.Psomas.com)





PSOMAS



# **COST PROPOSAL**

## **CITY OF SANTA ROSA**

### **LAGUNA TREATMENT PLANT**

#### **DISINFECTION AND DIVERSION**

#### **IMPROVEMENTS PROJECT**





# ESTIMATED LEVEL OF EFFORT & BUDGET

The timeliness of construction management services is key to project success. All of our team members understand that there is no place for procrastination in construction. This applies to all phases – preconstruction, construction, start-up, and closeout. Our commitment and dedication to schedule – while preserving quality services – is one of the main reasons we have created numerous “clients for life.”

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***There is no question that our services are often dependent on the designer and contractor’s activities and tasks. Yet when Psomas manages a project, the CM does not become the critical path.***

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Whether it is providing our constructability review comments, processing submittals, and RFIs, solving construction-related issues, or debugging start-up problems, our Construction Management (CM) team will keep pace with Carollo and the contractors’ needs. There is no question that our services are often dependent on the designer and contractor’s activities and tasks, yet when Psomas manages a project, the CM does not become the critical path.

This timeliness is a result of our resource planning, flexibility, and work ethic. The CM’s work schedule goes beyond regular working hours and weekdays. The more routine tasks in a CM trailer are planned in advance, e.g., status meetings, schedule reviews, progress payments and are executed in a timely manner. It is the daily issues that occur during construction that require staff adjustments and flexibility. The depth and experience of our staff provide significant value in this regard.

Regarding budget adherence, we are proponents of a professional services agreement that accurately defines the scope and provides the commensurate resource allocation that promotes quality and timeliness. Once the agreement and budget are in place, we consider that as our mandate for performance. We understand the importance of staying within budget and the difficulty of asking/receiving approval of budget amendments. As such, Psomas rarely seeks budget amendments.

We methodically monitor the project schedule and budgets for our personnel and our subconsultants. We will provide monthly reports to the City of Santa Rosa (City). While the original budget for each task and subconsultant may require internal adjustment, we expect the City will recognize and accept this flexibility internally as long as there is overall budget adherence.

We have developed our initial assessment of the labor resource requirements based on the City’s information, our current understanding of the work, and our experience with similar projects. Our firm and team are flexible and will provide staffing as needed to support the Project. We will increase or decrease our staffing based on Project requirements. Initially, we recommend that a task order only be issued for Task 1: Preconstruction. During this preconstruction phase, our scope of work and the project schedule requirements can be mutually confirmed. In this way, the staff



effort and budget estimate for the construction phase services will be better aligned for the actual requirements of the UV Project.

## Staffing

Psomas' Estimated Level of Effort and Preliminary Budget is straightforward. The type of tasks/ services requested by the City are most equitably provided on an hourly basis; thus, the preliminary budgets are based on two primary factors: 1) the scope of services and 2) the duration of the preconstruction, construction, and close-out activities.

Numerous project circumstances can affect these factors, such as weather, the contractor's quality and nature, existing site conditions, sequencing, and constraints. Based on the technical information provided by the City, the preliminary scope of services, estimated construction costs, and forecast durations for the Project, our staffing levels are practical, fair, and flexible.

## Standard Billing Rates

Our 2020 Hourly Billing Rates are presented below.

**City of Santa Rosa**  
**Laguna Treatment Plant Disinfection and Diversion Improvements Project**  
**2020 Hourly Billing Rates**  
**October 14, 2020**

Classification	Hourly Fee Range
Principal/Project Manager	\$230 - \$265
Construction Manager	\$165 - \$220
Office Engineer/Field Engineer	\$105 - \$165
Inspector (Prevailing Wage)	\$165 - \$175
Administrative Support	\$90 - \$110

## Task 1: Preconstruction

We estimated the Base Services level of effort on the RFP requirement of one Constructability Review on the 90% Design and other as-needed assistance during the final design and bid period, up to the construction Notice to Proceed (NTP). We also recommend additional optional services, including review of the 100% Design (Final) to verify if and how the 90% comments were addressed and to perform a high-level review of additional updates on the Final Plans and Specifications. We also recommend additional level of effort be considered solely concentrated on the Front-End Specifications (Division 0 and 1).

