# PROFESSIONAL SERVICES CONTRACT BETWEEN THE CITY OF HUNTINGTON BEACH AND MICHAEL K. NUNLEY & ASSOCIATES, INC. FOR

# ON-CALL CIVIL ENGINEERING & PROFESSIONAL CONSULTING SERVICES

THIS AGREEMENT ("Agreement") is made and entered into by and between the City of Huntington Beach, a municipal corporation of the State of California, hereinafter referred to as "CITY," and MICHAEL K. NUNLEY & ASSOCIATES, INC., a California Corporation hereinafter referred to as "CONSULTANT."

WHEREAS, CITY desires to engage the services of a consultant to provide On-Call Civil Engineering & Professional Consulting Services; and

Pursuant to documentation on file in the office of the City Clerk, the provisions of the Huntington Beach Municipal Code, Chapter 3.03, relating to procurement of professional service contracts have been complied with; and

CONSULTANT has been selected to perform these services,

NOW, THEREFORE, it is agreed by CITY and CONSULTANT as follows:

#### 1. SCOPE OF SERVICES

CONSULTANT shall provide all services as described in **Exhibit** "A," which is attached hereto and incorporated into this Agreement by this reference. These services shall sometimes hereinafter be referred to as the "PROJECT."

CONSULTANT hereby designates Ryan Gallagher who shall represent it and be its sole contact and agent in all consultations with CITY during the performance of this Agreement.

#### 2. CITY STAFF ASSISTANCE

CITY shall assign a staff coordinator to work directly with CONSULTANT in the performance of this Agreement.

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#### 3. TERM; TIME OF PERFORMANCE

Time is of the essence of this Agreement. The services of CONSULTANT are to commence on \_\_\_\_\_\_\_, 20\_\_\_\_\_ (the "Commencement Date"). This Agreement shall automatically terminate three (3) years from the Commencement Date, unless extended or sooner terminated as provided herein. All tasks specified in **Exhibit "A"** shall be completed no later than three (3) years from the Commencement Date. The time for performance of the tasks identified in **Exhibit "A"** are generally to be shown in **Exhibit "A."** This schedule may be amended to benefit the PROJECT if mutually agreed to in writing by CITY and CONSULTANT.

In the event the Commencement Date precedes the Effective Date, CONSULTANT shall be bound by all terms and conditions as provided herein.

#### 4. COMPENSATION

In consideration of the performance of the services described herein, CITY agrees to pay CONSULTANT on a time and materials basis at the rates specified in **Exhibit "B,"** which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed Two Million Dollars (\$2,000,000.00).

#### 5. EXTRA WORK

In the event CITY requires additional services not included in **Exhibit "A"** or changes in the scope of services described in **Exhibit "A,"** CONSULTANT will undertake such work only after receiving written authorization from CITY. Additional compensation for such extra work shall be allowed only if the prior written approval of CITY is obtained.

#### 6. METHOD OF PAYMENT

CONSULTANT shall be paid pursuant to the terms of Exhibit "B."

#### 7. DISPOSITION OF PLANS, ESTIMATES AND OTHER DOCUMENTS

CONSULTANT agrees that title to all materials prepared hereunder, including, without limitation, all original drawings, designs, reports, both field and office notices, calculations, computer code, language, data or programs, maps, memoranda, letters and other documents, shall belong to CITY, and CONSULTANT shall turn these materials over to CITY upon expiration or termination of this Agreement or upon PROJECT completion, whichever shall occur first. These materials may be used by CITY as it sees fit.

#### 8. HOLD HARMLESS

A. CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY, its officers, elected or appointed officials, employees, agents and volunteers from and against any and all claims, damages, losses, expenses, judgments, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) arising out of or in connection with CONSULTANT's (or CONSULTANT's subcontractors, if any) negligent (or alleged negligent) performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement by CONSULTANT, its officers, agents or employees except such loss or damage which was caused by the sole negligence or willful misconduct of CITY. CONSULTANT will conduct all defense at its sole cost and expense and CITY shall approve selection of CONSULTANT's counsel. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by CONSULTANT.

B. To the extent that CONSULTANT performs "Design Professional Services" within the meaning of Civil Code Section 2782.8, then the following Hold Harmless provision applies in place of subsection A above:

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"CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY and its officers, elected or appointed officials, employees, agents and volunteers, from and against any and all claims, damages, losses, expenses, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) to the extent that the claims against CONSULTANT arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of CONSULTANT. In no event shall the cost to defend charged to CONSULTANT exceed CONSULTANT's proportionate percentage of fault. However, notwithstanding the previous sentence, in the event one or more other defendants to the claims and/or litigation is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, CONSULTANT shall meet and confer with CITY and other defendants regarding unpaid defense costs. The duty to indemnify, including the duty and the cost to defend, is limited as provided in California Civil Code Section 2782.8.

C. Regardless of whether subparagraph A or B applies, CITY shall be reimbursed by CONSULTANT for all costs and attorney's fees incurred by CITY in enforcing this obligation. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT.

#### 9. PROFESSIONAL LIABILITY INSURANCE

CONSULTANT shall obtain and furnish to CITY a professional liability insurance policy covering the work performed by it hereunder. This policy shall provide coverage for CONSULTANT's professional liability in an amount not less than One Million Dollars (\$1,000,000.00) per occurrence and in the aggregate. The above-mentioned insurance shall not contain a self-insured retention without the express written consent of CITY; however an insurance

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policy "deductible" of Ten Thousand Dollars (\$10,000.00) or less is permitted. A claims-made policy shall be acceptable if the policy further provides that:

- A. The policy retroactive date coincides with or precedes the initiation of the scope of work (including subsequent policies purchased as renewals or replacements).
- B. CONSULTANT shall notify CITY of circumstances or incidents that might give rise to future claims.

CONSULTANT will make every effort to maintain similar insurance during the required extended period of coverage following PROJECT completion. If insurance is terminated for any reason, CONSULTANT agrees to purchase an extended reporting provision of at least two (2) years to report claims arising from work performed in connection with this Agreement.

If CONSULTANT fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the CITY with required proof that insurance has been procured and is in force and paid for, the CITY shall have the right, at the CITY's election, to forthwith terminate this Agreement. Such termination shall not effect Consultant's right to be paid for its time and materials expended prior to notification of termination. CONSULTANT waives the right to receive compensation and agrees to indemnify the CITY for any work performed prior to approval of insurance by the CITY.

#### 10. CERTIFICATE OF INSURANCE

Prior to commencing performance of the work hereunder, CONSULTANT shall furnish to CITY a certificate of insurance subject to approval of the City Attorney evidencing the foregoing insurance coverage as required by this Agreement; the certificate shall:

- A. provide the name and policy number of each carrier and policy;
- B. state that the policy is currently in force; and

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C. shall promise that such policy shall not be suspended, voided or canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice; however, ten (10) days' prior written notice in the event of cancellation for nonpayment of premium.

CONSULTANT shall maintain the foregoing insurance coverage in force until the work under this Agreement is fully completed and accepted by CITY.

The requirement for carrying the foregoing insurance coverage shall not derogate from CONSULTANT's defense, hold harmless and indemnification obligations as set forth in this Agreement. CITY or its representative shall at all times have the right to demand the original or a copy of the policy of insurance. CONSULTANT shall pay, in a prompt and timely manner, the premiums on the insurance hereinabove required.

### 11. INDEPENDENT CONTRACTOR

CONSULTANT is, and shall be, acting at all times in the performance of this Agreement as an independent contractor herein and not as an employee of CITY. CONSULTANT shall secure at its own cost and expense, and be responsible for any and all payment of all taxes, social security, state disability insurance compensation, unemployment compensation and other payroll deductions for CONSULTANT and its officers, agents and employees and all business licenses, if any, in connection with the PROJECT and/or the services to be performed hereunder.

#### 12. TERMINATION OF AGREEMENT

All work required hereunder shall be performed in a good and workmanlike manner. CITY may terminate CONSULTANT's services hereunder at any time with or without cause, and whether or not the PROJECT is fully complete. Any termination of this Agreement by CITY shall be made in writing, notice of which shall be delivered to CONSULTANT as provided herein. In the

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event of termination, all finished and unfinished documents, exhibits, report, and evidence shall, at the option of CITY, become its property and shall be promptly delivered to it by CONSULTANT.

#### 13. ASSIGNMENT AND DELEGATION

This Agreement is a personal service contract and the work hereunder shall not be assigned, delegated or subcontracted by CONSULTANT to any other person or entity without the prior express written consent of CITY. If an assignment, delegation or subcontract is approved, all approved assignees, delegates and subconsultants must satisfy the insurance requirements as set forth in Sections 9 and 10 hereinabove.

#### 14. COPYRIGHTS/PATENTS

CITY shall own all rights to any patent or copyright on any work, item or material produced as a result of this Agreement.

#### 15. CITY EMPLOYEES AND OFFICIALS

CONSULTANT shall employ no CITY official nor any regular CITY employee in the work performed pursuant to this Agreement. No officer or employee of CITY shall have any financial interest in this Agreement in violation of the applicable provisions of the California Government Code.

#### 16. NOTICES

Any notices, certificates, or other communications hereunder shall be given either by personal delivery to CONSULTANT's agent (as designated in Section 1 hereinabove) or to CITY as the situation shall warrant, or by enclosing the same in a sealed envelope, postage prepaid, and depositing the same in the United States Postal Service, to the addresses specified below. CITY and CONSULTANT may designate different addresses to which subsequent notices, certificates or other communications will be sent by notifying the other party via personal delivery, a reputable overnight carrier or U. S. certified mail-return receipt requested:

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TO CITY:

TO CONSULTANT:

City of Huntington Beach ATTN: Director of Public Works 2000 Main Street

Huntington Beach, CA 92648

Michael K. Nunley & Associates, Inc. Attn: Ryan Gallagher 354 Pacific Street

San Luis Obispo, CA 93401

17. CONSENT

When CITY's consent/approval is required under this Agreement, its

consent/approval for one transaction or event shall not be deemed to be a consent/approval to any

subsequent occurrence of the same or any other transaction or event.

18. MODIFICATION

No waiver or modification of any language in this Agreement shall be valid unless in

writing and duly executed by both parties.

19. SECTION HEADINGS

The titles, captions, section, paragraph and subject headings, and descriptive phrases

at the beginning of the various sections in this Agreement are merely descriptive and are included

solely for convenience of reference only and are not representative of matters included or excluded

from such provisions, and do not interpret, define, limit or describe, or construe the intent of the

parties or affect the construction or interpretation of any provision of this Agreement.

20. INTERPRETATION OF THIS AGREEMENT

The language of all parts of this Agreement shall in all cases be construed as a

whole, according to its fair meaning, and not strictly for or against any of the parties. If any

provision of this Agreement is held by an arbitrator or court of competent jurisdiction to be

unenforceable, void, illegal or invalid, such holding shall not invalidate or affect the remaining

covenants and provisions of this Agreement. No covenant or provision shall be deemed dependent

upon any other unless so expressly provided here. As used in this Agreement, the masculine or

neuter gender and singular or plural number shall be deemed to include the other whenever the

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context so indicates or requires. Nothing contained herein shall be construed so as to require the commission of any act contrary to law, and wherever there is any conflict between any provision contained herein and any present or future statute, law, ordinance or regulation contrary to which the parties have no right to contract, then the latter shall prevail, and the provision of this Agreement which is hereby affected shall be curtailed and limited only to the extent necessary to bring it within the requirements of the law.

#### 21. DUPLICATE ORIGINAL

The original of this Agreement and one or more copies hereto have been prepared and signed in counterparts as duplicate originals, each of which so executed shall, irrespective of the date of its execution and delivery, be deemed an original. Each duplicate original shall be deemed an original instrument as against any party who has signed it.

#### 22. IMMIGRATION

CONSULTANT shall be responsible for full compliance with the immigration and naturalization laws of the United States and shall, in particular, comply with the provisions of the United States Code regarding employment verification.

#### 23. LEGAL SERVICES SUBCONTRACTING PROHIBITED

CONSULTANT and CITY agree that CITY is not liable for payment of any subcontractor work involving legal services, and that such legal services are expressly outside the scope of services contemplated hereunder. CONSULTANT understands that pursuant to *Huntington Beach City Charter* Section 309, the City Attorney is the exclusive legal counsel for CITY; and CITY shall not be liable for payment of any legal services expenses incurred by CONSULTANT.

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#### 24. ATTORNEY'S FEES

In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the nonprevailing party.

#### 25. SURVIVAL

Terms and conditions of this Agreement, which by their sense and context survive the expiration or termination of this Agreement, shall so survive.

#### 26. GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of California.

#### 27. SIGNATORIES

Each undersigned represents and warrants that its signature hereinbelow has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify CITY fully for any injuries or damages to CITY in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.

#### 28. ENTIRETY

The parties acknowledge and agree that they are entering into this Agreement freely and voluntarily following extensive arm's length negotiation, and that each has had the opportunity to consult with legal counsel prior to executing this Agreement. The parties also acknowledge and agree that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by that party or anyone acting on that party's behalf, which are not embodied in this Agreement, and that that party has not executed this Agreement in reliance on any representation, inducement, promise, agreement, warranty, fact or circumstance not expressly set forth in this

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Agreement. This Agreement, and the attached exhibits, contain the entire agreement between the parties respecting the subject matter of this Agreement, and supersede all prior understandings and agreements whether oral or in writing between the parties respecting the subject matter hereof.

#### 29. EFFECTIVE DATE

This Agreement shall be effective on the date of its approval by the City Council.

This Agreement shall expire when terminated as provided herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officers.

CONSULTANT,	
MICHAEL K. NUNLEY & ASSOCIATES,	CITY OF HUNTINGTON BEACH, a
INC.	municipal corporation of the State of
1 V	California
By: Milking	
MICHEL K. WHEY	Mayor
print name	
ITS: (circle one) Chairman President Vice President	
	City Clerk
By:	INITIATED AND APPROVED:
Ryan Gallagher	ella
print name  ITS: (circle one) Secretary/Chief Financial Officer/Asst.	Director of Public Works
Secretary - Treasurer	
secretary - Fredshire	REVIEWED AND APPROVED:
	City Manager
	APPROVED AS TO FORM:
	piden
	City Attorney

#### EXHIBIT "A"

## A. <u>STATEMENT OF WORK:</u> (Narrative of work to be performed)

Provide On-Call Civil Engineering and Professional Consulting Services. If Consultant chooses to assign different personnel to the project, Consultant must submit names and qualifications of these staff to City for approval before commencing work.

#### B. CONSULTANT'S DUTIES AND RESPONSIBILITIES:

See Attached Exhibit A

#### C. CITY'S DUTIES AND RESPONSIBILITIES:

- 1. Furnish Scope of Work and provide a request for proposal for each project.
- 2. City shall issue a task order for each project based upon scope of services, work schedule, and fee proposal submitted.

#### D. WORK PROGRAM/PROJECT SCHEDULE:

A project schedule will be developed for each project assigned by the City.

## **EXHIBIT A**

The following pages contain the completed copies of the forms requested in the RFP.

# Disciplines of Civil Engineering Services Application Form

\*Circle all that apply\*

Civil Engineering Service Area	Bidding? Y/N (circle)
Water/Sewer/Storm Water Engineering	(Yes) / No
General Civil Engineering	Yes / No
Ocean Engineering	Yes / No
Environmental/Water Quality	Yes / No





## REQUEST FOR PROPOSAL

## VENDOR APPLICATION FORM

TYPE OF APPLICANT:	X NEW	☐ CURRENT VENDOR
Legal Contractual Name of Corpor	ration:	Michael K. Nunley & Associates, Inc.
Contact Person for Agreement: Ry	an Gallagher.	PE
Corporate Mailing Address:	354 Pacific	Street
City, State and Zip Code:	San Luis Obis	spo, CA, 93401
E-Mail Address: rgallagher@mk	nassociates.u	ds .
Phone: 714-213-9758		Fax: 805-904-6532
Contact Person for Proposals: Saf	a Kamangar, I	PE, PMP, CCM, QSD/P
Title: Contract Manager		E-Mail Address: skamangar@mknassociates.us
Business Telephone: 949-637-399	79	Business Fax: 805-904-6532
Year Business was Established: 20 Is your business: (check one)	012	
☐ NON PROFIT CORPORAT	ION 🗵	FOR PROFIT CORPORATION
Is your business: (check one)		
<ul><li>☒ CORPORATION</li><li>☐ INDIVIDUAL</li><li>☐ PARTNERSHIP</li></ul>	SOLE I	ED LIABILITY PARTNERSHIP PROPRIETORSHIP FORPORATED ASSOCIATION







Names & Titles of Corporate Board Members (Also list Names & Titles of persons with written authorization/resolution to sign contracts)

Names Michael K. Nunley, PE	Title President/CFO	Phone 805-329-4773				
Jon Hanlon, PE, AMPP	Vice President	805-329-4773				
Eileen Shields, PE	Vice President	805-329-4773				
Henry Liang, PE	Board Member	559-500-4750 x1102				
Ryan Gallagher, PE	Board Member	949-491-1678				
Federal Tax Identification Number:	45-5504041					
City of Huntington Beach Business License Number: Will obtain upon award.  (If none, you must obtain a Huntington Beach Business License upon award of contract.)						
City of Huntington Beach Business License Expiration Date: N/A						







# MKN's Client-Centric Origins

MKN is a water, wastewater, and recycled water engineering firm located in Central and Southern California. Since 2012, our firm has grown to over 80 professional engineers, planners, construction managers/inspectors, and support staff. MKN is focused on meeting the growing needs of public agencies for responsive, technically capable consultants who are committed to a long-term relationship based on excellence.



All City projects will be managed out of MKN's Irvine office, less than 20 miles from the City of Huntington Beach.

Our clients are looking for a trusted partner to lean on, and MKN is an engineering firm that can participate and manage every aspect of a project from start to finish. This is what it means to be a client advocate. Whether we are overseeing a citywide water treatment program or managing a specific aspect of a project, our dedicated team works tirelessly to ensure we deliver the quality, responsiveness, availability, and accessibility our clients expect.

## Water Is Our Focus

We are passionate about water in every form. Our firm is completely dedicated to delivering professional services for water-related projects. Beyond delivering for our clients, MKN's staff members are leaders in industry organizations; we actively research, present, and participate in the development of industry standards and best practices. We are innovating the way engineers deliver work and the products our clients use. Our principals have decades of experience in management and leadership roles for some of the highest-ranked engineering firms in the world, and we are excited to bring our expertise to the City.

# MKN has delivered projects on over 35 On-Call contracts.

MKN has a robust track record of successfully executing projects under On-Call contracts for a diverse range of clients and has demonstrated its capability to deliver high-quality services efficiently and effectively. The firm's experience spans various project types, including water and wastewater treatment, hydraulic modeling, infrastructure design, and condition assessments. MKN's approach is characterized by responsiveness, technical expertise, and a commitment to client satisfaction, which has resulted in long-standing relationships with many agencies.











400+ Miles of Pipeline

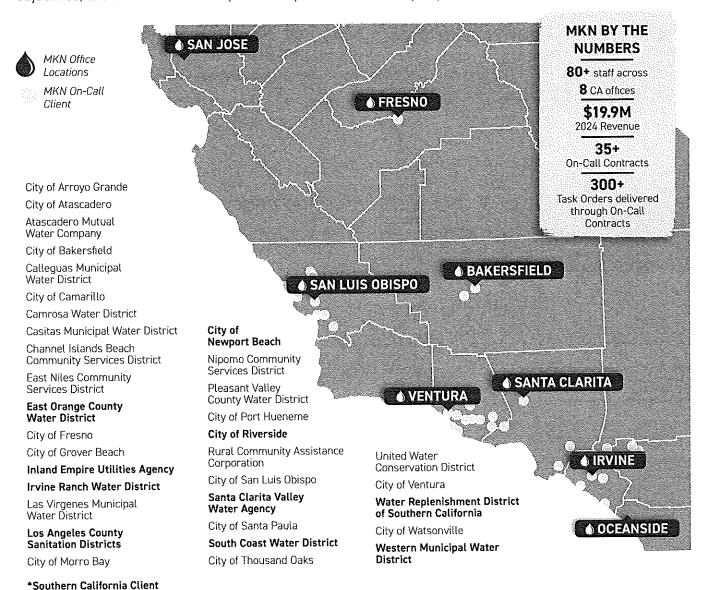




## MKN Is Committed to Huntington Beach

MKN is proud to be engaged in locally focused projects that impact the Huntington Beach and Orange County communities. The firm understands the need to be responsive and flexible for the City, and its organizational structure and size allow it to serve without any external barriers. Unlike larger firms, MKN's engineers are fully committed to their clients and are not focused on "utilization" or "profit." The primary objective is to serve and support clients as a trusted partner.