**Table 1 - Constructability Review, Bid Assistance, and Optional Preconstruction Services Proposed Budget - Base Services**

ACTIVITY DESCRIPTION	Name	C. Davenport	Seufert	G. Skrel	G. Post/E. Obrien	T. Beecher	D. Mathy	TOTAL HOURS	TOTAL COST
	Role	Team Leader / General Review	General Review	General Review	Specialists	E, I and C	Geotechnical		
	Billing Rate	\$ 235	\$ 190	\$ 245	\$ 215	\$ 220 <sup>1</sup>	\$ 225 <sup>1</sup>		
<b>TASK - 90% Constructability Review</b>		<b>78</b>	<b>38</b>	<b>48</b>	<b>56</b>	<b>40</b>	<b>16</b>	<b>276</b>	<b>\$ 61,750</b>
a. Document Review		40	24	32	40	40	16	192	
b. Sequence & Constraints Review		16	8	16	16			56	
c. Report		16						16	
d. Review Meeting		6	6					12	
<b>TASK - Assistance During Bid Period</b>		<b>20</b>	<b>16</b>	<b>8</b>				<b>44</b>	<b>\$ 9,700</b>
a. Addendum Support		8	8	4				20	
c. PreBid Mtg and Follow-up		8	8					16	
d. Bid Review and Recommendation		4		4				8	
<b>TOTAL</b>									<b>\$ 71,450</b>

**Table 2 - Constructability Review, Bid Assistance, and Optional Preconstruction Services Proposed Budget - Recommended Optional Services**

ACTIVITY DESCRIPTION	Name	C. Davenport	Seufert	G. Skrel	G. Post	T. Beecher	D. Mathy	TOTAL HOURS	TOTAL COST
	Role	Team Leader / General Review	General Review	General Review	Sequence Specialist	E, I and C	Geotechnical		
	Billing Rate	\$ 235	\$ 190	\$ 245	\$ 215	\$ 220 <sup>1</sup>	\$ 225 <sup>1</sup>		
<b>TASK - 100% Document Review</b>		<b>40</b>	<b>20</b>	<b>32</b>	<b>8</b>	<b>24</b>	<b>8</b>	<b>132</b>	<b>\$ 29,840</b>
a. Document Review		24	16	24		24	8	96	
b. Sequence & Constraints Review		8	4	8	8			28	
c. Report		8						8	
<b>TASK - Front End Specification and Other Misc. Support</b>		<b>96</b>	<b>24</b>	<b>40</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>168</b>	<b>\$ 38,700</b>
a. Final Front End Spec Input/Support		32						32	
b. Other Misc. Support		64	24	40		4	4	136	
<b>TOTAL</b>									<b>\$ 68,540</b>

<sup>1</sup> Hourly Billing Rates for subconsultants includes 5% markup.

## **Task 2: Construction – NTP through Final Acceptance**

We forecast our preliminary level of effort based on our experience managing similar treatment plant, pump station and pipeline construction and the durations presented in the RFP.

The preliminary budget presented on the following page is based on 2020 billing rates. Our billing rates are inclusive of all ordinary expenses. Due to economic uncertainties, we have included labor escalation allowances of approximately 3% each fiscal year.

### **Expenses**

Our hourly billing rates include ordinary expenses; charges for minor incidentals are nonexistent. We recommend the City include a Construction Contract Documents requirement that the contractor provides the field office trailer, utility hook-up, furniture, and equipment. Any extraordinary expenses, such as out of the area travel for off-site testing, can be addressed later. If direct expenses occur, we invoice these at cost, with no mark-up.

### **Subconsultants**

Based on our understanding of the anticipated construction disciplines and administrative requirements, we have included budget allowances for these subconsultants. The allowances for Beecher Engineering, Inc., BACC, DCM, and CEL are consistent with our past experiences for these specialty services. These allowances are typical and well within industry norms.

### **Total Preliminary Budget**

We consider our Task 2 budget a maximum limit, not a billing goal to meet. We strive to have an unspent budget at final completion. We accomplish this by budgeting to cover a conservative and demanding scenario. We find that our professional approach and integrity eliminates scope creep and should eliminate the need to go back to the Board of Public Utilities and/or City Council for additional budget authorizations. Additionally, other clients appreciate this approach and can attest to our commitment to finish ‘under’ budget. This can be verified when you check our references.

CM and inspection fees for wastewater treatment plant projects of this nature are typically in the range of 7% to 13% of construction costs. Our preliminary budget is at the low end of this range. As we mentioned previously, we recommend finalizing the level of effort and budget once the construction plans and specifications are nearly complete.

We understand the variable nature of construction and public works projects, and that is why we encourage the City to ask questions about our fee schedule and scope. We want the City to feel comfortable with the assumptions and associated costs. We commit to remain open and flexible during discussions, so we end up with a level of effort, fee schedule, and contract that mutually meets our interests.