MKN established its Irvine office to better serve the region, and its engineers have been working in Southern California for decades. The firm is actively engaged in several projects throughout Orange County for agencies such as the Cities of Anaheim, Irvine, Newport Beach, and other local municipalities such as Irvine Ranch Water District, East Orange County Water District, and South Coast Water District. The proposed contract manager, Safa Kamangar, has extensive experience executing major water, wastewater and recycled water public works improvements in the region including working with the City of Huntington Beach for more than a decade. Safa understands the City's goals, requirements, and objectives, and has established a partnership with different City departments over the years.







# CMETHODOLOGY



# Understanding of the City

MKN understands the critical importance of infrastructure to the City of Huntington Beach, a bustling community with a diverse array of civil engineering needs. The City's infrastructure encompasses water, sewer, and stormwater systems, necessitating a robust and responsive engineering approach. Past projects, such as the Saybrook Lift Station Replacement with Safa at the helm as the Project Manager, demonstrate Huntington Beach's commitment to upgrading and maintaining vital



Main Street and Ocean Avenue, 1930's. Photo courtesy of the OC Archives.

infrastructure. MKN's extensive experience in water, sewer, and stormwater engineering positions us well to address the City's needs.

The City of Huntington Beach has made it clear that the selected on-call consultants must be able to deliver on a broad range of services, which aligns with our staffs' past experience with and understanding of the City. MKN has reviewed the City's five-year Capital Improvement Program and understands that the following project types are of high importance to the City:

- Annual Pipeline Replacement Program. This is one of core competencies of MKN. We have been providing the same service under On-Call contracts for East Orange County Water District and South Coast Water District over the past five years.
- Well Rehabilitation and Treatment. MKN has a long list of well equipping, rehabilitation, PFAS
  treatment, and other well treatment projects. Over the past three years MKN has completed four
  similar projects in So Cal and was recently selected for Santa Clarita Valley Water's Pin Court Well
  Equipping and Treatment Project.
- Sewer Lift Station Rehabilitation. Lift stations are another area of expertise for our proposed team. Our Contract Manager, Safa Kamangar, has been involved with more than five Lift Station projects with the City of Huntington Beach, and the MKN team has completed the condition assessment for 12 sewer lift stations at South Coast Water District and the design of four lift stations in Southern California over the past five years. Three of these projects include the newest sewer pump station innovation i.e., direct in-line pumps (overwatch) for the City of Riverside.

Beyond these capabilities, the MKN team offers expert professionals in every aspect of Water and Wastewater engineering and can effectively and efficiently deliver the City's needs.





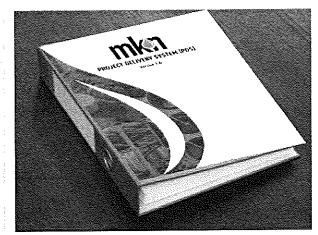
# Comprehensive Planning and Feasibility Studies

Many of the design projects will start with planning, feasibility or alternatives analysis to identify the most cost-effective approach while also refining and defining the project to be designed. MKN's experience includes numerous early planning studies, including various feasibility studies, alternatives analysis and conceptual designs. While the type of study is project specific, a general approach for all includes early development of the City goals and objectives from all stakeholders. Project alternatives or components can be developed from these initial discussions and subjected to preliminary screening.

Once short-listed alternatives are confirmed with the City, MKN will conduct an alternatives analysis using both quantitative and qualitative elements and varying weighting factors. These elements and factors will be established in collaboration with the City and based on projects' specific needs. These factors may include economic factors such as capital cost, life cycle or payback, or non-economic factors such as schedule, public impact, traffic, environmental, constructability, operability, and regulatory requirements. By involving the City actively in this decision-making process, MKN seeks to deliver infrastructure designs that not only meet technical standards but also align with the City's broader goals and responsibilities.

# MKN's Project Management and Schedule Approach

MKN employs a structured project management approach that emphasizes close leadership involvement and meticulous schedule management to ensure successful project delivery. Through our Project Delivery Manual, we maintain consistency and quality in project execution, allowing us to manage multiple contracts efficiently. Our methodology includes thorough task tracking, schedule adherence, and proactive risk management, making us a reliable partner for the City in implementing its on-call engineering services. MKN's Project Management Plan is a requirement of every Task Order and will set the stage for success by identifying key staff, milestones, quality requirements and risk.

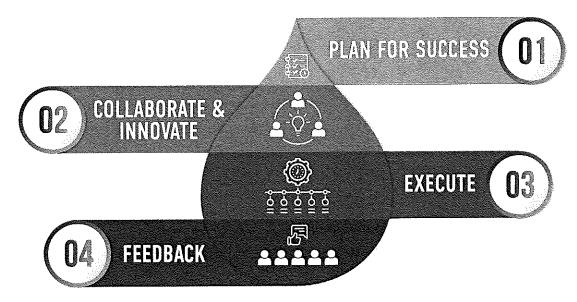


MKN's Project Delivery Manual is the source of our continued success in delivering quality projects.

## Key Goals of the Project Management Plan:

- Project Overview & Planning A well-structured project begins with clear objectives and planning, ensuring a defined scope, schedule, and the necessary drawings to support execution. Establishing these foundational elements provides direction and alignment from the start.
- Project Execution & Management Successful execution relies on proactive management, including financial oversight, quality assurance, and risk mitigation. Maintaining clear communication, adhering to established CAD standards, and ensuring accurate timesheet charging contribute to efficiency and consistency throughout the project.
- Team & Client Coordination Collaboration and accountability drive project success, with a strong team, client satisfaction, and key success factors playing a critical role. Keeping open lines of communication and ensuring accessibility through well-defined contact information fosters seamless coordination.





# Step 1 - Plan for Success

MKN's Contract Manager will coordinate with City staff on a regular basis to understand upcoming task orders. Through this early development process, or in some cases once the task order is received, MKN focuses on identifying the key owner objectives which are integrated into our approach. Our scope, schedule and budget include explicit line items for internal kickoff, quality control reviews, deliverable dates and client review. Specific team members are identified on our fee sheets, which commits those resources to the client and ensures coordination is

## Key Elements of Step 1

- Clearly defined Client goals/concerns
- Comprehensive scope of work
- Explicit deliverables for each task
- Task-linked project schedule
- Assumptions and limitations
- Team-specific project fee
- Asana coordination on availability

done ahead of the task order to confirm availability. This latter part is done through MKN's use of Asana, which is an innovative resource and project management tool available to the entire company.

## Step 2 - Collaborate & Innovate

Following the Notice to Proceed, MKN's Project Manager will coordinate an internal kickoff meeting and prepare a Project Management Plan (PMP). Both serve as an opportunity to ensure appropriate staffing, understanding of client goals, and preparation for the subsequent Client Kickoff. This internal venue also serves as a platform to brainstorm with a designated QC reviewer and Technical Advisor regarding innovative approaches, allowing time for ideas to be vetted before bringing them forward at the Client Kickoff.

MKN has numerous examples of how this has resulted in savings for our customers, including a recent project with SCWD. In this instance, MKN suggested an alternative to a pipeline project scoped by the Client, in which MKN demonstrated equivalent performance via hydraulic modeling that resulted in a significantly reduced pipeline.

Throughout the course of the project, we will continue collaboration with all stakeholders through biweekly meetings with the City's Project Manager and additional participants as needed. During these meetings, key issues will be discussed and stakeholder responses and requirements will be documented for evaluation or implementation.

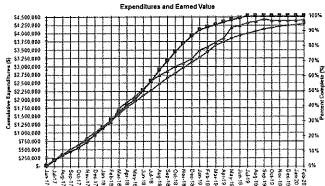




## Step 3 - Execute

With a well-formed plan in place, execution relies heavily on communication and coordination. MKN utilizes several tools to support our Contract and Task Order Managers in communicating expectations, project status, and project plan, including the following:

- Project Management Plan This standard form is completed at the start of the project and serves as our team's roadmap.
- Microsoft Project Schedule Our standard includes line items for QC, Client Review, and hard dates for Deliverables.
- Project Management Software Our billing software (BillQuick V20) provides for up-to-date budget, billing, and payment details.
- **Client Check-Ins** Ranging from weekly to bi-weekly these 15-30 minute calls follow a standard agenda that ensures accountability for delivering on action items for both parties.
- Resource Coordination MKN uses weekly office and company-wide coordination calls to ensure adequate resources are available to meet deliverables. All resources are managed through our online BillQuick software and Asana Project Management platform by the Contract Manager. The Asana platform is populated at the start of the project with all key deliverables and QC dates with direct links to those responsible. QC is successful when the reviewer has adequate time to review and the team has adequate time to respond; both are accomplished by MKN's utilization of Asana. Our technical teams also utilize tools such as the latest Microsoft, AutoCAD, GIS, and Modeling software to support execution of project work.
- Farned Value Analysis Our standard spreadsheets, shared with the Client, track budget and schedule in real time by integrating billing data and work status. This tool enables effective project management while providing City staff with transparent updates. Additionally, MKN can include an Earned Value Analysis (EVA) graph with each invoice for a comprehensive view of budget health.



## MKN's Project Documentation

Our team will also utilize Microsoft Teams for project-related communication, video and screen share meetings, documentation, and management of action items. The City's Project Manager will be provided full access to the platform and can view these project materials and status at his or her convenience. This instant access to information ensures that the City will always be able to quickly get up to speed on the project status.

## Step 4 - Feedback

Constant improvement is a core value for MKN, and feedback is an essential component of that. For every project that we complete for the City, the agency Project Manager will receive a short survey that allows for candid feedback on performance of the MKN team. The survey even provides the City's personnel the opportunity to request a meeting with our CEO. This feedback will enable us to perform better in the next task order assignment and improve work quality, as well as the City's experience with MKN.



# MKN's Quality Assurance/Quality Control (QA/QC)

Our tried and true QA/QC process provides the City with peace of mind. Our team's philosophy and approach to project management and the QA/QC program is proactive. We work closely and effectively with clients to ensure a seamless operation. MKN's Quality Management System (QMS) includes three key elements: (1) Quality Planning, (2) Quality Assurance, and (3) Quality Control.

#### **GINVALITY INFANTALINE**

- PM Plan
- QC Scheduling
- QC Line Item Budget
- MKN QC Planning Calls

PLAN

#### **QUALITY ASSURANCE**

- Internal Training
- Robust Design Templates
- · Proven Technical Tools
- 10% Technical Review

PREVENT

#### **QUALITY CONTROL**

- Approved QC Reviewers
- Standard QC Forms
- Subconsultant QC Reqs.
- Principal Review

**CONFIRM** 

## Quality Planning - Plan for Success

Our QMS requires the Contract Manager to plan for quality even before a contract is signed. This means that our proposal must include the following:

- Line Item Scope this helps to ensure that the budget is preserved through project execution.
- Line Item Schedule QC is included in our task-linked Microsoft Project Schedules to ensure that adequate time is allotted, which typically requires 2-5 days.
- Identify a QC Manager this person is identified and confirmed prior to submitting a proposal.

Once a contract is signed, a Project Management Plan is prepared which details key elements of the project, including risks and quality reviews.

## Quality Assurance - Prevent Errors

A key element of Quality Assurance is our technical training which is conducted every two weeks. Our engineers are also supported by our design templates, calculation spreadsheets and access to our Technical Practice Groups which maintain and manage many of these documents.

The Technical Review completed at the 10% project phase is another key element of our Quality Assurance program.

## Quality Control - Confirm MKN Quality Is Met

For the City, our Contract Manager will conduct monthly status meetings with Task Order Managers. During this meeting, project status will be discussed along with adherence to QMS procedures and resource needs.

Every deliverable will be reviewed by either Dennis Phinney, PE or Karl Francis, PE, PLS, who will follow our defined process for QC review. Our standard review forms will be utilized which identify key elements of review. These documents have been prepared based on our team's extensive experience and "Lessons Learned."





# DSTAFFING



(evav/eteropatatelaataa

Dennis Phirm**e**y, PE Karl Francis, PE, PLS CONTRACT MANAGER

Safa Kamangar, PE, PMP, ECM, QSD/P PRINGENENEGRANGE

. Tavan Bahadinas 175

#### TASK ORDER MANAGERS

Kevin Saleh, PE

Parasto Azami, PE

Kathleen Labrador, PE

#### **PROJECT TEAM**

PIPELINE DESIGN

Ivy Sanders, PE Judy Beik, PE

PLANNING/ HYDRAULIC MODELING

Adam Bugielski, PE Kathleen Labrador, PE

WASTEWATER PROCESS

Michael Nunley, PE, Assoc. DBIA Eileen Shields, PE

TANK REHABILITATION

Jon Hanlon, PE

SITECIVIL

Becca Bugielski, PE

PUMP/LIFT STATION

Josh Nord, PE

Sarah Mathews, PE

WATER QUALITY/TREATMENT

Chris Martin, PE Stefanos Word, PE, Env Sp

PIPELINE REHABILITATION/ CONDITION ASSESSMENT

Joseph Reichmuth, PE Kevin Norgaard, PE

SURGE

Jason Wilson, PE

CONSTRUCTABILITY

Peter Brennan, PE, CCM

WELL/RESERVOIR

Henry Liang, PE Brian McCauley, PE

ELECTRICAL/INSTRUMENTATION Long Pham, EE<sup>1</sup> SURVEY

Ramon Gonzalez, LSIT<sup>2</sup>

TRAFFIC CONTROL

David Kuan, PE, PTE<sup>3</sup>

GEOTECHNICAL

Adam Chamaa, PG, GE<sup>e</sup>

ARCHITECTURE

Scott Jones

ENVIRONMENTAL ASSESSMENT

Jennifer Jacobus, PhD<sup>6</sup> Annaliese Torres<sup>6</sup>

POTHOLING

Underground Solutions

STRUCTURAL

Joe Wendt, PE<sup>7</sup>

1-SPEC; 2-Calvada Surveying; 3-Traffic Control Engineering; 4-AESCO; 5-Architects Orange (AO); 6-Rincon; 7-Peterson Structural Engineers

Full resumes for the key project team members listed on the following pages can be found in Appendix 1.





**Ryan Gallagher, PE**Principal-in-Charge

Since joining MKN in 2019, Ryan Gallagher has completed over 130 projects with 30+ public agencies in Southern California, serving as the Project Manager for the majority. The estimated construction value of the projects that have been planned, designed and/or constructed exceeds \$300M. Projects include planning through design for water, wastewater and recycled-water conveyance, pumping, storage, and treatment. Ryan specializes in complex multi-agency water supply programs, alternative delivery, program management, master planning, and contract negotiations.

#### **EDUCATION**

BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, CA

#### **LICENSE**

Professional Civil Engineer, CA No. 74805



Safa Kamangar, PE, PMP, CCM, QSD/P Contract Manager

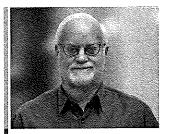
Safa Kamangar is a highly experienced professional with 28 years of expertise in water, wastewater, and water reuse. As a design engineer, Safa has provided hydraulic calculations, mechanical design, detailed design drawings, and development of specifications. He has a strong background in planning, design, and construction management, gained from working in both the private and public sectors. His expertise encompasses design, construction, and commissioning of water/wastewater infrastructure including more than 65 pumping facilities, 15 wells, and more than 150 miles of pipeline ranging from 4 inches to 72 inches in diameter.

#### **EDUCATION**

MS, Civil Engineering, University of Tehran, Iran BS, Civil Engineering, Azad University, Tehran, Iran

#### **LICENSE**

Professional Civil
Engineer, CA No. 70118
Project Management
Professional (PMP), No. 1863656
Certified Construction
Manager, No. 6341
Qualified SWPPP
Developer/Practitioner
(QSD/QSP), CA No. 23059



Dennis Phinney, PE QA/QC Officer

Dennis Phinney's 46 years consulting experience in water and wastewater engineering includes design of over 100 pumping facilities, two of which were awarded Southern California APWA "Projects of the Year." He has also designed pipelines, wells, chemical feed facilities, reservoirs, and water and wastewater treatment facilities in service throughout California and Arizona.

#### **EDUCATION**

MS, Civil Engineering, Rensselaer Polytechnic Institute, Troy, NY MBA, Pepperdine University, Malibu, CA BS, Civil Engineering, Rensselaer Polytechnic Institute, Troy, NY

#### LICENSE

Professional Civil Engineer, CA No. 30778 Professional Mechanical Engineer, CA No. 21533







Karl Francis, PE, PLS QA/QC Officer

Karl Francis has over four decades of experience in civil engineering, project management, and regulatory compliance. Throughout his career, Karl has demonstrated exceptional leadership and technical expertise, managing and overseeing numerous large-scale infrastructure projects. His roles have included Deputy Director of Engineering at Western Municipal Water District, Principal Civil Engineer at South Coast Water District, and various senior engineering positions at the City of Anaheim and San Bernardino County.



**Kevin Saleh, PE**Task Order Manager

Kevin Saleh has more than 30 years of experience as a civil engineer. He has led and participated in planning, design, construction management, and construction support for numerous public works projects, particularly in water and wastewater. His expertise spans the design and management of water distribution and treatment facilities, pumping stations, treatment plant processes, reservoirs, pressure-reducing/surge facilities, wastewater conveyance systems, pumping stations, and treatment plant projects.



Parasto Azami, PE Task Order Manager

Parasto Azami brings over 10 years of experience in water and wastewater engineering design, with a strong focus on pipeline design. Her expertise includes water conveyance systems, gravity sewers, force mains, pump stations, and the rehabilitation and condition assessment of infrastructure.



**Kathleen Labrador, PE**Task Order Manager

Kathleen Labrador has over 10 years of experience in the water/wastewater civil engineering field. Her experience includes planning and design of potable water, sewer, and recycled water facilities within California—hydraulic analyses for water, recycled water, and sewer projects and pipeline, pump station, and reservoir design where she has prepared plans, specifications, and cost-estimates and provided construction support.

#### **EDUCATION**

MS, Civil Engineering, California State University, Fullerton, CA MBA, The University of Kansas, Lawrence, KS BS, Civil Engineering, The University of Kansas, Lawrence, KS

#### **LICENSE**

Professional Civil Engineer, CA No. 45699 Professional Land Surveyor, CA No. 7239

#### **EDUCATION**

BS, Civil Engineering, University of Tabriz, Iran Computer Programming/ System Analysis, Seneca Polytechnic, Toronto, Canada Project Management (PM) Certificate, Cornell University, Ithaca, NY

#### LICENSE

Professional Civil Engineer, CA No. 90535

#### **EDUCATION**

MS, Civil Engineering, University of California, Irvine, CA BS, Mechanical Engineering, University of Tabriz, Iran

#### LICENSE

Professional Civil Engineer, CA No. 91468 Project Management Certification, UCI DCE

#### **EDUCATION**

BS, Civil Engineering, University of California, Irvine, CA

#### **LICENSE**

Professional Civil Engineer, CA No. 90355



## MKN's Additional Staff Resources

MKN prides itself on a robust team of licensed staff members who are integral to our project management structure. Beyond the skilled individuals directly listed in our proposal, MKN possesses a wealth of additional staff resources, providing us with a significant depth of expertise and flexibility. This allows us to effectively respond to varying project demands and timelines, enhancing our ability to meet client objectives efficiently.

Service

Service Type

			Агеа		Service Typ					9E			
	Lacation	CA Registration	Water	Wastewater	Recycled Water	Planning/ Studies	Pumping	Pipelines	Storage	Treatment	Condition Assessment	Environmental	CM Support
Staff Member	Location	=		_			L.J		0,	_		LL.	_
Chris Haugen, EIT	Irvine	EIT 178979	4	4	4	-/		4			-√		
Cindy Sevilla Esparza, PE	Irvine	Civil PE 96093	4	4	4	4	√	Ą	Į.				,
Dennis Phinney, PE	Irvine	Civil PE 30778; Mech. PE 21533	4	1	4	-1	Ą	۷.	4	4	4		Ą
Ivy Sanders, PE	Irvine	Civit PE 93269	Ą	V	∜ .			.1		√.			
Judy Beik, PE	Irvine	Civit PE 96365	4	4	4	J	√.	₹	4				
Karl Francis, PE, PLS	Irvine	Civit PE 45699; LS 7239	4	4	Ą	- <i>i</i>	4	-/	-J				√
Kathleen Labrador, PE	Irvine	Civil PE 90355	1	√.	4	<i>\f</i>	¥	1	Ą		4		
Kevin Saleh, PE	Irvine	Civit PE 90535	4	√	1		4	4	-\$	1	4		4
Khanh Nguyen, EIT	Irvine	EIT 119293	4	Į	1		√	Ą	å				
Parasto Azami, PE	Irvine	Civil PE 91468	4	- <i>j</i>	1		4	Ą.	4				
Ryan Gallagher, PE	Irvine	Civil PE 74805	-į	4	4	-\$	√.	Ý	Ą	Ý	4	4	
Sabrina Ryan	Irvine	N/A	Į	¥	-1	1	4	1					
Safa Kamangar, PE, PMP, CCM, QSD/P	Irvine	Civil PE 70118; PMP 1863656; CCM 6341; QSD 23059	4	4	4	J	∢	√	4	J	4		4
Saisanjith Kakkireni	Irvine	N/A	ý	∢	Ą			4					
Chris Martin, PE	Bakersfield	Chem. PE 4597	-\$	J	Ĵ	4	1	4		1			
Jason Wilson, PE	Bakersfield	Civil PE 89117	1	J	4	4	4	4	4	4	4	-J	ş
Josh Nord, PE	Bakersfield	Civil PE 61789	Á	J	1	J	4	1	4	J	Ą	J	Ą
Ammar Hanna, EIT	Fresno	EIT 171630	4	Á			4	ď			₹		
Brian McCauley, PE	Fresno	Civil PE 92170	4	V		4	4	4					
Carson Hatmaker, EIT	Fresno	EIT 177471	4				4	1	4				
Henry Liang, PE	Fresno	Civil PE 68442	\$	4		4	4	4	4				1
Kevin Norgaard, PE	Fresno	Mech. PE 27654	4	J	4	4	4	Ą	₹	4	1		Ą
Miles Madrid, EIT	Fresno	EIT 179184	\$	4			4	Ą		4			
Xavier Vera, EIT	Fresno	EIT 172420	<b>√</b>				4	\$					į
Vicki Quiram, PE, ENV SP	Oceanside	Texas - Civil PE 74346, Env SP 3577	4	J	1	4	√	4	4			4	
Mihika Ram, PE	San Jose	Georgia - Civil PE 049695		√.	4	4		4		Ą	1		
Stefanos Word, PE, ENV SP	San Jose	Civil PE 93856; Env SP 18683	4	4	4	4	4	1		V			
Eileen Shields, PE	San Luis Obispo	Civil PE 74757	4	Ą	J			4		√			
Jon Hanlon, PE, AMPP	San Luis Obispo	Mech. PE 33232; AMPP 10431924	<b></b>	4	4		4	4	4	1	$\mathbf{y}^{t}$		
Joseph J. Reichmuth, PE	San Luis Obispo	Civil PE 63124	4	1	1		√	4	Ą		4		
Julia Cannon, EIT	San Luis Obispo	EIT 173059	4	4	1,			√		1			
Michael Nunley, PE, Assoc. DBIA	San Luis Obispo	Civil PE 61801; Assoc. DBIA	4	4	-,1	4	4	1	ų,	J	J		
Tim McHale, EIT, AMPP	San Luis Obispo	EIT 175874; AMPP 114981	4	4	ş	-1	4	4					
Peter Brennan, PE, CCM	Santa Clarita	Civil PE 53110; CCM A2428	4	J	4								ď
Adam Bugielski, PE	Ventura	Civil PE 89065	Ų	į	į	-1	4	Ą	4	1	4	1	4
Becca Bugielski, PE	Ventura	Civil PE 93278; PACP/LACP/MACP	4	-1	Ą	4	4	-,[	Ą	4	J	4	4
Gerardo Hernandez, EIT	Ventura	EIT 179738	,	J	<del>√</del>		4	ý				-4	j
Luis Garcia, EIT	Ventura	EIT Certification	-[	· v	į		4	-1			.}		4
Nick Liu, PE	Ventura	Civil PE 95502	•	1	d	4	4		1		•		
Sarah Mathews, PE	Ventura	Civil PE 88471; PACP/LACP/MACP	J	1	4	,	./	J	1	J	4	J	1
Shayne Curson, EIT	Ventura	EIT 179395	4	4	Ą.		•	J	•	J	•	•	•
Gridyric Odradin, Eri	T CITICAL CI	2.7. 17.1070	*	•				*		•			





## Subconsultants

To strengthen our team, we made deliberate choices to provide you with highly skilled, reliable resources. The professional capabilities of each firm are briefly highlighted below. We have successfully collaborated on previous projects with all of the subconsultants identified, and these established working relationships will translate to effective communication, trust and safety in the field, schedule efficiency, and the best value for Huntington Beach.

	Subconsultant	Firm Description
SERVICES	<b>Long Pham, EE</b> Electrical/Instrumentation SPEC	SPEC delivers a comprehensive range of planning, engineering, design, and project services to a variety of industries. Their offerings include feasibility studies, project management, engineering design, and on-site support, ensuring complete solutions that drive success throughout every phase of the project lifecycle.
CAL VADA 50 5045 INC.	Ramon Gonzalez, LSIT Survey Calvada Surveying	Founded in 1989, Calvada Surveying, Inc. is a distinguished Disabled Veteran and Minority Owned land surveying firm headquartered in Corona, California.
	<b>David Kuan, PE, PTE</b> Traffic Control Traffic Control Engineering	TCE prepares traffic control plans and detour plans and conducts traffic impact studies and alternative alignment evaluations to safely and expeditiously guide traffic through or around construction activities.
AESCO	Adam Chamaa, PG, GE Geotechnical AESCO	AESCO offers expertise in a wide array of geotechnical and geologic services to determine the characteristics of soil conditions and recommend design parameters to support client projects.
Architecture. Design. Relationships.	Scott Jones Architecture Architects Orange (AO)	Founded in 1974, AO is a full service Architectural, Master Planning and Design firm specializing in Retail, Residential and Mixed-Use projects.
RINCON CONSULTANTS, INC. Environmental Scientists   Planners   Engliseers	Jennifer Jacobus, PhD Environmental Assessment Rincon Consultants	Rincon was founded in 1994 and has grown to a leading environmental consulting firm throughout California. Rincon brings expertise in CEQA/NEPA compliance for public agencies.
RINCON CONSULTANTS, INC. Environmental Scientists   Planners   Engliseers	Annaliese Torres Environmental Assessment Rincon Consultants	Rincon was founded in 1994 and has grown to a leading environmental consulting firm throughout California. Rincon brings expertise in CEQA/NEPA compliance for public agencies.
UNDERGROUND SOLUTIONS POSITIVE ID	Underground Solutions, Inc. Potholing	USI provides potholing and subsurface utility engineering services to locate and understand underground utilities to help clients make informed decisions, avoid costly conflicts or project delays, and minimize risk.
PETERSON STRUCTURAL ENGINEERS	Joe Wendt, PE Structural Peterson Structural Engineers	A single discipline structural engineering and consulting firm specializing in municipal structural design and evaluations. Extensive experience with reservoirs, pump stations and condition assessment.





# E QUALIFICATIONS

## Project Experience

### On-Call for South Coast Water District

#### **OWNER**

South Coast Water District

#### **CLIENT CONTACT**

Taryn Kjolsing, PE Engineering Manager 31592 West Street, Laguna Beach, CA 92651 tkjolsing@scwd.org 949.541.1327

#### **DURATION**

Jan. 2020 - Present

South Coast Water District selected MKN to serve as one of five firms on the District's multi-year on-call contract. MKN has been executing projects both under this contract, as well as stand-alone contracts. Projects include:

- Via California Pipeline Rehabilitation. An emergency project that included replacement of an existing 10-inch AC pipeline and lining of the 16-inch casing for a failed pipe crossing the 5 Freeway.
- Development Review. Completed two task orders requiring review of plans submitted by vendors requesting to utilize District infrastructure for telecommunications.
- Lift Station Condition Assessment. Condition assessment of 12 lift stations, including a pump efficiency and wet well capacity assessment. MKN identified 175 improvement/rehabilitation projects and prepared a 5-year implementation plan in close collaboration with District operations and engineering staff.
- Reservoirs No. 2B and 3B Replacement.
   Feasibility study for replacement of Reservoirs 2B and 3B. The project was completed on schedule and below budget and included hydraulic modeling, alternatives evaluation, cost estimating, constraints analysis, environmental and geotechnical evaluation and conceptual design.
- Marriott Pipeline. Design services for a 12-inch water main approximately 1,500 feet in length located in Dana Point in the vicinity of the Laguna Cliffs Marriott.
- LS No. 13 and 14 Stairs. Design for replacement of stairs and guardrails at the District's Lift Stations No. 13 and 14.

#### **KEY TEAM MEMBERS:**

Ryan Gallagher, PE Safa Kamangar, PE, PMP, CCM, QSD/P Parasto Azami, PE Dennis Phinney, PE Kevin Saleh, PE

# RELEVANCE TO HUNTINGTON BEACH:

- On-Call Contract
- Planning Studies
- Pipeline Replacement
- Lift Station Improvements
- ReservoirRehabilitation



## As-Needed Engineering Services for Western Municipal Water District

#### **OWNER**

Western Municipal Water District

#### **CLIENT CONTACT**

Luis Cardenas, PE Principal Engineer 14205 Meridian Pkwy, Riverside, CA 92518 lcardenas@wmwd. com 951.571.7285

#### **DURATION**

2023 - Present

Since 2023, MKN has been delivering essential on-call engineering services to Western Municipal Water District (WMWD), encompassing project design and program management for their comprehensive Capital Improvement Program (CIP). This partnership underscores MKN's commitment to ensuring efficient infrastructure development and management within WMWD, contributing to enhanced water service delivery and community sustainability. Following is a list of projects that have been completed or are ongoing:

- Magnolia Avenue Interconnect
- Mockingbird Canyon Pipeline
- Western RCWD Intertie
- Jefferson Avenue Interconnection
- Sterling Reservoir and Pumping Station
- Sterling Pump Station Second PRV
- Well No. 7 Equipping and Discharge Pipe
- PFAS Focused Sewer Rehab
- Murrietta Water Supply Study
- WWRF Flows Project Services
- Sewer Force Main Replacement Support

#### **KEY TEAM MEMBERS:**

Ryan Gallagher, PE Safa Kamangar, PE, PMP, CCM, QSD/P Karl Francis, PE, PLS Kevin Saleh, PE Kathleen Labrador, PE Parasto Azami, PE

# RELEVANCE TO HUNTINGTON BEACH:

- On-Call Contract
- Pipeline Design
- Pump Station Planning and Design
- Sewer Lift Station
   Design

## Various Engineering Services for Irvine Ranch Water District

#### **OWNER**

Irvine Ranch Water District

#### **CLIENT CONTACT**

Malcolm Cortez, PE Engineering Manager 15600 Sand Canyon Avenue, Irvine, CA 92612 cortez@irwd.com 949.453.5854

#### **DURATION**

2022 - Present

Since 2022, as a pre-qualified approved vendor, MKN has been selected for multiple design projects for Irvine Ranch Water District. The following project descriptions are provided:

- Serrano Creek Pipeline. MKN provided alternatives analysis, hydraulic modeling, and final design for approximately 1,200 feet of new 8-inch recycled water pipeline to replace an existing pipe within a creek.
- Park Plaza Pipeline. MKN provided an expedited design for a new pipeline to replace approximately 1,100 feet of existing 6- and 8-inch AC pipeline that had reached the end of its useful life and was experiencing leaks.
- Technology and Ada Recycled Water Pipeline Replacement. (Ongoing project) MKN is providing design services for the replacement of approximately 4,600 LF of existing 6" ACP recycled water pipe and replacement of 22 services that have reached the end of useful life and are experiencing leaks.

#### **KEY TEAM MEMBERS:**

Ryan Gallagher, PE Safa Kamangar, PE, PMP, CCM, QSD/P Parasto Azami, PE Kevin Saleh, PE Dennis Phinney, PE

# RELEVANCE TO HUNTINGTON BEACH:

- Same Project Team Members
- Pipeline Replacement Program
- Multiple
   Stakeholder
   Engagement





## As-Needed Engineering Services for Yorba Linda Water District

#### **OWNER**

Yorba Linda Water District

#### **CLIENT CONTACT**

Roseanne Weston, PE, PMP Engineering Manager 1717 E. Miraloma Ave., Placentia, CA 92870 rweston@ylwd.com 714.701.3102

#### **DURATION**

2021 - Present

Since 2021, as a pre-qualified approved vendor, MKN has been selected for multiple design projects for Yorba Linda Water District. The following projects have been completed:

- Water Master Plan Update
- On-Call Hydraulic Modeling
- Placentia Waterline Replacement
- Staff Augmentation Services

#### **KEY TEAM MEMBERS:**

Ryan Gallagher, PE Safa Kamangar, PE, PMP, CCM, QSD/P Parasto Azami, PE Dennis Phinney, PE Kevin Saleh, PE

# RELEVANCE TO HUNTINGTON BEACH:

- Same Key Team Members
- Pipeline Replacement Program
- Hydraulic Modeling Support Services

## On-Call for Santa Clarita Valley Water Agency

#### OWNER

Santa Clarita Valley Water Agency

#### **CLIENT CONTACT**

Jason Yim, PE
Principal Engineer
27234 Bouquet
Canyon Road, Santa
Clarita, CA 91350
jyim@scvwa.org
661.297.1277

#### **DURATION**

2020 - Present

MKN provides construction management, inspection, and engineering design services for the Santa Clarita Valley Water Agency (SCVWA). As part of the Agency's on-call, MKN has been selected to conduct evaluations, studies, preliminary and final designs, land acquisition, permit acquisition and more for various projects for the SCVWA's water treatment, water distribution, storage and pumping facilities. Projects include:

- Well 201 VOC Treatment improvements:
   New GAC system for VOC treatment consisted of construction of a new chemical building including all associated chemical storage and handling systems at the site.
- Well D/Clark Well PFAS Groundwater
   Treatment: Prepared hydraulic calculations, treatment process equipment selection and sizing, conceptual design, and preliminary design report for PFAS treatment at two existing well locations.
- Smyth Waterline Improvements: Abandonment and replacement of 1,300 linear feet of existing 14-inch PVC potable water line with a new parallel 16-inch ductile iron pipe.
- Earl Schmidt Filtration Plant Two 5MG Tanks Improvements: Prepared final construction documents for the rehabilitation of two tanks.

#### **KEY TEAM MEMBERS:**

Ryan Gallagher, PE Safa Kamangar, PE, PMP, CCM, QSD/P Kevin Saleh, PE Kathleen Labrador, PE

## HUNTINGTON BEACH:

**RELEVANCE TO** 

- On-Call Contract
- Pipeline Replacement Design
- Wellhead Treatment



## On-Call for City of Newport Beach

#### **OWNER**

City of Newport Beach

#### **CLIENT CONTACT**

Mike Sinacori, PE, MPA Assistant City Engineer 100 Civic Center Drive, Newport Beach, CA 92660 msinacori@ newportbeachca.gov 949.644.3342

#### **DURATION**

2022 - Present

MKN was selected for the City of Newport Beach On-Call in 2022 and has performed a series of task orders supporting various water supply planning and rehabilitation projects. The task orders received to date included the following:

- Well-Siting Study. MKN performed a well-siting study for a new water production well.
- Surge Analysis. MKN performed a surge analysis to identify potential mitigation measures to protect aging infrastructure.
- Cortland PRV. Hydraulic modeling and design of an expedited PRV abandonment project driven by a development project.
- 16th Street Constructability Review. MKN performed a peer review of a pump station rehabilitation project.
- Shore Cliffs Regulating Stations. MKN designed two new PRV stations for the Shore Cliffs area.
- Evening Canyon Pipeline. Design of approximately 900 feet of potable pipeline replacement.
- Balboa Ave/Irvine Terrace Pipeline. Design of approximately 13,000 feet of potable pipeline replacement.

#### **KEY TEAM MEMBERS:**

Ryan Gallagher, PE Safa Kamangar, PE, PMP, CCM, QSD/P Dennis Phinney, PE Parasto Azami, PE Kathleen Labrador, PE

# RELEVANCE TO HUNTINGTON BEACH:

- Same Project Team Members
- Fast-paced
   Pipeline
   Replacement
- Small to Mid-Size
   Task Orders

### On-Call for East Orange County Water District

#### **OWNER**

East Orange County Water District

#### **CLIENT CONTACT**

David Youngblood, PE General Manager 185 N. McPherson Road, Orange, CA 92869 dyoungblood@eocwd. com 714.538.5815

#### **DURATION**

2021 - Present

MKN has been providing as-needed engineering services to East Orange County Water District through various contracts since 2021. The task orders received to date included the following:

- Barrett Pump Station Replacement. MKN designed a new pump station to replace an existing station that had reached the end of its useful life.
- Water and Sewer Standards Update. MKN completed an update to the District's water and sewer standards.
- Zone 3 to 2 Conversion. MKN designed new pipeline to replace existing piping that reached the end of its useful life. Project also included new distribution system and customer PRVs.
- Brae Glen Pipeline. Design of new pipeline and abandonment of existing pipeline in private easement.
- Orange Knoll PRV. Design of new PRV and abandonment of existing pipeline in private easement.

#### **KEY TEAM MEMBERS:**

Ryan Gallagher, PE Safa Kamangar, PE, PMP, CCM, QSD/P Dennis Phinney, PE Parasto Azami, PE

# RELEVANCE TO HUNTINGTON BEACH:

- Similar projects such as PRVs and pipeline replacement
- Similar On-Call Structure
- Same Project Team Members



# MKN On-Call Contracts Align with Huntington Beach's Needs

MKN is uniquely built to operate as a single business unit, meaning that resources from around the company can and are brought in as needed to address specific technical solutions or to expedite production when our clients need a quick turnaround. The table below provides a sampling of our On-Call

Carvica |

contract experience.

			7	S	егуі Агеа	ce )				erv	ice T	уре		
On-Call Contracts	Vear Started	Total Years of Service	Contract Services Total (Millions)	Water	Wastewater	Recycled Water	Planning/Studies	Pumping	Pipelines	Storage	Treatment	Condition Assessment	Environmental	CM Support
East Orange County Water District	2021	3	\$0.9	4			Į.	J	1			4		4
Newport Beach	2021	3	\$0.2	V			4		v			ų!		
Water Replenishment District of SC	2021	3	\$1.7	V		A.	1	À	Ą	1	J	4	1	
South Coast Water District	2017	7	\$1.3	4		4	J	J	4	4		4	4	
Los Angeles County Sanitation Districts	2020	4	\$0.4											4
Inland Empire Utilities Agency	2021	3	\$0.1	Ą	· (g)	Ąľ	. ž							
Western Municipal Water District	2023	2	\$1,5	Ą	J	The same of the sa	S.F.	1	V				Ą	
Las Virgenes Municipal Water District	2020	4	\$0.3	4		·sf	Ą		V					1
Santa Clarita Valley Water Agency	2020	4	\$0.2	4					V	1		1		V
Calleguas MWD	2015	9	\$0.4	V	3				- A		1	*		4
Thousand Oaks	2020	4	\$1.1	Ą	V		4		J					
Camrosa Water District	2020	4	\$0.3						Ą.		Ŋ			
Camarillo	2019	5	\$1.1		Ì		V				J.	V	4	
Pleasant Valley County Water District	2019	5	\$0.7	4		J	4		$\sqrt{f}$	4			1	
Port Hueneme	2020	4	\$0.1	Á			J.				J	1		
Channel Islands Beach CSD	2019	5	\$0.6	1	J		J	w.f	Ą			,%'	·	*
United Water Conservation District	2023	2	\$0.3	4					Ą.		4	4		4
Ventura	2019	5	\$1.6	Ą	¥		1		1			4		
Santa Paula	2015	9	\$4.0	, j	4		4		J		4	4		
Casitas MWD	2018	6	\$2.1	1			V		V				V	
Nipomo Community Services District	2013	11	\$2.9	1	ug <sup>‡</sup>		1					J		
Grover Beach	2021	4	\$1.0	rg <sup>d</sup>	4			V	4	1		\f		
Arroyo Grande	2015	9	\$0.5	J.	4		J		4			Ų,		V
San Luis Obispo	2013	11	\$1.7	e de			Ú		and the second	1	1			
Morro Bay	2013	11	\$2.4	4	1		"Ĵ		4		1	./		
Atascadero	2013	11	\$1.2		v		"J"	P. ST	4		Ť	1		
Atascadero Mutual Water Company	2014	10	\$1.9	Ą	The same		V		1		ų.	(2) A		
Bakersfield	2016	8	\$0.8		r <sub>o</sub> f						1			1
East Niles Community Services District	2015	9	\$4.1	1	n.f		4		Ą	4	V			
Fresno, City of	2021	4	\$1.2	4		y.	, J	1	Ą	1	V	J		J
RCAC	2019	5	\$0.6	n.f			1	¥	4	V	V	V		
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# MKN Experience - Pipelines

MKN's team has delivered over 400+ miles of pipeline, covering every aspect of pipeline development including conceptual planning, hydraulic modeling, alternatives analysis, condition assessment, detailed design and construction management. Our design experience includes the full range of pipeline materials and trenchless construction methods, including pipe bursting, horizontal directional drilling and jack-and-bore.