Exhibit B

City of Santa Rosa

Laguna Treatment Plant Disinfection and Diversion Improvements Project (C00284)  
Forecast Budget for Preconstruction, Construction Management, and Inspection Services (Based on 75% Design)  
October 14, 2020

Construction Phase							Approx. Duration	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24				
Phase 1: Clearing, Utility Relo, New Hypo Facility, start Load Center& Pump Stations, Floodwall Relocation							10 months																																							
Phase 2: Demo Ex. Hypo Facility, start UV and EDJS Structures, construct Diversion Pipeline and other UG utilities							8 months																																							
Phase 3: Install Bypass System, demo Eff Pipeline, complete UV, PS and LC structures, complete UG utilities							8 months																																							
Phase 4: Install UV equipment, Start-up and Test UV and Pump Stations, Demo Ex. UV, Paving, reinstall Floodwall							7 months																																							
Close Out Phase: Finalize contract admin, documentation, record drawings, spare parts and final acceptance							2 months																																							
Personnel/Service		Hours and Forecast Hourly Rates						Level of Effort (approximate hours per month)																																						
		Hours	2021 Rate	2022 Rate	2023 Rate	2024 Rate	Amount																																							
Psomas Labor																																														
	Principal: Skrel	396	\$ 245	\$ 250	\$ 260	\$ 270	\$ 100,500	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	-	-	
	Project Manager: Davenport	2,180	\$ 235	\$ 240	\$ 245	\$ 250	\$ 527,400	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	Construction Manager: Seufert	5,040	\$ 195	\$ 200	\$ 205	\$ 210	\$ 1,017,360	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
	Inspector (prevailing wage)	5,600	\$ 170	\$ 175	\$ 180	\$ 185	\$ 990,400	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
	Office/Field Engineer	5,600	\$ 125	\$ 130	\$ 135	\$ 140	\$ 738,400	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
	Inspector 2 (prevailing wage)	1,360	\$ 170	\$ 175	\$ 180	\$ 185	\$ 238,000	-	-	-	-	-	-	-	-	40	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
	Start-Up Specialist	1,160	\$ 170	\$ 175	\$ 180	\$ 185	\$ 210,400	-	-	-	-	-	-	-	-	-	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
	Psomas Labor Subtotal						\$ 3,822,460																																							
Subconsultant Labor																																														
	E, I and C: Beecher Engineering			Allowance			\$ 60,000																																							
	Geotechnical: DCM			Allowance			\$ 10,000																																							
	Sp. Insp: Welding, Masonry, etc....:CEL			Allowance			\$ 25,000																																							
	Coatings: BACC			Allowance			\$ 15,000																																							
	Subconsultant Subtotal						\$ 110,000																																							
	Subconsultant Mark-up					5%	\$ 5,500																																							
	Subconsultant Total						\$ 115,500																																							
Base Services Total							\$ 3,937,960																																							
Additional CM Services Contingency						10%	\$ 393,796																																							
Preconstruction Services																																														
	Base Services (reference Table 1)						\$ 71,450																																							
	Optional Services (reference Table 2)						\$ 68,540																																							
TOTAL							\$ 4,471,746																																							

Notes & Assumptions:

1. Psomas' rates include all expenses for home office, telephone, computers, in-house reproduction and travel in the Bay Area in personal vehicles. Prevailing Wage Rates may need further adjustment depending on the State of California's potential rate adjustments.

2. Field trailer, utilities and furniture to be provided by Contractor. Psomas is responsible for mobile telephones, computers, tablets, and customary supplies. Santa Rosa will reimburse extraordinary expenses, such as out of the area travel for witness testing, if any are deemed necessary by City and Psomas.

3. Labor escalation based on ±3% per year, effective January 1 of each year.

4. Contingency shall only be used upon written authorization from the City.

5. Assumed Contract Dates:

Preconstruction NTP

1-Dec-20

Construction NTP

1-Jun-21

Substantial Completion

31-Jan-24

Final Completion

1-Mar-24

Final Close-Out

30-Apr-24

M K



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# PSA Psomas CM Inspection LTP

Final Audit Report

2020-10-15

Created:	2020-10-15
By:	Joyce Brandvold (JBrandvold@srcity.org)
Status:	Signed
Transaction ID:	CBJCHBCAABAA33DQqoquay-6SOFDI1XljuesntO_vqmy

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-  Document created by Joyce Brandvold (JBrandvold@srcity.org)  
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