Client	Project Name	Diameter (inches)	Material	Length (Li
Water Replenishment District	Brine Pipeline	16	HDPE	2,000
Water Replenishment District	GRIP Conveyance Alternatives Analysis	42	Steel	25,000
Water Replenishment District	208th Street Pipelines	14, 24, 36	HDPE	2,400
West Basin MWD	Palos Verdes Pipeline	10, 12	PVC	16,000
South Coast Water District	Via California Replacement	10	PVC	500
United Water CD	Alternatives Analysis	16	PVC	20,000
Ventura County	Potable Pipeline Project	12	PVC	20,000
Las Virgenes MWD	Westlake Reservoir	30, 36	Steel	2,200
Antelope Valley/East Kern WA	95th Street East PS/Turnout	20	Steel	500
Kern County Water Agency	Northwest Feeder PS & Pipeline	42	Steel	21,120
Lakeside Union SD	LUSD Connection to Bakersfield	16	PVC	15,500
Monterey County WRA	Salinas River Diversion Facility	20, 30	WSP, DIP	10,560
Nipomo CSD	Joshua Road Booster Pump Station	24	PVC	27,000
Nipomo CSD	Frontage Rd Trunk Sewer Replacement	24	PVC	4,200
Nipomo CSD	Branch St Water Improvements	8	PVC	2,100
Nipomo CSD	Supplemental Water Project	12, 18, 24	DIP, HDPE	27,000
North of the River MWD	Highland Park Improvement	8, 12	PVC	27,000
Santa Maria	WWTP Influent Piping Improvements	42, 48	PE	600
Antelope Valley/East Kern WA	South Feeder Parallel Pipeline	24, 36, 48	Steel	34,320
Arvin CSD	Arvin RW Disposal Pipeline	18	PVC	18,480
California Rail Builders	North Kern WSD Canal 9-26	42	Conc/HDPE	400
Casitas MWD	Pipeline Loading Evaluation	33	Steel	NA NA
Casitas MWD	West Ojai Pipeline Project	8	PVC	5,600
Cayucos Sanitary District	Sewer Pipeline Improvements	8	PVC	3,500
Cayucus Sanitary District	Toro Creek Bridge Pipeline Rehab	8	PVC	100
City of Arroyo Grande	Fair Oaks Waterline Replacement Project	8	PVC	2,025
······································	CDBG Waterline Replacement	8	PVC	2,400
City of Grover Beach	CDBG Waterline Replacement	6,8	PVC	5,500
City of Grover Beach	Tognazzini Well Intertie	8	PVC	600
City of Guadalupe	Nacimiento Water Pipeline	18-36	PVC, DIP	264,000
SLO County Food Control	Highland Waterline Replacement	24	DIP	165
City of San Luis Obispo	Morning and 178 Intertie	20	Steel	1,320
East Niles CSD	Brentwood Sewer Extension	8	VCP,PVC,HDPE	1,000
East Niles CSD	### ##################################	12	PVC	1,400
East Niles CSD	Pioneer Pipeline Project  Redbank Rd Pipeline Project	8, 14	PVC	6,800
East Niles CSD		8	VCP	500
East Nites CSD	Pesante Sewer Replacement Water Master Plan	12-36	NA NA	67,500
East Niles CSD		20	Steel	5,500
East Niles CSD	Morning Dr Transmission Pipe	12	PVC	1,500
East Niles CSD	Well 20 Flushing Pipeline Project	18-48	RCP/CIP	21,120
Fresno Met Flood CD	Various Flood Control Projects	60	WSP	26,400
City of Fresno	Friant-Kern Canal Pipeline	16-48	WSP, DIP	68,640
City of Fresno	Regional Transmission Mains	12	PVC	1,800
Valley Children's Hospital	VCH Rio Mesa Well & Pipeline		PVC	21,120
6 5	Wastewater Improvements	27, 30	r V U	
Gunner Ranch	Allerta Carras Carras Designation	20.04	פרף/מום	ፍኃ ያበብ
Gunner Ranch City of Modesto  ND State Water Commission	Ninth Street Storm Drain Replacement Southwest Pipeline Project and PS	24-96 24, 30	RCP/CIP Steel	52,800 448,800





# MKN Experience - Wells

MKN has executed over 70 wells and wellhead treatment projects throughout California, showcasing our commitment to delivering reliable and innovative water solutions. Our extensive portfolio demonstrates our expertise in addressing complex water quality challenges and our dedication to enhancing water reliability and safety for clients similar to the City.

Client	Project Name	Type	Constituent		
Crescenta Valley County WD	Glenwood Treatment Plant	Ion Exchange	Nitrate		
City of Beverly Hills	Beverly Hills Desalter WTP	BWRO	Salinity/Hardness		
City of Compton	Well 16 and 18 - Planning	Various	PCE/TCE		
City of Lynwood	Well No. 11	GAC	PCE/TCE		
City of Lynwood	Well No. 19	GAC and Greensand	PCE/TCE and Fe & Mn		
Maywood Mutual #2	Maywood Well	Greensand	Fe & Mn		
Monte Vista Water District	Well 33 Treatment	Ion Exchange	Nitrate, Hardness		
Irvine Ranch Water District	Deep Aquifer Treatment System (5 MGD)	Nanofiltration (NF)	Color/Organics/Hardness		
Jurupa CSD	Jurupa IX Plant	Ion Exchange	Nitrate		
Jurupa CSD	Jurupa IX Plant Expansion	Ion Exchange	Nitrate		
Capistrano Beach WD	1.5 MGD/BWRO	BWRO	Salinity/Hardness		
Capo. Valley CWD	San Juan Capistrano Desatter	BWRO	Salinity/Hardness/Iron/ Manganese		
Capistrano CSD	Capistrano Desalter	BWRO, Greensand	Salinity/Iron		
City of Oxnard	GREAT Program Brackish Desalter	BWRO	Salinity/Hardness		
City of Oxnard	Water Operations Support Contract	BWRO	Salinity/Hardness		
City of Oxnard	Brine Optimization	BWRO	Salinity/Hardness		
City of Oxnard	BS No. 3 Brackish Desalter	BWRO	Salinity/Hardness		
Camrosa Water District	Conejo Wellfield GAC Treatment Evaluation	Adsorption (GAC)	TCP		
Port Hueneme Water Agency	Brine Optimization	8WR0	Salinity/Hardness		
Port Hueneme Water Agency	BWRDF Facility Master Plan	BWRO/NF	Salinity/Hardness		
Port Hueneme Water Agency	EDR Replacement	BWRO/NF	Salinity/Hardness		
Meiners Oaks WD	Well 8 Nitrate Treatment Study	Ion Exchange, Reverse Osmosis, Biological Treatment	Nitrate		
Meiners Oaks WD	Wells No. 1 and No. 2 Water Treatment Plant	Direct Filtration (Pressure Filtration)	Groundwater Under the Influence of Surface Water		
City of Fillmore	Fillmore WTP Treatment Study	BWRO	Salinity/Hardness		
City of Solvang	Well 22	Oxidation-Filtration	Sulfide, Fe & Mn		
City of Goleta	Anita Well	GAC, Greensand, Airstripping	Fe & Mn, TTHM		
Buena Vista Water Storage Dist.	Ag. Drainage Study	BWR0	Selenium		
East Niles CSD	Well 18 Arsenic Treatment	Adsorption	Arsenic		
East Niles CSD	Well 19 Arsenic Treatment	Adsorption	Arsenic		
East Niles CSD	Well 22 Arsenic Treatment	Adsorption	Arsenic		
East Niles CSD	Well 21 and 23 GAC Treatment	Adsorption (GAC)	TCP		
City of Bakersfield	5 Wells Arsenic Treatment	Adsorption	Arsenic		
City of Delano	Well 32 Nitrate Blending Analysis	Ion Exchange	Nitrate		
City of McFarland	McFarland Well 2	Ion Exchange	Nitrate		
City of McFarland	McFarland Well 4	Ion Exchange	Nitrate		
Confidential Client	Well	CI, Greensand, RO	Sulfide, TDS		
University Enterprises	Central Union School District Arsenic Removal	Adsorption	Arsenic		
University Enterprises	Coarsegold Elementary School Arsenic Removal	Adsorption	Arsenic and Manganese		
University Enterprises	Foothill Mobile Home Park	Adsorption	Uranium and Arsenic		
University Enterprises	Lancaster Mobile Home Park Arsenic Removal	Adsorption	Arsenic		
Kern Housing Authority	N. Shafter LLC	Ion Exchange	Nitrate		
City of Guadalupe	Well 5	Ion Exchange	Nitrate		
City of Arroyo Grande	Well No. 11	GAC and Greensand	Iron and Arsenic		
City of Grover Beach	Grover Beach Nitrate Removal	Ion Exhcange	Nitrate		
Nipomo CSD	District-Wide	Chloramine Conversion	TTHM		
Los Osos CSD	Nitrate Removal Evaluation	Removal Evaluation Various Nitrate			
City of Pismo Beach	Meadow Creek Wells	Oxidation-Filtration	Fe & Mn		





# MKN Experience - Wells Continued

Client	Project Name	Type	Constituent
City of Paso Robles	Sherwood Wells	Adsorption, GAC	Arsenic, Sulfide, Taste & Odor
Atascadero Mutual Water Company	PFOS/PFOA Treatment	Ion Exchange, GAC, Oxidation- Adsorption	PFOA and PFOS, Iron, Manganese, Hydrogen Sulfide
Atascadero Mutual Water Company	PFAS Remediation Program Management	Various	PFAS and PFOS
City of Fresno	Pump Station 177 Wellhead Treatment Improvements	Adsorption (GAC), Airstripping	TCP, Carbon Dioxide
City of Fresno	Pump Station 185 Wellhead Treatment	Adsorption (GAC), Airstripping	TCP, Carbon Dioxide
City of Fresno	Pump Station 345-1 Wellhead Treatment	Oxidation-Adsorption	Hydrogen Sulfide, Arsenic, Iron, Manganese
City of Fresno	Pump Station 347 Wellhead Treatment	Oxidation-Adsorption	Hydrogen Sulfide, Arsenic, Iron, Manganese
Belmont Water Corporation	Well 1 TCP Treatment	Adsorption (GAC)	TCP
Sweetwater Authority	Richard A. Reynolds GW Desal Facility	BWRO	Salinity/Hardness/Iron/ Manganese
Three Crowns Industrial Park	Well 1-3 TCP Treatment	Adsorption (GAC)	TCP
Monterey Peninsula WMD	Seawater Desal Feasibility Study	Sea Water Reverse Osmosis (SWRO)	Salinity/Hardness

BWRO = Brackish Water Reverse Osmosis; GAC = Granular Activated Carbon

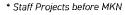




# MKN Experience - Sewer Lift Stations

MKN is an industry leader in the planning, design, rehabilitation and inspection services for lift stations in Central and Southern California. The following table provides a sample of our team's lift station experience which includes *over 80 lift stations*.

Support Francisco Client	Project Name
*Algonquin Lift Station Construction	Huntington Beach, City of
*Central Park Lift Station Design	Huntington Beach, City of
*Edgewater Lift Station Construction	Huntington Beach, City of
*Lift Station No. 24 Construction	Huntington Beach, City of
*Saybrook Lane Lift Station Replacement	Huntington Beach, City of
Seat Beach Lift Station Replacement	Orange County Sanitation District
Belgrave Lift Station Design	Garden Grove Sanitation District
Tiffany Lift Station Replacement	Garden Grove Sanitation District
Santa Ana Civic Center LS Rehab (2 total)	Santa Ana, City of
SD 03 Lift Station Design	Long Beach, City of
LS Condition Assessment (7 stations)	Emerald Bay Service District
Lift Station No. 3 Rehabilitation	Emerald Bay Service District
Aliso Creek and Southwing LS Rehab	Moulton Niguel Water District
Paseo de Valencia LS Rehabilitation	Moulton Niguel Water District
Planning Area 3 Lift Station Study	Rancho Mission Viejo, City of
Landmark Lift Station Design	LA County Sanitation Districts
San Dimas Lift Station Improvements	LA County Dept, of Public Works
Azusa Avenue LS Rehabilitation	West Covina, City of
Yellowstone Lift Station Design Services	Santa Clarita, City of
Palomino Park Lift Station Design	Norco, City of
Joy Lift Station Design	Corona, City of
Arantine Hills Lift Station Construction	Corona, City of
Smith/Rincon Lift Station Design	Corona, City of
Fairgrounds & Dexter LS Replacement	Riverside, City of
Pierce Street LS Condition Assessment	Riverside, City of
Wood Road Lift Station Assessment	Riverside, City of
Meridian Lift Station Replacement	San Bernardino MWD
Harbor, Roja, and Pilgrim Creek LS Rehab	Oceanside, City of
North Valley Lift Station Improvements	Oceanside, City of
Portola Hills Lift Station Improvements	Ventura, City of
Lift Station Capacity Evaluation	Mission Hills CSD
Lift Station B Evaluation and Design	Channel Islands Beach CSD
Pump Station B	Channel Islands Beach CSD
24th & Oak Lift Station Feasibility Study	Bakersfield, City of
District Lift Station Feasibility Study	Bakersheld, City of
Downtown Sewer Study LS Assessment	Bakersfield, City of
McCutchen Lift Station Study	Bakersfield, City of
Avila Ranch Lift Station Design-Build	San Luis Obispo, City of
Calle Joaquin Lift Station Replacement	San Luis Obispo, City of
Laguna Lift Station Replacement	San Luis Obispo, City of
Margarita and Foothill LS Replacement	San Luis Obispo, City of
WRRF Influent LS Pump Replacement	San Luis Obispo, City of
Lopez Recreation Area LS Eval (5 total)	San Luis Obispo, County of
Influent LS Assessment and Rehab	Avila Beach CSD
LS No. 1 Force Main Replacement	Arroyo Grande, City of
Lift Station No. 3 Rehabilitation	Arroyo Grande, City of
Lift Station No. 13 Replacement	Atascadero, City of
Lift Station No. 2 Replacement	Atascadero, City of
LS No. 4, 7 & 11 Rehabilitation	Atascadero, City of
LS No. 4, 7 , 11 & 15 Assessment	Atascadero, City of
Lift Station No. 5 Rehabilitation	Atascadero, City of
Lift Station No. 14 Improvements	Legacy Development (on behalf of City of Atascadero)
Lift Station No. 3, 8, and 11 Rehab	Paso Robles, City of
Lift Station No. 4 Replacement	Paso Robles, City of







## **References of Work Performed Form**

(List 5 Local References)

Comany Name: MKN & Associates, Inc.

1. Name of Reference: South Coast Water District
Address: 131592 West Street, Laguna Beach, CA 92651
Contact Name: Taryn Kjolsing, PE Phone Number: 949.541.1327
Email: tkjolsing@scwd.org
Dates of Business: 2020 - Current
2. Name of Reference: Western Municipal Water District
Address: 14205 Meridian Pkwy, Riverside, CA 92518
Contact Name: Luis Cardenas, PE Phone Number: 951.571.7285
Email: <u>lcardenas@wmwd.com</u>
Dates of Business: 2023 - Current
3. Name of Reference: Yorba Linda Water District
Address: 1717 F. Miraloma Avenue, Placentia, CA 92870-6623
Contact Name: Roseanne Weston, PE, PMP Phone Number: 714.701.3102
Email: rweston@ylwd.com
Dates of Business: 2021-Current
4. Name of Reference: <u>Irvine Ranch Water District</u>
Address: 131592 West Street, Laguna Beach, CA 92651
Contact Name: Malcolm Cortez, PE Phone Number: 949.453.5854
Email: <u>cortez@irwd.com</u>
Dates of Business: 2022-Current
5. Name of Reference: <u>City of Newport Beach</u>
Address: 131592 West Street, Laguna Beach, CA 92651
Contact Name: Mike Sinacori, PE, MPA Phone Number: 949.644.3342
Email: msinacori@newportbeachca.gov
Dates of Business: 2022-Current





# APPENDIX 1 - RESUMES

# Project Experience

As requested in the RFP, the following pages contain full resumes of Key Personnel.







#### EDUCATION

 BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, CA

# LICENSES & REGISTRATIONS

 Professional Civil Engineer, CA No. 74805

# PROFESSIONAL ASSOCIATIONS

- American Public Works Association (APWA),
   Ventura County Chapter (President 2014)
- American Society of Civil Engineers (ASCE), Santa Barbara-Ventura Branch (Younger Member Forum President 2012)
- Association of Water Agencies of Ventura County (AWAVC) (Board of Directors 2010–2016, President 2013)
- Orange County Sanitation District (OC San) (Board of Directors 2021 – Present, Vice Chair 2022– 2024, Board Chairman 2024–2025)
- Orange County Water Association (OCWA) (President 2020 and 2021)
- Tustin City Council (2020–2028, Mayor Pro Tem 2024)

#### YEARS OF EXPERIENCE

- 5 with MKN
- 9 19 Total

# RYAN GALLAGHER, PE

#### PRINCIPAL-IN-CHARGE

Since 2019, Ryan Gallagher has completed over 130 projects with 30+ public agencies in Southern California, serving as the Project Manager for the majority. The estimated construction value of the projects that have been planned, designed and/or constructed exceeds \$300M. Projects include planning through design for water, wastewater and recycled-water conveyance, pumping, storage, and treatment. Ryan specializes in complex multi-agency water supply programs, alternative delivery, program management, master planning, and contract negotiations.

Why Ryan for City of Oceanside's On-Call?

- Local and Committed. Ryan is located in MKN's Irvine Office and is an active member of the local water industry. Mr. Gallagher offers a distinct perspective and valuable industry insights, drawing from his experience as Board Chair at the Orange County Sanitation District.
- Company Principal. As a company Principal, Ryan can execute contracts, allocate resources, and prioritize District projects.
- On-Call Experience. South Coast Water District, Water Replenishment District,
   Thousand Oaks, Las Virgenes MWD, Channel Islands Beach CSD, and City of Oxnard.

16th Street Pump Station Constructability Review | City of Newport, Newport Beach, CA Project Manager. Managed the constructability review of 90% design drawings for a pump station rehabilitation project. The evaluation included project drawings and specifications. The review identified over 100 comments with classifications for low, medium and high. Comments included fatal flaws, schedule and cost risks, and opportunities for cost reduction.

Via California Pipeline Replacement | South Coast Water District, Dana Point, CA

Project Manager. The project involved the replacement of 500 feet of pipe following failure
of the pipeline. The 10-inch pipeline is located within a 16-inch casing in a freeway overpass.
The replacement design included evaluation of various materials, including fusible PVC and
Certa-Lok PVC. The final design included a cured-in-place liner for the casing and new CertaLok PVC to replace the failed carrier pipe. The design was expedited to ensure the pipe
could be returned to service quickly.

Reservoir 28 Final Design | South Coast Water District, Laguna Beach, CA

**Project Manager.** The project involved the preliminary and final design for two new 100,000 gallon steel tanks located within a hillside in the City of Laguna Beach. The effort included environmental permitting, public outreach, access road improvements, site grading, retaining walls and demolition of one existing steel tank. The estimated project cost is approximately \$3M.





Reservoir 2B and 3B Replacement | South Coast Water District, Laguna Beach, CA

**Project Manager.** The project team provided a feasibility study to evaluate the replacement of two existing 100,000-gallon steel tanks (two sites). The scope of work included hydraulic modeling, siting evaluation, geotechnical and environmental review, constraints analysis, tank sizing, cost estimating and conceptual planning. Alternatives included consideration of new steel tanks, pre-stressed concrete tanks, new and/or expanded pump stations and pipeline improvements required to meet fire flow demands.

Anaheim Valve Vault | Orange County Water District, Anaheim, CA

**Project Manager.** This project team designed the new valve vault for multiple buried valves (48-inch to 72-inch), which added gates to Atwood Channel discharge structure and made minor modification to the OC-28. Identified an opportunity to reduce costs by \$300k during the PDR stage. Total project cost is estimated at \$1M.

15th Street Pump Station Constructability Review | City of Newport, Newport Beach, CA

**Project Manager.** Managed the constructability review of 90% design drawings for a pump station rehabilitation project. The evaluation included project drawings and specifications. The review identified over 100 comments with classifications for low, medium and high. Comments included fatal flaws, schedule and cost risks, and opportunities for cost reduction.

Barrett Pump Station Replacement | East Orange County Water District, Orange, CA

**Project Manager.** The project designed a pump station replacement. Efforts included preliminary and final design for the replacement of an existing pump station. The new pump station was sized at 1,500 gpm and consisted of a package pumping system, associated piping, controls and valving. The construction included a temporary pumping system to allow for continued operation during construction and replacement of an elevated transformer (SCE). The total construction cost for the project was \$1.5M.

Earl Schmidt Filtration Plant (ESFP) Two 5MG Tanks Improvements | Santa Clarita Valley Water Agency, Castaic, CA Principal-in-Charge. The project involved planning and preliminary design services for two, 1970s era 5MG welded steel tanks at the Agency's Earl Schmidt Filtration Plant. The Scope of Services included development of a technical memorandum which included evaluation of rehabilitation alternatives, including retrofitting the tanks with self-supporting aluminum dome roofs, opinions of probable construction costs, and 30% design drawings. The tank improvements will consist of roof and rafter structural retrofits and upgrades, recoating, safety enhancements, and seismic upgrades.

Granular Activated Carbon (GAC) Wellhead Treatment | Water Replenishment District of Southern California, Lynwood, CA Project Manager. The project provided preliminary and final design of two 20,000-pound skid-mounted GAC contact vessels, backwash system, piping modifications, new sewer lateral, and other on-site improvements. Treated tetrachloroethylene/trichloroethylene (PCE/TCE) for an existing 700 gpm well in the City of Lynwood. The construction cost was approximately \$900k.

Groundwater Treatment Evaluations - Lynwood Well and Maywood Well | Water Replenishment District of Southern California, Lakewood, CA

**Project Manager.** The project team provided feasibility evaluations for groundwater treatment at three separate well sites, covering two service areas – the cities of Lynwood and Maywood – and various contaminants, including iron, manganese, tetrachloroethylene (PCE), and trichloroethylene (TCE). The evaluations included reviewing well data, providing a comparative analysis of well treatment options, conducting a life-cycle cost analysis of options, and providing recommendations for well treatment. The final report included a detailed cost estimate, schedule, and conceptual site plan. Treatments evaluated included the following: Greensand Plus, Layne-Ox, DMI65 water filtration technology, reverse osmosis for iron and manganese, granular activated carbon, air-stripping, and ultraviolet oxidation for PCE.







#### EDUCATION

- MS, Civil Engineering, University of Tehran, Iran
- BS, Civil Engineering, Azad University, Tehran, Iran

# LICENSES & REGISTRATIONS

- Professional Civil Engineer, CA No. 70118
- Project Management Professional (PMP), No. 1863656
- Certified Construction Manager, No. 6341
- Qualified SWPPP
   Developer/Practitioner
   (QSD/QSP), CA No. 23059
- OSHA 30-Hour
   Construction Outreach
   Training
- OSHA 40-Hour HAZWOPER Certification
- OSHA Confined Space Training

# PROFESSIONAL ASSOCIATIONS

- American Public Works Association (APWA)
- American Society of Civil Engineers (ASCE)
- American Water Works Association (AWWA)
- Iranian American
   Society of Engineers and Architects (iaSEA)
- Orange County Water Association (OCWA)

#### YEARS OF EXPERIENCE

- 1 with MKN
- 28 Total

# SAFA KAMANGAR, PE, PMP, CCM, QSD/P

#### CONTRACT MANAGER

Safa Kamangar is a highly experienced professional with 28 years of expertise in water, wastewater, and water reuse. As a design engineer, Safa has provided hydraulic calculations, mechanical design, detailed design drawings, and development of specifications. He has a strong background in planning, design, and construction management, gained from working in both the private and public sectors. His expertise encompasses design, construction, and commissioning of water/wastewater infrastructure including more than 50 pumping facilities, 15 wells, and more than 150 miles of pipeline ranging from 4 inches to 72 inches in diameter.

Saybrook Lift Station Replacement | City of Huntington Beach, CA

**Project Manager.** Provided design services for the Saybrook Lane Sewer Lift Station at the intersection of Saybrook Lane and Heil Avenue. As part of the lift station replacement, included installing a new 30-ft deep wet-well structure, slide rail system submersible pumps, piping and force main, a valving facility and vault, electrical service and instrumentation, and a new gas-powered generator. Additionally, project included the design of relocating about 2,000 feet of existing utilities that conflicted with construction and reconfiguring traffic lanes and a median in the intersection to allow for the new lift station.

Edgewater Sewer Lift Station | City of Huntington Beach, CA

**Construction Manager.** This \$4M project constructed a new wet well type sewer lift station, force main, piping, electrical and controls. Construction included a 30-foot-deep wet well structure less than two miles from the coastline, which required an extensive dewatering and monitoring program.

Algonquin Sewer Lift Station | City of Huntington Beach, CA

**Project Manager.** The project team maintained the operation of the existing Algonquin Lift Station while constructing a new station adjacent to it. The construction involved a 35-foot-deep concrete structure, valving and metering vaults, new sewer mains, force mains, and manholes. Additionally, a new power and control system was installed, along with a startup protocol and checklist.

Sewer Lift Station No. 24 | City of Huntington Beach, CA

**Project Manager.** The project involved maintaining the operation of the existing sewer lift station while constructing a new station adjacent to it. The work included building a 35-foot-deep concrete structure, constructing valving and metering vaults, and installing new sewer mains, force mains, manholes. Additionally, the project encompassed the installation of a new power and control system and the provision of a startup protocol and checklist.





Downtown Watermain Replacement Project | City of Huntington Beach, CA

**Project Engineer.** The scope of work included preparing final contract drawings, technical specifications and engineering cost estimate for replacing old water lines in alleys in downtown area in various locations and street rehabilitations.

Colinas Bridge Water Line Relocation | Moulton Niguel Water District, Laguna Niguel, CA

**Project Manager.** The project consisted of preliminary and final design of water line relocations at the Paseo de Colinas Bridge in the City of Laguna Niguel. Work consisted of investigating and preparing plans, specifications, and cost estimate (PS&E) for relocating the District's existing 20-inch gravity outfall and existing 12-inch water line including relocation of existing electrical conduits, control panel, and existing vault sump pump discharge lines into the existing sewer system. The two water lines were in conflict with the seismic retrofit of the Paseo de Colinas Bridge.

La Paz/Moulton PW System Configuration | Moulton Niguel Water District, La Crescenta, CA

**Project Manager.** This project consisted of the preliminary and final design of the construction of approximately 1,500 feet of 12-inch potable water main along Moulton Parkway and La Paz Road and their connections to the existing system as well as abandonment of the existing pressure reducing station and water lines. The improvements will combine the water and fire systems and provide points of connection at the driveway right-of-way at the end of the commercial property for future connections to the District's 450-zone water system.

Santa Ana Civic Center Pump Stations Upgrades, Santa Ana | City of Santa Ana, CA

**Project Manager.** Responsible for project oversight. Performed preliminary studies and final design services to identify options, recommend upgrades, and provide final construction plans for two stormwater lift stations at the Santa Ana Civic Center. After flooding during the 2016 El Nino season, the mechanical and electrical equipment in both lift stations were deemed to have reached the end of their lifespans. Project included designing upgrades for both stations that included the replacement of pumps, sump pumps, motors, piping and valves, structural and electrical improvements, site and drainage enhancements, and upgrades to SCADA and electrical instrumentation.

Bonita Canyon Zone D to B Pressure Reducing Station Supply Pipeline Replacement | Irvine Ranch Water District

Project Manager. Responsible for project oversight. Project included the design of a 12" CML&C pipe replacement across Bonita Canyon Road, connecting the recycled water Zone D of IRWD's system to its Zone B system via an existing PRV Station.

On-Call Engineering and Construction Management | Santa Clarita Valley Water Agency, Santa Clarita, CA

**Project Manager/Technical Advisor.** The project consisted of engineering services to SCV Water (including through Castaic Lake Water Agency). Safa has been involved in the following task orders: Magic Mountain Pump Station Preliminary Design; Magic Mountain Pipeline Design Phase 6 – Final Design; Rio Vista Valve #2 Vault Modifications – 72-inch Valve Replacement; and Earl Schmidt Filtration Plant CT Credit Improvement Project. (Completed with a prior firm)

Project Management Support Services | Western Municipal Water District (WMWD), Riverside, CA

**Project Manager.** This project provided project management services to WMWD for their CIP program for three new projects under an on-call contract.

Lincoln Avenue 12-Inch Water Line Replacement | City of Anahelm, CA

**Project Manager.** The project installed approximately 3,000 linear feet of new 12-inch-diameter DIP water main in Lincoln Avenue between La Plaza and State College Boulevard to improve the fire flow in the portion of the City's 335 Pressure Zone.

Silverado Canyon Road Pipeline | Irvine Ranch Water District, Irvine, CA

**Project Manager.** The project involved the design of pipeline based on data gathering and information collection performed. Work included performing field reconnaissance, field survey topographic maps, pothole information and geotechnical engineering recommendations. Design included plan and profile, pipeline connection details, road trench section replacement, traffic control plans, and all details necessary for construction of improvements for existing 8-inch domestic water line.







#### **EDUCATION**

- MS, Civil Engineering, Rensselaer Polytechnic Institute, Troy, NY
- MBA, Business
   Administration,
   Pepperdine University,
   Malibu, CA
- BS, Civil Engineering, Rensselaer Polytechnic Institute, Troy, NY

# LICENSES & REGISTRATIONS

- Professional Civil Engineer, CA No. 30778
- Professional Mechanical Engineer, CA No. 21533
- Professional Civil Engineer, AZ No. 15704

# PROFESSIONAL ASSOCIATIONS

 American Water Works Association (AWWA) (Life Member)

#### YEARS OF EXPERIENCE

- 1 with MKN
- ≈ 46 Total

# **DENNIS PHINNEY, PE**

## QA/QC OFFICER

Dennis Phinney's 46 years consulting experience in water and wastewater engineering includes design of over 100 pumping facilities, two of which were awarded Southern California APWA "Projects of the Year." He has also designed pipelines, wells, chemical feed facilities, reservoirs, and water and wastewater treatment facilities in service throughout California and Arizona.

He has prepared water and wastewater master plans for service areas aggregating over 1 million residents, has authored standard specifications adopted by water agencies throughout California, and was responsible for preparing the sections added to the "Greenbook" Standard Specifications for Public Works Construction in 2015 to address water and wastewater pipelines and appurtenances.

Western Pump Station Upgrades | City of Glendale, CA

**Project Engineer.** This project involved upgrades of major City water pumping facility including power conversion from medium to low (460VAC) voltage, replacement of two horizontal pumps, upgrading of ClaValves, site work and reconfiguration of piping in residential street to increase system flexibility.

Bake Parkway Recycled Water Pipeline | Irvine Ranch Water District, Irvine, CA Project Engineer. Prepared preliminary design report and plans and specifications for approximately 3,400 linear feet of 12-inch diameter PVC pipe, 730 linear feet of 10-inch steel pipe in Caltrans bridge, 5,000 linear feet of 24-inch steel pipe, connections, pressure reducing station, and permitting with Caltrans and two cities.

Planning Area 6, Zone 4 & Zone C Reservoirs, Zone 4/6 BPS & Zone C/D BPS | Irvine Ranch Water District, Irvine, CA

**Project Engineer.** Prepared preliminary design report, plans, and specifications for 3.5 MG domestic water and 2.2 MG recycled water partially buried pre-stressed concrete tanks, domestic water and recycled water pump stations with (4) 125-hp and (1) 50-hp VFD pumps each, reservoir management system, grading and site improvements, access road, 1,000 LF of 20-inch domestic water pipeline, 1,000 LF of 24-inch recycled water pipeline, 1,000 LF of 24-inch storm drain, site piping, drains, and vaults.

Project Engineer. Prepared plans and specifications for submersible sewage lift station next to Long Beach Aquarium serving a dockside commercial complex. Design included fixture unit counts of nearby building to estimate design wastewater flow using Hunter curves and plans for retrofit of a duplex pump station with new 5-hp 150-gpm pumps, an overflow storage basin, a flagpole vent, and a solenoid to shut off water to neighboring bathrooms if needed to prevent a sewage overflow.





Mangular Blending Facility | City of Corona, CA

**Project Manager.** Managed this combined water treatment and pumping facility allowing City to use existing 2.0 MG 905-Zone Mangular Park buried water tank as a second groundwater blending facility supplementing Corona's Garretson Blending Facility. The Mangular facility blends 1,000-3,800 gpm of inexpensive nitrate-containing water from the Temescal Groundwater Basin with surface water from other sources to provide citizens with a greater volume of EPA-compliant potable water. The blended water is then disinfected with chlorine and ammonia before the introduction to the water system. The project includes the 1 MW of standby power and two 150-hp pumps to deliver 2,500 gpm to the 1060-Zone plus three 150-hp 1250-gpm pumps to the 1220-Zone. APWA Southern California BEST Project of 2023 Drainage, Water Wastewater Category.

Walnut Pump Station | City of Santa Ana, CA

**Project Engineer.** Prepared a design report, plans, and specifications for new masonry buildings at Walnut Pump Station including a new 3,500-square-foot pump building to house existing pumps delivering well water from 7MG buried reservoir to Santa Ana distribution system using 5 existing vertical turbine pumps. New structure replaces obsolete building built in 1956. Main building included new pump room, workshop, electrical building, office space and bath and shower facilities. The design also included a separate 200 square-foot industrial storage building for sodium hypochlorite and POL fuel, plus a carport structure to shade a generator, a perimeter fence wall, and tennis practice courts and backwalls in the adjacent park to mask the perimeter fencing. Project earned Envision bronze rating from Institute for Sustainable Infrastructure. APWA Southern California BEST Project of 2020 Drainage, Water Wastewater Category.

Keith Tank | City of Corona, CA

**Project Manager.** The project consisted of a 2.5-million-gallon partially buried prestressed concrete water tank for gravity water redistribution back to City's 1220 Zone. Provided operational, emergency, and fire storage for Arantine Hills Development in southeastern Corona. Work incorporated interior Tideflex mixing system and included upsizing of local distribution pipelines to eliminate system bottlenecks to maximize emergency deliveries for fire protection.

Well No. 14A | City of Corona, CA

**Project Manager.** The project involved restoring Corona's abandoned Well No. 14A through chemical treatment and installation of new liner and screen to produce 550 gpm of groundwater. Work included equipping well with new 75-hp pump and motor and appurtenant piping to deliver groundwater to central groundwater treatment location at Mangular Park.

Ross Booster Station | City of Pasadena, CA

**Project Manager.** Oversaw the design of 1,400 gpm booster station including three 60-hp inline vertical pumps within a tight existing building. Work included site redesign and mechanical, HVAC, electrical and structural redesign of building to improve pumping capacity and facilitate operation.

La Palma Reservoir and Pump Station | City of Anaheim, CA

**Project Engineer.** This project involved the preparation of feasibility study, preliminary design report, plans and specifications for reconstruction of a 4MG Hypalon-lined and aluminum roof La Palma Reservoir, new La Palma Pump Station including two 250-hp and two 125-hp pumps, standby power, remodeled restroom and chemical analyzer building, slip-lining of existing 12-inch cast iron pipe with new 10-inch HDPE pipe, inspection of and extensive pervious pavement and WQMP stormwater capture facilities onsite.

Linda Vista Reservoir and Pump Station | City of Anaheim, CA

**Project Engineer.** Prepared preliminary design report, plans, and specifications for construction of 4.0 MG precast concrete reservoir, drainage facilities connecting to storm drains beneath Orange County Water District recharge basins (Anaheim Lake), improvements to on-site chlorination facilities, retrofit of structures to bring up to current seismic codes and relocation of an existing 11-pump pump station to pump from new reservoir to Zones 400 and 555. Plans included extensive grading and drainage plans including onsite retention to offset paving of unpaved area, trapezoidal vegetated swales to comply with SWPPP water quality management objectives and design of piping in groundwater recharge basin to withstand 275k scraper wheel loads.







#### EDUCATION

- MS, Civil Engineering, California State University, Fullerton, CA
- MBA, The University of Kansas, Lawrence, KS
- BS, Civil Engineering,
   The University of Kansas,
   Lawrence, KS

#### LICENSES & REGISTRATIONS

- Professional Civil Engineer, CA No. 45699
- Professional Land Surveyor, CA No. 7239

# PROFESSIONAL ASSOCIATIONS

 American Water Works Association (AWWA)

#### YEARS OF EXPERIENCE

- <1 with MKN</p>
- 41 Total

# KARL FRANCIS, PE, PLS

#### QA/QC OFFICER

Karl Francis has over four decades of experience in civil engineering, project management, and regulatory compliance. Throughout his career, Karl has demonstrated exceptional leadership and technical expertise, managing and overseeing numerous large-scale infrastructure projects. His roles have included Deputy Director of Engineering at Western Municipal Water District, Principal Civil Engineer at South Coast Water District, and various senior engineering positions at the City of Anaheim and San Bernardino County. Karl has successfully managed capital improvement programs, development services, and regulatory compliance, ensuring projects meet high standards of quality and efficiency. Karl has a proven track record of securing competitive grant funds, collaborating with local, state, and federal agencies, and continuously improving processes and procedures.

1269 Force Main Project Design | Western Municipal Water District, Riverside, CA.

**Deputy Director of Engineering.** Provided oversight and supervision for the design phase of the project, with funding secured for construction estimated at \$7M.

Arlington Desalter Wells Rehabilitation Program | Western Municipal Water District, Riverside, CA.

**Deputy Director of Engineering.** Supervised the annual wells rehabilitation program (\$420K over a 5-year period).

Sterling Reservoir and Pump Station Project | Western Municipal Water District, Riverside. CA.

Deputy Director of Engineering. Acted as the principal in charge for this \$18M project.

Cajalco Intake Switchgear and Motor Control Center Project | Western Municipal Water District, Riverside, CA.

**Deputy Director of Engineering.** Provided oversight and supervision for the design and construction phases for this \$10M project.

Cannon Street Interconnection with Riverside Public Utilities Design | Western Municipal Water District, Riverside, CA.

**Deputy Director of Engineering.** Supervised the design phase of the interconnection \$2M project.

Magnolia Avenue Interconnection with Riverside Public Utilities | Western Municipal Water District, Riverside, CA.

**Deputy Director of Engineering.** Oversaw the planning, design, and construction of the interconnection \$7M project.





Pipeline Replacement Program | Western Municipal Water District, Riverside, CA.

**Deputy Director of Engineering.** Managed the programming, planning, funding, design, and construction of the pipeline replacement program, budgeted at \$5M per year for the first five years, extended another two years.

Tunnel Rehabilitation and Sewer Pipeline Replacement Project | South Coast Water District, Laguna Beach, CA.

**Project Manager.** Performed detailed design reviews, provided comments, and implemented value engineering, risk analysis, and funding for the 2-mile long tunnel rehabilitation and sewer pipeline replacement project.







# KEVIN SALEH, PE

#### TASK ORDER MANAGER

# EDUCATION BS, Civil Engineering, University of Tabriz, Iran

- Computer Programming/ System Analysis, Seneca Polytechnic, Toronto, Canada
- Project Management (PM) Certificate, Cornell University, Ithaca, NY

# LICENSES & REGISTRATIONS

- Professional Civil Engineer, CA No. 90535
- Professional Civil Engineer, MD No. 36759

# PROFESSIONAL ASSOCIATIONS

- American Membrane Technology Association (AMTA)
- Water Environment Federation (WEF)

#### YEARS OF EXPERIENCE

- 1 with MKN
- 31 Total

Kevin Saleh has more than 30 years of experience as a civil engineer. He has led and participated in planning, design, construction management, and construction support for numerous public works projects, particularly in water and wastewater. His expertise spans the design and management of water distribution and treatment facilities, pumping stations, treatment plant processes, reservoirs, pressure-reducing/surge facilities, wastewater conveyance systems, pumping stations, and treatment plant projects.

8-inch and 6-inch Water Main Replacement in Westford Street, Ardmore Street, and Calle del Norte Street | Orange County, CA

**Project Manager.** Responsible for design and preparation of construction bid documents for abandonment and replacement of existing, aging 4-inch and 8-inch DIP with new 6-inch and 8-inch PVC C-900, including water services and located in Westford, Ardmore, and Calle del Norte streets.

Culver Boulevard Area Main Replacement | Los Angeles County, CA

**Senior Project Engineer.** Responsible for the design of replacement of existing, aging 4-inch and 6-inch cast iron water main with 8-inch DIP or PVC in Culver Boulevard from Sepulveda Boulevard to Overland Avenue and in Wagner Street from Sepulveda Boulevard to Coombs Avenue (approximately 7,000 feet). The project also includes the relocation of 1-inch and 2-inch services and meters and the abandonment of the existing water mains in the alley east of Culver Boulevard and Wagner Street.

Eastern Wells and Pipeline | Orange County, CA

**Project Engineer.** Mr. Saleh was responsible for the pipeline design, construction inspection, and support of the project, which included two raw water wells and 9,000 feet of 16-inch AWWA C905 collection pipeline between the wells and the City's Groundwater Recovery Plant. This project also included the construction of the pipeline in the bike path under the I-5 Bridge crossing over San Juan Creek. Caltrans permit engineer required that the 16-inch carrier pipe be constructed inside a 24-inch steel casing pipe. He was responsible for the engineering, design, and construction support of two replacement groundwater wells. The wells were both drilled in a shallow aquifer (15 to 100-ft BGS) using an adapted auger method to reduce the need for drilling fluids and increase production. Both wells utilize 75-HP electric motors to produce up to 700gpm of raw groundwater. The well facilities each include 22ft x 18ft slump stone well houses, Variable Frequency Drives, 8-inch Ductile Iron discharge lines, 4-inch PVC pump-to-waste lines, and concrete pump-to-waste cisterns.





Citywide Sanitary Sewer Improvement Program (CSSIP) Group 6, Model 6 | City of Anaheim, CA

**Technical Manager.** Responsible for quality checks and technical reviews of plans. The City of Anaheim identified sewer capacity deficiencies in the Model 6 area of their collection system. The City retained the professional engineering services to confirm, analyze, and develop a recommended solution to mitigate the sewer system deficiencies. Project No. 2 within Group 6 of the Citywide Sanitary Sewer Improvement Program / Projects (CSSIPP) focused on improving the sewer collection system on Crescent Avenue, Loara Street, and North Street. The existing sewer collection system consisted of approximately 4,300 linear feet of 8-inch, 10-inch, and 12-inch gravity sewer pipelines.

Signal Hitt Pipeline and Pump Station | Signal Hitt, CA

Assistant Project Manager responsible for overseeing the design and preparation of project specifications. The project included preparing plans, specifications, and construction cost estimates for recycled water improvements to View Park. Proposed by the City of Signal Hill, these improvements consist of approximately 6,300 feet of 6-inch pipeline and a new pump station to deliver 40 acre-feet annually to the park. Provided design services in two phases. The first phase of design, already completed, requires an irrigation supply of 17 gallons per minute and a pressure of 60 psi at the intersection of Cherry Avenue and Burnett Street. The project also required performing a feasibility study and a pipe alignment study to determine the best location for the proposed pump station.

Orange/Western Regional Trunk Sewer Rehabilitation | Orange County Sanitation District, Anaheim, Long Beach, Seal Beach, Cypress, Buena Park, and Los Alamitos, CA

**QA/QC Engineer.** Responsible for reviewing the plans and specs for quality assurance prior to submittal to the client. The design included providing engineering design services for the rehabilitation of four sewer reaches and one pump station in Anaheim, Long Beach, Seal Beach, Cypress, Buena Park, and Los Alamitos; a total of 84,000 linear feet of sewer line, a utility survey and research; surveying and mapping; a pipeline rehabilitation analysis; preparation of cost estimates and calculations; modeling in Civil 3D; and preparation of technical memoranda and reports, contract drawings and details, and contract specifications.

Saybrook Lift Station Replacement | City of Huntington Beach, CA

**Senior Engineer.** Responsible for overseeing the design and preparation of project specifications and construction cost estimate for the replacement of the Saybrook Lift Station. As part of the lift station replacement, project elements included installing a new wet-well structure, submersible pumps, a lift system, piping and force main, a valving facility and vault, electrical service and instrumentation, and a new gas-powered generator and relocating about 2,000 LF of utilities that conflicted with construction, in addition to reconfiguring traffic lanes and a median in the intersection to allow for the new lift station.

Paseo De Valencia Lift Station Rehabilitation Project | City of Laguna Hills, CA

**Project Manager.** Responsible for preparation of plans, specifications, estimates, and construction support to rehabilitate and upgrade the existing lift station by replacing the existing pumps, mechanical, electrical, and control equipment and for a portable generator plug-in connection and associated equipment.

Lift Station No. 1 Improvements | Orange County, CA

**Senior Project Engineer.** Responsible for the design of a new lift station located at the Blue Lagoon Development, which has been the main source of resident noise complaints. The project includes the removal and replacement of all hatches, installation of a new "quiet" fan, installation of a new davit arm, and interlocking pavers. In addition, the new "quiet" fan must be in compliance with the City noise ordinance, the hatched must be spring-loaded and traffic-rated, and the interlocking paver must allow for a growing natural landscape around the station.







#### EDUCATION

- MS, Civil Engineering, University of California, Irvine, CA
- BS, Mechanical Engineering, University of Tabriz, Iran

# LICENSES & REGISTRATIONS

- Professional Civil Engineer, CA No. 91468
- Project Management Certification, UCI DCE

# PROFESSIONAL ASSOCIATIONS

- American Society of Civil Engineers (ASCE)
- Association of Women in Water, Energy & Environment (AWWEE)
- University of California Irvine (UCI) Civil and Environmental Engineering (CEE) Affiliates (Program Committee Chair)
- Women in Water, Orange County Chapter

#### YEARS OF EXPERIENCE

- 4 with MKN
- \* 11 Total

# PARASTO AZAMI, PE

#### TASK ORDER MANAGER

Parasto Azami brings over 10 years of experience in water and wastewater engineering design, with a strong focus on pipeline design. Her expertise includes water conveyance systems, gravity sewers, force mains, pump stations, and the rehabilitation and condition assessment of infrastructure. She has successfully led numerous complex, large-scale pipeline projects, delivering reliable and sustainable solutions. Parasto's deep understanding of engineering challenges and commitment to excellence ensures optimal outcomes for her clients and stakeholders.

Marriott Pipeline | South Coast Water District, Dana Point, CA

**Project Manager and Design Lead.** The project involved the design of new 12-inch water main via open trench and trenchless installation in the vicinity of the Laguna Cliffs Marriott in the City of Dana Point.

Park Plaza Recycled Waterline Replacement | Irvine Ranch Water District, Irvine, CA

Design Lead and Project Manager. The project replaced an existing 6-inch and 8-inch
diameter asbestos cement recycled water pipe in Park Plaza. Tasks included identifying
optimum alignment, coordinating with Irvine Company for work hours and traffic control,
preparing plans, specifications, cost estimates and construction schedules.

Circular Panorama Pipeline Replacement | East Orange County Water District, Orange, CA Project Manager. The project involved preliminary and final design of 4,000 feet of new 12-inch waterlines and three pressure reducing facilities. Major tasks included alternative analysis, utilities research, coordination with County for Traffic and pavement replacement requirements.

Coastal Recycled Water Expansion Program Phase 4 Project | South Coast Water District, Dana Point, CA

**Project Manager.** The project involved design of 5,500 LF of new 8-inch PVC recycled water pipe as well as a new pressure reducing station along Ritz Carlton Dr, Selva Road and Pacific Coast HWY in the City of Dana Point. Key responsibilities include coordinating with the City of Dana Point and Caltrans for traffic control and work hours and conducting an alternatives analysis to determine the pipeline alignment with minimal impact on community access. (Ongoing)

Capital Improvement Water, Sewer, and Reclaimed Water Lines - Portola Parkway | Irvine Ranch Water District, Irvine, CA

**Project Engineer.** The project involved the design over 2 miles 30-inch domestic transmission water line, 10-inch sewer line, 16-inch recycled water lines and over 200 feet of trenchless/ tunneling pipe for new developments along Portola Parkway.





Recycled Water Conveyance Pipeline | Pleasant Valley County Water District, Ventura County, CA

**Design Lead.** Project consisted of the preliminary and final design of 8,000 feet of 18-inch pipeline in Ventura County. The effort included HDD installation underneath of red-line channel, environmental permitting, and coordinating with jurisdiction agencies.

Grange Knoll PRV and Brae Glen Pipeline | East Grange County Water District (EOCWD), North Tustin, CA

**Project Manager and Design Lead.** Project consisted of the design of new pressure reducing facility and new water line to abandon existing pipe in easement, and included site visits, preliminary and final design, specifications, stakeholder coordination and community outreach.

Serrano Creek Raw Waterline Replacement | Irvine Ranch Water District, Irvine, CA

**Design Lead.** The project replaced an existing 8-inch diameter asbestos cement raw water pipe in the vicinity of Serrano Creek Trail in City of Lake Forest with over 100 feet of trenchless/ tunneling pipe under the community wall. Task included identifying optimum alignment, coordinating with utility and jurisdiction agencies, preparing plans, specifications, cost estimates and construction schedules.

Regional Desalter Conveyance Design | Water Replenishment District of Southern California, Torranca, CA

**Project Engineer.** The project provided an expedited alternatives analysis and design of 2,500 LF pipelines for WRD's future Regional Brackish Water Reclamation Facility. The project included the evaluation of six alternative alignments, including both trenchless and open cut approaches, and final design. The project includes the preliminary and final design of a 14-inch HDPE brine line, two 24-inch HDPE product water lines, and a 34-inch HDPE source water line.

Barrett Pump Station Replacement | East Orange County Water District, Orange, CA

**Deputy Project Manager/Project Engineer.** The project included the preliminary and final design for the replacement of an existing pump station. The new pump station consisted of a 1,500 gpm package pumping system, associated piping, controls and valves. The construction included a temporary pumping system to allow for continued operation during construction and replacement of an elevated electrical transformer (SCE).

Rehabilitation of Western Regional Sewer | Orange County Sanitation District, Fountain Valley, CA

**Design Engineer.** The project involved the rehabilitation (CIPP) and replacement of 16 miles of sewer pipes and over 200 manholes to extend sewer system's reliable life by 50 years. Tasks included preliminary and final design, technical reports, bypass plans, construction schedule, cost estimate and specifications. Work also included coordination and attending progress review meetings with client, utility agencies and sub-contractors.

Lift Stations Condition Assessment | South Coast Water District, Laguna Beach, CA

**Project Engineer.** The project involved condition assessment of 12 sewer lift stations. Work included updating district's survey form, condition ratings of all aspects of the lift stations, wet well capacity, and review of pump efficiencies. A list of potential projects with estimated costs were developed for use in planning future capital improvement projects.

Reservoir 28 Final Design | South Coast Water District, Laguna Seach, CA

**Project Engineer.** The project involved the design of two new 100K gallon steel reservoirs located within a hillside in Laguna Beach. The effort included environmental permitting, public outreach, access road improvements, site grading, retaining walls and demolition of one existing steel tank.

Morena Pump Station and Conveyance System (Pure Water) | City of San Diego, CA

**Design Engineer.** The project involved the design of over 11 miles of 48-inch Force main and 30-inch Brine line to convey sewer from Morena pump station to North City Pure Water Facility and producing 15 MGD of purified drinking water. Major tasks included hydraulic analysis, steel pipe calculations (AWWA M-11), construction plans and Specifications, and pressure reducing facility.







#### **EDUCATION**

 BS, Civil Engineering, University of California, Irvine, CA

# LICENSES & REGISTRATIONS

- Professional Civil Engineer, CA No. 90355
- Professional Civil Engineer, CO No. 61003

# PROFESSIONAL ASSOCIATIONS

 Orange County Water Association (OCWA)

#### YEARS OF EXPERIENCE

- 1 with MKN
- 6 11 Total

# KATHLEEN LABRADOR, PE

# TASK ORDER MANAGER/PLANNING/ HYDRAULIC MODELING

Kathleen Labrador has over 10 years of experience in the water/wastewater civil engineering field. Her experience includes planning and design of potable water, sewer, and recycled water facilities within California. Her planning experience includes conducting hydraulic analyses for water, recycled water, and sewer projects where she uses hydraulic modeling software to build models, run simulations and summarize the results in a report. Her design experience includes various pipeline, pump station, and reservoir design where she has prepared plans, specifications, and cost-estimates, and provided construction support.

On-Call Task Order No. 12 Recycled Water System Hydraulic Modeling | South Coast Water District, Dana Point, CA

Project Engineer. Provided engineering services to complete a recycled water system hydraulic model evaluation. This study evaluated three alternatives and provided recommendations for the recycled water line improvements for the Coastal Recycled Water Expansion Project—Phase 4. MKN reviewed the existing hydraulic model, asbuilts, Infrastructure Master Plan Update, and the 2023 Recycled Water Roadmap for the preparation for this study. The study used hydraulic modeling software, Innovyze's Infowater, to evaluate the three scenarios and determine which scenarios could provide adequate pressure to the proposed system. Results were reviewed against the District's infrastructure master plan and a technical memorandum was prepared to summarize the simulations, results, and recommendations.

Rose and Vine Sewer Improvements, Citywide Sanitary Sewer Program | City of Anaheim, CA

**Project Engineer.** The Citywide Sanitary Sewer Program Sewer Improvements is located in the City of Anaheim. The project consists of preliminary design and preparation of plans, specifications, and estimates for the sewer replacement on Vine Street and Rose Street, north of Lincoln Avenue in Anaheim, CA. The purpose is to mitigate existing deficiencies identified in the City's Master Plan of Sanitary Sewer. The project consists of upsizing 1,300 If of existing sewer pipe from 6-inch to 8/10-inch sewer pipe. Responsible for authoring the preliminary design report that summarizes the design considerations of the project, existing and proposed sewer capacity calculations, alternative alignments and trenchless alternatives, pipe material selection, construction methods, and designed preliminary plans. Responsibilities included preparing the construction plans, specifications, and cost-estimate and participated in the City's workshop to discuss design prior to finalization.





Master Plan Studies and Hydraulic Modeling Services | Mesa Water District and Newport Beach, CA

**Project Engineer.** Provided Master Plan updates by running hydraulic analyses and authoring reports and fire flow analysis and updating the hydraulic model per Mesa Water District's system updates. Worked with Mesa Water District to provide hydraulic modeling services, including Master Plan updates for proposed developments within the Mesa Water District distribution system. Analyses included land areas up to 9 acres, developments with 250 attached units, and developments with 177 detached units. Other hydraulic modeling services for Mesa Water District include on-call fire flow analysis to determine system reliability, system operational adjustments, and continuous hydraulic model updates, per Mesa Water's direction.

Hacienda Pump Station Project | City of La Habra, CA

**Project Engineer.** Provided preliminary analyses, final design, and construction support services for the City of La Habra's new Hacienda Park Booster Pump Station. The new pumping facility will replace two existing pump stations that currently serve the Foothill Zone of the City's water system. The proposed facility will be constructed within the Hacienda Park on a new asphalt pavement with access roads and seven vertical turbine pumps covering a flow range of 25 to 3,500 gallons per minute. Construction of approximately one mile of 12-in transmission pipe, a stationary generator, and a surge tank are included as part of the project. Responsible for developing the site and grading plan, sizing and selecting pumps, and developing construction documents.

Sterling Pump Station Construction Support | Western Municipal Water District, Riverside, CA

**Project Engineer.** Provided support services for the Sterling Reservoir and Pumping Station. The project elements are comprised of a new 1.5 MG prestressed post tensioned 80-foot-diameter and 35-foot-high concrete reservoir; a high pressure pumping station with six 700-HP pumps, each sized for 2,200 gpm at 1,000 feet of head (approximately 450 psi discharge pressure), two of which are gas engine driven pumps; a chemical injection building and metering pumps to generate and inject mono-chloramines; a flow control facility consisting of a 16 inch Cla-Val combination valve; pump house building; 15,000 gallon surge tank; and site improvements and fencing. Responsible for providing construction engineering support services. Construction support duties include completing final bid construction plans and specifications prior to construction, designing modifications to alleviate issues during construction, assisting in hosting a workshop for Operations training, co-authored the Operations and Maintenance Manual, and providing oversight during the start-up and commissioning of the reservoir and pump station.

On-Call Sewer Study Support | City of Victorville, CA

Project Engineer. Provided on-call, as-needed sewer system studies for new proposed developments in the City of Victorville. Prepared and maintained the sanitary sewer system hydraulic model for the City and provided area sewer studies on an asneeded basis to identify required improvements based on the proposed developments. Projects included proposed industrial campuses to be developed on open space, and recommendations included building a sewer extension and re-routing existing sewer pipeline to lead to the City's industrial wastewater treatment plant. Simulations were conducted within the hydraulic model, and the results were reviewed against the City's sewer master plan criteria. A technical memorandum was prepared to summarize the simulations, results, and recommendations.

State Water Interconnect Modeling | Calleguas Municipal Water District and City of Ventura, CA

**Project Engineer.** Conducted a hydraulic analysis to review various scenarios and summarizing the results in a technical memorandum for the new seven-mile State Water Project Interconnection 30-inch pipeline between the City of Ventura and Calleguas Municipal Water District. The pipeline allows for additional water supplies for the City as it will be able to deliver the City's allocated State Water of 10,000 acre-feet per year. The project includes updating the City's water hydraulic model to be consistent with the State Water Project. Results are summarized in a technical memorandum.





#### **EXHIBIT "B"**

Payment Schedule (Hourly Payment)

#### A. Hourly Rate

CONSULTANT'S fees for such services shall be based upon the following hourly rate and cost schedule:

#### SEE ATTACHED EXHIBIT B

B. Travel Charges for time during travel are not reimbursable.

#### C. Billing

- 1. All billing shall be done <u>monthly</u> in fifteen (15) minute increments and matched to an appropriate breakdown of the time that was taken to perform that work and who performed it.
- 2. Each month's bill should include a total to date. That total should provide, at a glance, the total fees and costs incurred to date for the project.
- 3. A copy of memoranda, letters, reports, calculations and other documentation prepared by CONSULTANT may be required to be submitted to CITY to demonstrate progress toward completion of tasks. In the event CITY rejects or has comments on any such product, CITY shall identify specific requirements for satisfactory completion.
- 4. CONSULTANT shall submit to CITY an invoice for each monthly payment due. Such invoice shall:
  - A) Reference this Agreement;
  - B) Describe the services performed;
  - C) Show the total amount of the payment due;
  - D) Include a certification by a principal member of CONSULTANT's firm that the work has been performed in accordance with the provisions of this Agreement; and
  - E) For all payments include an estimate of the percentage of work completed.

Upon submission of any such invoice, if CITY is satisfied that CONSULTANT is making satisfactory progress toward completion of tasks in accordance with this Agreement, CITY shall approve the invoice, in which event payment shall be made within thirty (30) days of receipt of the invoice by CITY. Such approval shall not be unreasonably withheld. If CITY does not approve an invoice, CITY shall notify CONSULTANT in writing of the reasons for non-approval and the schedule of performance set forth in **Exhibit "A"** may at the option of CITY be suspended until the parties agree that past performance by CONSULTANT is in, or has been brought into compliance, or until this Agreement has expired or is terminated as provided herein.

5. Any billings for extra work or additional services authorized in advance and in writing by CITY shall be invoiced separately to CITY. Such invoice shall contain all of the information required above, and in addition shall list the hours expended and hourly rate charged for such time. Such invoices shall be approved by CITY if the work performed is in accordance with the extra work or additional services requested, and if CITY is satisfied that the statement of hours worked and costs incurred is accurate. Such approval shall not be unreasonably withheld. Any dispute between the parties concerning payment of such an invoice shall be treated as separate and apart from the ongoing performance of the remainder of this Agreement.





# 2025 FEE SCHEDULE

CATEGORY	POSITION	HOURLY RATE
Communications	Administrative Assistant	\$113
and	Strategic Communications Coordinator	\$121
Administrative	Strategic Communications Specialist	\$147
51	CAD Technician I	\$137
Designers and Technicians	CAD Design Technician II	\$158
recinicians	Senior Designer	\$176
	Assistant Planner I	\$140
	Assistant Planner II	\$160
Diameter	GIS Specialist	\$173
Planning	Planner I	\$189
	Planner II	\$205
	Senior Planner	\$215
	Engineering Technician	\$103
	Assistant Engineer I	\$140
	Assistant Engineer II	\$160
	Project Engineer I	\$189
Engineers	Project Engineer II	\$205
	Senior Engineer I	\$221
	Senior Engineer II	\$231
	Senior Engineer III	\$247
	Principal Engineer	\$257
	Project Manager	\$231
Project	Senior Project Manager	\$267
Management	Project Director	\$289
	Senior Project Director	\$308
,	Scheduler	\$179
	*** Construction Inspector	\$200
Construction	Assistant Resident Engineer	\$200
Management Services	Resident Engineer	\$212
Services	Construction Manager	\$231
	Principal Construction Manager	\$272

The foregoing Billing Rate Schedule is effective through December 31, 2025 and will be adjusted each year after at a rate of 2 to 5%.

#### **DIRECT PROJECT EXPENSES**

Outside Reproduction Cost + 10%
Subcontracted or Subconsultant Services Cost + 10%
Travel & Subsistence (other than mileage) Cost
Auto Mileage Current IRS Rate

\*\*\* 40 hrs per week assumed; part-time rates can be provided upon request Rates also subject to prevailing wage mandatory increases during a calendar year







SPEC Services, Inc. 10540 Talbert Ave., Suite 100 East Fountain Valley, CA 92708 714.963.8077 Fax 714.963.0364 www.specservices.com

#### RATE SCHEDULE

#### LABOR RATES:

#### **Design & Document Production**

Personnel <u>Classification</u>	Hourly Billing Rate	Personnel <u>Classification</u>	Hourly Billing Rate
Design Drafter 1	\$84.00	Designer 4	\$171.00
Design Drafter 2	\$98.00	Designer 5	\$186.00
Designer 1	\$116.00	Designer 6	\$198.00
Designer 2	\$133.00	Project Administrative Assistant	\$98.00
Designer 3	\$153.00	Project Accountant	\$108.00

#### **Engineering & Project Management**

Personnel <u>Classification</u>	Hourly <u>Billing Rate</u>	Personnel <u>Classification</u>	Hourly <u>Billing Rate</u>
Engineer 1	\$136.00	Procurement Agent 1	\$108.00
Engineer 2	\$167.00	Procurement Agent 2	\$141.00
Engineer 3	\$194.00	Procurement Agent 3	\$175.00
Engineer 4	\$222.00	Project Coordinator	\$168.00
Engineer 5	\$248.00	Project Controls Specialist 1	\$136.00
Project Manager 1	\$194.00	Project Controls Specialist 2	\$167.00
Project Manager 2	\$222.00	Project Controls Specialist 3	\$194.00
Project Manager 3	\$248.00	Project Controls Specialist 4	\$218.00

#### Survey & Field Services

Personnel <u>Classification</u>	Hourly <a href="Billing Rate">Billing Rate</a>	Personnel <u>Classification</u>	Hourly <u>Billing Rate</u>
Survey Technician	\$110.00	1-Person Survey Crew*	\$182.00
Party Chief	\$157.00	2-Person Survey Crew*	\$292.00
Survey Manager	\$218.00	3-Person Survey Crew*	\$402.00
, ,		*Includes survey equipme	ent rate

A 30% premium on labor rates will be charged on labor for client authorized overtime, emergency or priority work. This premium will not be charged without prior approval of the client.

System Planning, Engineering & Coordinating





#### **EQUIPMENT RATES:**

Survey Equipment	\$ 25.00 per hour
Laser Scanning Equipment	\$150.00 per hour
Drone Equipment	\$300.00 per day
In-House Aerial Imagery	\$500.00 Standard Access Fee
Computer Assisted Design/Drafting System	\$ 10.00 per hour
Caesar Piping Stress Analysis System	\$ 10.00 per hour
PLC Programming Software	\$ 10.00 per hour
SYNERGI Stoner Pipeline Hydraulic Simulation	\$ 30.00 per hour
AspenTech Suite	\$ 30.00 per hour
ETAP & SKM Electrical Analysis Software	\$ 10.00 per hour
ArcGIS Mapping Software	\$ 20.00 per hour
Pipeflo Hydraulic Simulation Software	\$ 30.00 per hour
ArcFlash Label Software	\$ 10.00 per label
Procore Software	as quoted per project

#### IN-HOUSE REPRODUCTION AND PLOTTING:

	Photo	Copies	B&\	V Plots	Color Plots			S
Size	B&W	Color	Bond		Bond			High Gloss
8.5"x11"	\$ 0.08	\$ 0.70	\$	0.30	\$	4.00	\$	8.00
11"x17"	\$ 0.08	\$ 1.50	\$	0.60	\$	5.00	\$	10.00
24"x36"			\$	3.50	\$	10.00	\$	20.00
36"x48"			\$	6.50	\$	20.00	\$	35.00

#### OTHER EXPENSES:

Automobile Expenses: Per Current IRS Rates

All other direct project expenses, including but not limited to travel and living expenses, postage and freight, subcontract services and materials, will be charged at cost plus 10%.

#### **AGENCY PERSONNEL:**

Staffing agency personnel will be billed the same as direct employees in accordance with the Labor Rates contained herein.

#### **PAYMENT TERMS:**

Monthly invoices, net 30 days

#### ANNUAL RATE ADJUSTMENTS:

Labor Rates shall be adjusted on January 1<sup>st</sup> each year based upon the percentage change in the Employment Cost Index (ECI): Series Title: Total compensation for Private industry workers in West, 12-month percent change [Series:CIU2010000000240A-non seasonally adjusted].

Rev. 23A







#### Prevailing Wage Rate Schedule (2025)

Item Description	Unit	Unit Price
Field Support		
Field Survey Crew & Equipment (Prevailing Wage) *	Hour	\$385.00
Round Trip Travel Time & Costs	Hour	\$165.00
Office Support		
Principal	Hour	\$275.00
Director Surveying/Professional Land Surveyor	Hour	\$235.00
Senior Project Manager	Hour	\$195.00
Project Surveyor	Hour	\$180.00
GPS Post Processing	Hour	\$170.00
Survey Technician	Hour	\$165.00
Drafting/AutoCAD Technician	Hour	\$130.00
Accounting / Clerical	Hour	\$90.00
Reimbursable Costs		
In-House Reproductions		Cost + 15%
Printing and Materials		Cost + 15%
Parking and Tolls		Cost + 15%
Express Mail, Courier, Next Day Service		Cost + 15%
Special Sub-Consultant Services (GPR, etc.)		Cost + 10%
Miscellaneous Services		
Per Diem (when required)	Day	Per GSA Schedule
Consultation in Connection with Litigation	Hour	\$465.00
Transportation (per 2025 IRS Mileage Rate)	Mile	\$0.69
Overtime and Saturday Rates		
	Hour	1.5 times Hourly Rate

The hourly rate increases 3% per year to cover cost of living. Also, a 10% mark-up will be added to any sub-consultants utilized to cover project management and administration costs. Hourly rates good for 2025.

\*4 or 8 Hour Minimum

Armando D. DuPont, Professional Land Surveyor 7780



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#### **Cost Table**

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Code	Item	\$/	Unit	Unit
P100	Principal Professional Engineer	\$	220.00	Hour
P101	Senior Geotechnical Engineer	\$	205.00	Hour
P102	Project Engineer / Manager	\$	175.00	Hour
P103	Geologist	\$	185.00	Hour
P104	Quality Control Manager	\$	175.00	Hour
P105	Senior Staff Engineer	\$	170.00	Hour
P116	Health and Safety Officer	\$	205.00	Hour
P115	LA City Deputy Methane Specialist	\$	150.00	Hour
P107	Laboratory Manager	\$	140.00	Hour
P108	Laboratory Technician	\$	115.00	Hour
P109	CADD Operator/Draftsperson	\$	95.00	Hour
P110	Data Processing, Technical Editing or Reproduction	\$	95.00	Hour
P111	Expert Witness Testimony	\$	465.00	Hour
P112	Certified Payroll, per hr.	\$	170.00	Hour
P113	Senior Staff Environmental Engineer	\$	170.00	Hour
P114	Senior Environmental Engineer	\$	205.00	Hour

#### Field Technician

Code	ltem	 S/Unit	Unit
T150	Special Inspector (Reinforced Concrete, and Masonry)	\$ 125.00	Hour
T151	Special Inspector (Structural Steel, Drilled-In-Anchors	\$ 125.00	Hour
T152	Special Inspector for Welding	\$ 125.00	Hour
T153	DSA Class I Inspector	\$ 145.00	Hour
T154	DSA Class II Inspector	\$ 135.00	Hour
T155	Special Inspector for Fireproofing	\$ 125.00	Hour
T156	Special Inspector Load Tests or Torque/Bolt)	\$ 125.00	Hour
T157	Special Inspector Rebar Sample	\$ 125.00	Hour
T158	Special Inspector Pachometer	\$ 125.00	Hour
T159	Senior Asphalt Placement Technician	\$ 125.00	Hour
T160	Asphalt Placement Technician	\$ 125.00	Hour
T161	Asphalt/Concrete Plant Technician	\$ 125.00	Hour
T162	ACI/Caltrans Technician	\$ 125.00	Hour
T163	Senior Soils Technician	\$ 125.00	Hour
T164	Senior Grading Inspector	\$ 130.00	Hour
T165	Staff Grading Inspector	\$ 125.00	Hour
T166	Soils Technician	\$ 125.00	Hour
T167	Pile Driving Inspector	\$ 140.00	Hour
T168	AWS Certified Welding Inspector	\$ 125.00	Hour
T169	NACE Coating Inspector	\$ 150.00	Hour
T170	Field Coring Technician	\$ 125.00	Hour
T171	Nondestructive Examination Technician, UT, MT, LP	\$ 130.00	Hour
T172	Structural Steel Fabrication Inspector (AWS)	\$ 130.00	Hour
T177	Senior Environmental Technician	\$ 140.00	Hour
T178	Environmental Technician	\$ 140.00	Hour
T179	Building Inspector	\$ 145.00	Hour

#### Fabrication Shop Inspections

Code Item S	\$/Unit	Unit







T173	Structural Steel Inspector (ICC/CBO)	125	Hour
T174	Structural Steel Inspector (AWS)	125	Hour
T175	Batch Plant Quality Control Technician/Inspector	125	Hour
T176	Reinforced Concrete, Prestressed Inspector	125	Hour

#### Field Inspector/Technician Hours

No Work Performed (Work Cancelled) will be charged at 2 hour minimum All field services charge at 4 hour minimum and 8 hour thereafter

#### Regular Work Hours

First 8 hours, Monday through Friday, between 5:00 a.m. to 5:00 p.m. Direct Project expenses outside services will be charged at Cost + 15%.

#### Time and One-Half

Any increment past first 8 hours through 12 hours, Monday through Friday First 12 hours on Saturday Shift between 3:00 a.m. and 5:00 a.m.

#### **Double Time**

Any hours past 12 hours Monday through Saturday, all day Sunday and Federal Holidays

#### Field Analysis

Code	ltem	\$/Unit	Unit
G200	Soil Boring with Hollow Stem Auger Orilling Portal to Portal	\$ 415.00	Hour
G200A	Mobilization and Demobilization for Hollow Stem Auger	\$ 350.00	Hour
G201	Backfill Boreholes with Bentonite	\$ 26.00	Foot
G202	Backfill Boreholes with Grout	\$ 37.00	Foot
G203	Drumming and Disposal of Clean Cuttings	\$ 410.00	Drum
G204	Fire Water Buffalo	\$ 578.00	Day
G205	Support Truck	\$ 158.00	Day
G206	Water Truck	\$ 473.00	Day
G207	Mobilization and Demobilization for Rock coring	\$ 1,208.00	Each
G208	Rock Coring	\$ 478.00	Hour
G209	Decontamination of Vehicle and Equipment (Up to 100 miles)	\$ 315.00	Each
G210	Field Resistivity, up to 3 arrays, maximum distance of 40 ft.	\$ 1,890.00	Each
G211	Environmental Soil Boring with Hollow Stem Auger Portal to Portal	\$ 446.00	Hour
G212	Environmental Soil Boring with Direct Push Portal to Portal	\$ 399.00	Hour
G213	Environmental Groundwater Sampling with Grundfos, Portal to Portal	\$ 289.00	Hour
G214	Environmental Analysis of soil for waste classification		Quote/Sample
G215	Environmental Analysis of liquid for waste classification		Quote/Sample
G216	Ground Resistance Tester (Four Point Method), plus travel	\$ 1,700.00	Each
G217	Potholing, two-man crew	\$ 600.00	Hour
G218	Ground Penetrating Radar (GPR) for Locating Utilities	\$ 1,500.00	Day

#### Mix Design Review

Code	ltem	 /Unit	Unit
D250	Review of Concrete Mix Design	\$ 168.00	Each
D251	Review of Concrete Mix Design, per Trial Batch, 6 cylinder, ACI	\$ 250.00	Each
D252	Review of Grout Mix Design	\$ 168.00	Each
D253	Review of Mortar Mix Design	\$ 168.00	Each
D254	Review of Asphalt Mix Design	\$ 210.00	Each
D255	Review of Asphalt Mix Design, Caltrans	\$ 150.00	Each

#### Sample Pick-Up/Hold

Code	Item	 \$/Unit	Unit
	All hold samples are charged at the same rate as the testing rate		
U303	Technician for Specimen pick up, minimum 2 hours	\$ 120.00	Hour
U304	Vehicle (Up to 100 miles)	\$ 75.00	Trip







**Field Equipment Charges** 

Code Equ	quipment Charges \$/Unit				
E350	Brass Mold	\$	21.00	Unit Each	
E351	Concrete Air Meter	\$	53.00	Day	
E352	Concrete Unit Weight (Scale, Bucket, Rod and Mallet)	\$	32.00	Day	
E353	Field Vehicle Usage (Up to 100 miles)	\$	74.00	Trip	
E354	Concrete/Asphalt Coring Equipment rental (min 4 hrs and 8 hrs after)	Ś	200.00	Hour	
E355	Fireproofing Adhesion/Cohesion	\$ \$	21.00	Test	
E356	Hand Auger Equipment	\$	131.00	Day	
E357	Level D Personal Protective Equipment (PPE), per person	\$	42.00	Day	
E358	Liquid Penetrating Consumables	\$	32.00	Day	
E359	Magnetic Particle Equipment and Consumables	\$	42.00	Day	
E360	Ultrasonic Equipment and Consumables	Ś	68.00	Day	
E361	Nuclear Density Gauge Usage	\$ \$ \$	19.00	Hour	
E362	Compaction Test, per location	Ś	21.00	Test	
E363	Portable Concrete Laboratory-not including Technicians	Ś	-	Quote/Day	
E364	Pachometer (Rebar Locator)	Ś	58.00	Day	
E365	Environmental PID Usage	Ś	200.00	Day	
E366	Pull Test Equipment	Ś	74.00	Day	
E367	Sand Cone Test Kit (Scale, Burner, Sand Cone Apparatus)	\$ \$ \$ \$ \$	179.00	Day	
E368	Schmidt Hammer	Ś	53.00	Day	
E369	Torque Wrench, Small	Ś	21.00	Day	
E370	Torque Wrench, Large	\$ \$	37.00	Day	
E371	Torque Multiplier (Skidmore)	\$	95.00	Day	
E372	Miscellaneous Equipment Charge	Ś	-	Quote Each	
E373	Vapor Emission Kit	\$ \$ \$ \$	58.00	Each	
E374	Field Resistivity Meter	\$	240.00	Day	
E375	Water Level Meter	\$	80.00	Day	
E376	Environmental ph/Turbidity/Conductivity/Temp Meter	\$	110.00	Day	
E377	Environmental FID Usage	\$	110.00	Day	
E378	Environmental groundwater sampling pump	\$	215.00	Day	
E379	XRF Lead Analyzer	\$	131.00	Day	
E380	Relative Humidity	\$	74.00	Day	
E381	GPR (Groud Penetrating Radar), for buried rebar in concrete	\$	90.00	Hour	
E382	Load Cell for tension - Maximum 2,000 lb	\$	55.00	Hour	
E383	Barologger Solinst A/E 61160	\$	180.00	Day	
E384	Drone Site Monitoring & Mapping	\$	225.00	Day	
E385	Equipment for Double Ring Infiltrometer Testing per ASTM D3385	\$	750.00	Day	
E386	Equipment for Standard Test Method for Permeability of Synthetic Turf Sports Field Based				
	Stone and Surface System by Non-confined Area Flood Test Method. ASTM F2898	\$	250.00	Day	
E387	Minor Traffic Control Equipment for residential/minor or secondary collector (signs and cones)	\$	1,700.00	Day	
E388	Zefon High Volume Air Sampling Pump	\$	150.00	Day	
E389	Zefon Rotameter	\$	40.00	Day	
E390	PCM Air Cassettes	\$	15.00	Each	
E391	TEM Air Cassettes	\$	15.00	Each	
E392	Ghost Wipes for surface sampling, including lead and beryllium testing	\$	5.00	Each	
E393	TEM Cassette, 25mm, Microvac for collection of fibers and particulate	\$	15.00	Each	
E394	Automatic Pull-off Adhesion Tester (ASTM C1583)	\$	350.00	Day	
E395	50mm Dolly's for ASTM C1583	š	65.00	Each	
		•			

#### **Schedule of Fees for Laboratory Services**

#### **Concrete Tests**

	· · · · · · · · · · · · · · · · · · ·		
Code	Item	\$ /Unit	Unit
C400	6" x 12" Cylinder: Compression Strength (ASTM C39)	\$ 37.00	Test
C401	6" x 6" x 18" Flexural Beams Not Exceeding Referenced Size (ASTM C78, C293, or CTM 523)	\$ 84.00	Test
C402	Cylinders: Splitting Tensile Strength (ASTM C496)	\$ 84.00	Test
C403	Core Compression including Trimming (ASTM C39)	\$ 53.00	Test







C404	Concrete Core Compression excludes sampling (C42)	\$ 58.00	Test
C404	Coring of Test Panels in Lab	\$ 26.00	Each
C405	Diamond Sawing of Cores or Cylinders (ASTM C642)	\$ 26.00	Test
C406	Density, Absorption, and Voids in Hardened Concrete (ASTM C642)	\$ 315.00	Test
C407	Modulus of Elasticity Static Test (ASTM C469)	\$ 131.00	Test
C408	Unit Weight Including Lightweight Concrete	\$ 68.00	Test
C409	Lightweight Concrete Fill, Compression (C495)	\$ 27.00	Test
	Drying Shrinkage Up to 28 Days: Three 3" x 3" or 4" x 4" Bars, Five Readings up to 28 Dry Days		
C410	(ASTM C157)	\$ 394.00	Test
C411	Additional Reading	\$ 47.00	Set of 3 Bars
C412	Storage Over Ninety (90) Days	\$ 37.00	Set of 3 Bars/Month
C413	Splitting Tensile Strength (C496)	\$ 55.00	Test
C435	Coefficient of Thermal Expansion of Concrete (CRD 39, AASHTO T336)	\$ 840.00	Test
C436	Compression Test (ASTM C495 and C472)	\$ 47.00	Test
C437	Air Dry Density (ASTM C472)	\$ 37.00	Test
C438	Oven Dry Density (ASTM C495)	\$ 63.00	Test
C439	Sample Trimming in the lab, up 6" diameter	\$ 21.00	Test

#### Concrete Block, ASTM C140

Code	Item	\$/Unit	Unit
C412	Compression (3 Required Per ASTM C90)	\$ 63.00	Each
C413	Absorption/Moisture Content/Oven Dry Density (3 Required per ASTM)	\$ 95.00	Each
C414	Linear/Volumetric Shrinkage (ASTM C426)	\$ 105.00	Test
C415	Web and Face Shell Measurements	\$ 47.00	Test
C416	Tension Test	\$ 179.00	Test
C417	Core Compression	\$ 58.00	Test
C418	Conformance Package (CTM 90)	\$ 63.00	Test
C419	Shear Test of Masonry Cores: 2 Faces	\$ 95.00	Test
C420	Efflorescence Test (3 Required), each	\$ 58.00	Test

#### Laboratory Trial Batch: Cement, Concrete, Grout and Mortar

Code	Item	\$/Unit	Unit
1450	All trial batch for cement, concrete, grout, mortar, etc		Quote Each

#### Brick Masonry Tests

Code	ltem	\$/Unit		Unit
M500	Modulus of Rupture: Flexural (5 Required Per ASTM), each	\$	58.00	Test
M501	Compression Strength (3 Required Per ASTM), each	\$	53.00	Test
M502	Absorption: 5 Hour or 24 Hour (5 Required), each	\$	53.00	Test
M503	Absorption: 7 Day (CTM 67)	\$	50.00	Test
M504	Absorption (Boil): 1, 2, or 5 Hours (5 Required), each	\$	84.00	Test
M505	Initial Rate of Absorption (5 Required), each	\$	42.00	Test
M506	Moisture as Received (CTM 67)	\$	25.00	Test
M507	Saturation Coefficitent (CTM 67)	\$	60.00	Test
M508	Efflorescence (5 Required), each	\$	89.00	Test
M509	Core: Compression, each	\$	74.00	Test
M510	Shear Test on Brick Core: 2 Faces, each	\$	95.00	Test

#### **Masonry Prisms**

Code	ltem	 \$/Unit	Unit
M508	Compression Test: Composite Masonry Prisms Up To 8" x 16"	\$ 210.00	Test
M509	Compression Test: Composite Masonry Prisms Larger Than 8" x 16"	\$ 305.00	Test
M510	Masonry: Cutting of Cubes or Prisms	\$ 74.00	Test

#### **Mortar and Grout**

Code	ltem	\$ /Unit	Unit
M511	Compression: 2" x 4" Mortar Cylinders	\$ 47.00	Test
M512	Compression: 3" x 3" x 6" Grout Prisms, Includes Trimming	\$ 63.00	Test
M513	Compression: 2" Cubes (ASTM C109)	\$ 63.00	Test
M514	Compression: Cores (ASTM C42)	\$ 63.00	Test







M515 Mortar Expansion (ASTM C806) \$ 315.00 Test

#### Fireproofing Tests

Code	Item	 \$/Unit	Unit
F550	Oven Dry Density	\$ 79.00	Test
F551	Adhesion/Cohesions Testing, per hour, 4 hour minimum	\$ 126.00	Test

#### **Gunite and Shotcrete Tests**

Code	ltem	\$ /Unit	Unit
C420	Core Compression Including Trimming (ASTM C42)	\$ 63.00	Test
C421	Compression 6" x 12" Cylinders	\$ 37.00	Test
C422	Compression: Cubes	\$ 42.00	Test

Soils and Aggregate Tests

Code	Aggregate Tests  Item	\$/Unit	Unit
S599	Atterberg Limits/Plasticity Index (ASTM D4318)	\$ 147.00	Test
S600	California Bearing Ratio (ASTM D1883)	\$ 375.00	Test
S601	Chloride and Sulfate Content (CTM 417, CTM 422)	\$ 152.00	Test
S602	Consolidation, Full Cycle (ASTM 2435, CTM 219)	\$ 289.00	Test
5603	Cleanness Value: 1" x #4 (CTM 227)	\$ 194.00	Test
5604	Cleanness Value: 2.5" x 1.5" or 1.5" x .75" (CTM 227)	\$ 310.00	Test
S605	Corrosivity Series: Sulfate, Cl, pH (CTM 643 and 417)	\$ 210.00	Test
\$606	Lab Resistivity	\$ 131.00	Test
S607	Direct Shear Test (ASTM D3080)	\$ 268.00	Test
S608	Direct Shear Test, per point	\$ 116.00	Test
S609	Direct Shear Test Sample Remolding (ASTM D3080)	\$ 47.00	Test
S610	Durability Index Fine Aggregate	\$ 168.00	Test
S611	Expansion Index (ASTM D4829, UBC 18-2)	\$ 163.00	Test
S612	Durability Index: Coarse Aggregate	\$ 168.00	Test
S613	Maximum Density: Methods A/B/C (ASTM D1557 or D698, CTM 216)	\$ 194.00	Test
S614	Maximum Density: Check Point abrasion (ASTM D1557)	\$ 79.00	Test
S615	Maximum Density: AASHTO C (Modified) (AASHTO T-180)	\$ 210.00	Test
S616	Moisture Density Rock Correction	\$ 168.00	Test
S617	Moisture Content (ASTM D2216, CTM 226)	\$ 26.00	Test
S617A	Moisture, Ash and Organic Matter of Peat/Organic Soils	\$ 100.00	Test
5618	Density: Ring Sample (ASTM D2937)	\$ 32.00	Test
S619	Density: Shelby Tube Sample (ASTM D2937)	\$ 58.00	Test
S620	Organic Impurities (ASTM C40)	\$ 100.00	Test
S621	Failing Head Permeability (ASTM D2434)	\$ 263.00	Test
S622	R-Value: Soil (ASTM 2844)	\$ 373.00	Test
5623	R-Value: Aggregate Base (ASTM D2844)	\$ 373.00	Test
5624	Sand Equivalent (ASTM D2419, CTM 217)	\$ 137.00	Test
S625	Soil Classification (ASTM D2487)	\$ 37.00	Test
S626	Sieve #200 Wash Only (ASTM D1140)	\$ 100.00	Test
S627	Sieve with Hydrometer: Sand to Clay (ASTM D422)	\$ 305.00	Test
S628	Sieve Analysis including Wash (ASTM C136)	\$ 179.00	Test
S629	Sieve Analysis Without Wash	\$ 126.00	Test
S630	Specific Gravity and Absorption: Coarse (ASTM C127, CTM 202)	\$ 100.00	Test
S631	Specific Gravity and Absorption: Fine(ASTM C128, CTM 207)	\$ 168.00	Test
5632	Swell/Settlement Potential: One Dimensional (ASTM D4546)	\$ 173.00	Test
S633	Unit Weight Coarse Aggregate	\$ 84.00	Test
S634	Unit Weight Fine Aggregate	\$ 84.00	Test
S635	Voids in Aggregate (ASTM C29)	\$ 95.00	Test
S636	Unconfined Compression (ASTM D2166, CTM 221)	\$ 105.00	Test
S637	LA Rattler	\$ 205.00	Test
S638	pH of soil	\$ 26.00	Test
S639	Pocket Penetration Test	\$ 11.00	Test
S640	Infiltration Rate of Soils in Field Using Double-Ring Infiltrometer (ASTM D3385)	\$ 2,200.00	Test
	Permeability of Synthetic Turf Sports Field Base Stone and Surface System by Non-Confined		
S641	Area Flood Test Method ASTM F2898	\$ 1,100.00	Test







S637	Shrinkage of Soil Mixture	\$ 290.00	Test
S638	Hydraulic Conductivity of Saturated Porous Materials by Flexible Wall (ASTM D5084)	\$ 240.00	Test
5639	Consolidated Drained Triaxial Compression Test for Soils (ASTM D7181)	\$ 280.00	Test
S640	Consolidated Undrained Triaxial Compression Test for Cohesive Soils (ASTM D4767)	\$ 315.00	Test
5641	Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils (ASTM D2850)	\$ 295.00	Test
S642	Triaxial Shear, C.D., three points, (CTM 230)	\$ 280.00	Test
S643	Triaxial Shear, C.U., three points (ASTM D4767, CTM 230)	\$ 315.00	Test
S644	Triaxial Shear, U.U., one point (ASTM D2850, CTM 230)	\$ 295.00	Test
S645	Wax Density (ASTM D1188)	\$ 63.00	Test
S646	Clay Lumps and Friable Particles (CTM 142)	\$ 55.00	Test
S647	Crushed Particles (CTM 205)	\$ 75.00	Test
5648	Mortar Making Properties of Fine Aggregate (CTM 87)	\$ 140.00	Test

#### **Asphalt Concrete Tests**

Code	ltem	\$/Unit	Ųnit
A650	Asphalt Core Density	\$ 63.00	Test
A651	Extraction % AC by Ignition Oven (CTM 382)/ Binder	\$ 184.00	Test
A652	Gradation on Extracted Asph (ASTM D6507 and D5444, CTM 202, and CTM 382)	\$ 105.00	Test
A653	Moisture Content (CTM 370)	\$ 79.00	Test
A654	Maximum Theoretical Specific Gravity (RICE) (ASTM D2041, CTM 309)	\$ 168.00	Test
A655	Specific Gravity and Absorption: Coarse (ASTM C127, CTM 206)	\$ 95.00	Test
A656	Specific Gravity and Absorption: Fine (ASTM C128, CTM 207)	\$ 168.00	Test
A657	Sieve Analysis (ASTM D5444 and C136)	\$ 100.00	Test
A658	Sieve Analysis with Wash (ASTM D5444)	\$ 147.00	Test
A659	Sand Equivalent (ASTM D2419)	\$ 142.00	Test
A660	5 pt LTMD Bulk Specific Gravity (CTM 308, CTM 375)	\$ 299.00	Test
A661	Flat and Elongated Particles (ASTM D4791)	\$ 221.00	Test
A662	Fine Aggregate Angularity (AASHTO T304 A)	\$ 205.00	Test
A663	Maximum Density HVEEM (ASTM D1560)	\$ 221.00	Test
A664	Maximum Density Marshall (ASTM D1559 and D561)	\$ 221.00	Test
A665	Mix Stability (CTM 304)	\$ 221.00	Test
A668	Wet track Abrasion Loss (ASTM D3910), each	\$ 184.00	Test
A669	Extraction % of Emulsion (ASTM D6307)	\$ 163.00	Test
A670	Slurry seal field consistency test (ASTM D3910)	\$ 89.00	Test
A671	Maximum Theoretical Unit Weight (ASTM D2041)	\$ 160.00	Test

#### Reinforcing Steel

Code	Item	9	\$/Unit	Unit
R700	Bend Test: #11 or Smaller	\$	68.00	Test
R701	Bend Test: Larger Than # 11	\$	100.00	Test
R702	Tensile Test: #11 or Smaller	\$	89.00	Test
R703	Tensile Test: #14	\$	121.00	Test
R704	Tensile Test: #18	\$	300.00	Test
R705	Slippage Test In Addition to Tensile Test (Per Caltrans 52-1.08C)	\$	350.00	Test
R706	Tensile Test: Mechanical Splice # 11 and Smaller	\$	130.00	Test
R707	Tensile Test: Mechanical Splice # 14	\$	180.00	Test
R708	Tensile Test: Mechanical Splice # 18	\$	350.00	Test
R709	Tensile Test: Welded # 11 and Smaller	\$	90.00	Test
R710	Tensile Test: Welded # 14	\$	130.00	Test
R711	Tensile Test: Welded # 18	\$	300.00	Test
R712	Sample Straightening for Bend or Tensile Test (if required)	\$	65.00	Test
R713	Testing Multi-Wire Steel Prestressing Strand	\$	350.00	Test
R714	Tensile Test: T-Head #11 and Smaller	\$	160.00	Test
R715	Tensile Test: T-Head #14	\$	210.00	Test
R716	Tensile Test: T-Head #18	\$	300.00	Test
R717	Tensile Test: Welded Hoops # 11 and Smaller	\$	130.00	Test
R718	Tensile Test: Welded Hoops # 14	\$	180.00	Test
R719	High Strength Bolt, Nut and Washer Conformance, set, A-32	\$	135.00	Test
R720	Structural Steel Tensile Test up to 200,000 lbs. (machining extra), A370	\$	45.00	Test

#### **Metal Testing**







Code	Item		/Unit	Unit
₹714	Hardness Test (Rockwell) and Brinnel (ASTM E18)	\$	79.00	Test
R715	Hardness Test of Nuts		89.00	Test
716	Hardness Test of Bolts	\$ \$	105.00	Test
3717	Hardness Test of Washers	\$	89.00	Test
R718	ASTM F606 Bolt Axial, Wedge Tensile and Proof load	\$	125.00	Test
Concrete	e Coring Services			
Code	ltem		)/Unit	Unit
2423	Equipment Concrete (4 and 8 hour minimum)	\$	210.00	Hour
	Individual Core Prices (all prices are for a four core minimum job):	\$	-	
2424	Slab on Grade Coring for 2",3" and 4" Diameter (first 6" depth) each	\$ \$	74.00	Test
425	Slab on Grade Coring for 6" and 8" Diameter (first 6" depth) each	\$	79.00	Test
426	Slab on Grade Concrete Core (price per inch after 6" depth)	\$	11.00	Test
C427	Wall Cores 2",3" and 4" (first 6" in depth) each	\$	89.00	Test
2420	Wall Concrete Core (price per inch after 6" in depth), per inch			
C428	(Wall core pries based on Contractor supplying access to area to be cored)	\$	11.00	Inch
	Miscellaneous Concrete Coring Prices:	\$	-	
C429	Patching Slab on Grade Cored Holes with 2500 psi Concrete Patch, each	\$	21.00	Test
C430	Thickness Determination per ASTM C42, each	\$	21.00	Test
C431	Compression Strength Determination	\$	68.00	Test
Asphalt	Concrete Coring Services			
Code	Item		\$/Unit	Unit
	Alternate Individual Core Prices (all prices are for a four core minimum job):	ii		
A661	Asphaltic Concrete Cores 2",3" and 4" Diameter (First 6" in depth), each	\$	74.00	Test
4662	Asphaltic Concrete Cores 6" and 8" Diameter (First 6" in depth), each	\$	74.00	Test
4663	Asphaltic Concrete Cores price per inch after 6" in depth, each	\$	11.00	Test
	Miscellaneous Asphaltic Coring Prices:			
A664	Patching of Core Drilled Holes Using Cold Patch Material, each	\$	32.00	Test
A665	Thickness Determination per ASTM C42, each	\$	37.00	Test
A666	Specific Gravity for Determination of Percent Compaction per ASTM D 2726, each	\$	47.00	Test
A667	Specific Gravity for Determination of Percent Compaction by Paraffin, each	\$	68.00	Test
Environi	mental Tests			
	mental Tests Item		\$/Unit	Unit
Code		\$	\$/Unit 35.00	<b>Unit</b> Test
Code V800	Item	\$ \$	<del></del>	· · · · · · · · · · · · · · · · · · ·
Code V800 V801	Item Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each	\$ \$	35.00 23.00 21.00	Test Test Test
N800 N801 N802	Item Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each	\$ \$ \$ \$	35.00 23.00	Test Test Test
N800 N801 N802 N803	Item  Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each	\$ \$ \$ \$	35.00 23.00 21.00	Test Test Test Test
N800 N801 N802 N803 N804	Item  Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each	\$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00	Test Test Test Test Test
N800 N801 N802 N803 N804 N805	Item  Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00	Test Test Test Test Test Test Test Test
N800 N801 N802 N803 N804 N805 N806	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00	Test Test Test Test Test Test
N800 N801 N802 N803 N804 N805 N806 N807	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00	Test Test Test Test Test Test Test Test
N800 N801 N802 N803 N804 N805 N806 N807 N808	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00	Test Test Test Test Test Test Test Test
Code N800 N801 N802 N803 N804 N805 N806 N807 N808 N808	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 18.00 14.00	Test Test Test Test Test Test Test Test
Code N800 N801 N802 N803 N804 N805 N806 N807 N808 N808 N809 N810	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 48-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 18.00	Test Test Test Test Test Test Test Test
Code N800 N801 N802 N803 N804 N805 N806 N807 N808 N809 N810 N811	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 18.00 14.00	Test Test Test Test Test Test Test Test
Code N800 N801 N801 N803 N804 N805 N806 N807 N808 N809 N810 N811 N812	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each	* * * * * * * * * * * * * * * * *	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 18.00 14.00 12.00	Test Test Test Test Test Test Test Test
Code N800 N801 N801 N802 N803 N804 N805 N806 N807 N808 N809 N810 N811 N812	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each	* * * * * * * * * * * * * * * * * * * *	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 18.00 14.00 12.00 202.00	Test Test Test Test Test Test Test Test
Code \(\code\) \	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each	* * * * * * * * * * * * * * * * *	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 18.00 14.00 12.00 202.00 144.00	Test Test Test Test Test Test Test Test
Code N800 N801 N802 N803 N804 N805 N806 N807 N808 N809 N810 N811 N812 N813 N814 N815	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 24 hour Turnaround, each	* * * * * * * * * * * * * * * * * * * *	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 14.00 12.00 202.00 144.00 127.00	Test Test Test Test Test Test Test Test
Code N800 N801 N801 N802 N803 N804 N805 N806 N807 N808 N809 N810 N811 N812 N813 N814 N815 N816	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 24 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 48 hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 14.00 12.00 202.00 144.00 127.00 115.00	Test Test Test Test Test Test Test Test
Code N800 N801 N801 N802 N803 N804 N805 N806 N807 N808 N809 N810 N811 N812 N813 N814 N815 N816 N817	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 24 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 3-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 3-day Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 18.00 14.00 12.00 202.00 144.00 127.00 115.00	Test Test Test Test Test Test Test Test
Code N800 N801 N801 N802 N803 N804 N805 N806 N807 N808 N809 N811 N811 N8112 N813 N814 N815 N816 N817 N818	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 24 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 48 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 1000 Point Count, 4-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 14.00 12.00 202.00 144.00 127.00 115.00 110.00	Test Test Test Test Test Test Test Test
Code N800 N801 N801 N802 N803 N804 N805 N806 N807 N808 N809 N811 N812 N813 N814 N815 N816 N817 N818	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 24 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 48 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 1000 Point Count, 4-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 14.00 12.00 202.00 144.00 115.00 115.00 115.00	Test Test Test Test Test Test Test Test
Code N800 N801 N801 N802 N803 N804 N805 N806 N807 N808 N809 N810 N811 N812 N813 N814 N815 N816 N817 N818	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 24 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 3-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 3-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 1000 Point Count, 4-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 1000 Point Count, 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 1000 Point Count, 24-hour Turnaround, each	* * * * * * * * * * * * * * * * * * * *	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 14.00 12.00 202.00 144.00 127.00 115.00 115.00 115.00 110.00	Test Test Test Test Test Test Test Test
Code N800 N801 N801 N802 N803 N804 N805 N806 N807 N808 N809 N810 N811 N812 N813 N814 N815 N816 N817 N818	Asbestos Polarized Light Microscopy (PLM) 6-hour/rush Turnaround, each Asbestos Polarized Light Microscopy (PLM) 8-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 24-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 48-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 72-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 5-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 10-day Turnaround, each Phase Contrast Microscopy (PCM) 6-hour Turnaround, each Phase Contrast Microscopy (PCM) 24-hour Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 3-day Turnaround, each Phase Contrast Microscopy (PCM) 5-day Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 6-8 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 24 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 48 hour Turnaround, each Asbestos Transmission Electron Microscopy (TEM) AHERA, 3-day Turnaround, each Asbestos Polarized Light Microscopy (PLM) 1000 Point Count, 4-hour Turnaround, each Asbestos Polarized Light Microscopy (PLM) 1000 Point Count, 24-hour Turnaround, each	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.00 23.00 21.00 18.00 17.00 14.00 12.00 28.00 21.00 14.00 12.00 202.00 144.00 127.00 115.00 115.00 115.00 110.00 98.00	Test Test Test Test Test Test Test Test







N824	Asbestos TEM NIOSH 7402, 24-hour Turnaround, each	\$	111.00	Test
N825	Asbestos TEM NIOSH 7402, 72-hour Turnaround, each	\$	87.00	Test
N826	Asbestos TEM NIOSH 7402, 5-day Turnaround, each	\$	81.00	Test
N827	Asbestos TEM Microvac Dust Quantitative, 6-hour Turnaround, each	\$	345.00	Test
N828	Asbestos TEM Microvac Dust Quantitative, 24-hour Turnaround, each	\$	250.00	Test
N829	Asbestos TEM Microvac Dust Quantitative, 48-hour Turnaround, each	\$	230.00	Test
N830	Asbestos TEM Microvac Dust Qualitative, 24-hour Turnaround, each	\$	180.00	Test
N831	Asbestos TEM Microvac Dust Qualitative, 48-hour Turnaround, each	\$	173.00	Test
N832	Asbestos TEM Microvac Dust Qualitative, 3-day Turnaround, each	\$	144.00	Test
И833	Asbestos TEM Microvac Dust Qualitative, 5-day Turnaround, each	\$	127.00	Test
N834	Lead Wipe Dust (Flame Atomic Absorption), 4-hour Turnaround, each	\$	41.00	Test
N835	Lead Wipe Dust (Flame Atomic Absorption), 6-hour/same day Turnaround, each	\$	23.00	Test
N836	Lead Wipe Dust (Flame Atomic Absorption), 24-hour Turnaround, each	\$	18.00	Test
N837	Lead Wipe Dust (Flame Atomic Absorption), 48-hour Turnaround, each	\$	15.00	Test
N838	Lead Wipe Dust (Flame Atomic Absorption), 3-day Turnaround, each	\$	12.00	Test
N839	Lead Air Sample (Flame Atomic Absorption), 4-hour Turnaround, each	\$	41.00	Test
N840	Lead Air Sample (Flame Atomic Absorption), 6-hour/same day Turnaround, each	\$	23.00	Test
N841	Lead Air Sample (Flame Atomic Absorption), 24-hour Turnaround, each	\$	18.00	Test
N842	Lead Air Sample (Flame Atomic Absorption), 48-hour Turnaround, each	\$ \$	15.00	Test
N843	Lead Paint Chip (Flame Atomic Absorption), 3-day Turnaround, each	\$	12.00	Test
N844	Lead Paint Chip (Flame Atomic Absorption), 4-hour Turnaround, each	\$	41.00	Test
N845	Lead Paint Chip (Flame Atomic Absorption), 6-hour/same day Turnaround, each	\$	23.00	Test
N846	Lead Paint Chip (Flame Atomic Absorption), 24-hour Turnaround, each	\$	18.00	Test
N847	Lead Paint Chip (Flame Atomic Absorption), 48-hour Turnaround, each	\$	15.00	Test
N848	Lead Paint Chip (Flame Atomic Absorption), 3-day Turnaround, each	\$	12.00	Test
N849	Lead Soil (Flame Atomic Absorption), 3-hour Turnaround, each	\$	46.00	Test
N850	Lead Soil (Flame Atomic Absorption), 6-hour Turnaround, each	\$	35.00	Test
N851	Lead Soil (Flame Atomic Absorption), 24-hour Turnaround, each	\$	27.00	Test
N852	Lead Soil (Flame Atomic Absorption), 32-hour Turnaround, each	\$	22.00	Test
N853	Lead Soil (Flame Atomic Absorption), 48-hour Turnaround, each	\$	20.00	Test
N854	Lead Soil (Flame Atomic Absorption), 3-day Turnaround, each	\$	19.00	Test
N855	Lead Soil (Flame Atomic Absorption), 4-day Turnaround, each	\$	18.00	Test
N856	Lead Soil (Flame Atomic Absorption), 5-day Turnaround, each	\$	17.50	Test







#### Standard Fee Schedule for Environmental Sciences and Planning Services

		Hourly Rate	
Professional, Technical and Support Personnel*	January 1 – December 31, 2025	January 1 – December 31, 2026	January 1 – December 31, 2027
Senior Principal	\$330	\$342	\$354
Principal	\$318	\$329	\$341
Director	\$318	\$329	\$341
Senior Supervisor II	\$302	\$313	\$324
Supervisor I	\$282	\$292	\$302
Senior Professional II	\$264	\$273	\$283
Senior Professional I	\$246	\$255	\$264
Professional IV	\$218	\$226	\$234
Professional III	\$203	\$210	\$217
Professional II	\$180	\$186	\$193
Professional I	\$160	\$166	\$172
Associate III	\$135	\$140	\$145
Associate II	\$121	\$125	\$129
Associate I	\$113	\$117	\$121
Field Technician	\$97	\$100	\$104
Technical Editor	\$152	\$157	\$162
Project Accountant	\$129	\$134	\$139
Billing Specialist	\$111	\$115	\$119
Publishing Specialist	\$124	\$128	\$132
Clerical	\$111	\$115	\$119

<sup>\*</sup> Professional classifications include environmental scientists, urban planners, biologists, geologists, marine scientists, GHG verifiers, sustainability experts, cultural resources experts, data technology experts, and other professionals. Expert witness services consisting of depositions or in-court testimony are charged at the hourly rate of \$400.

#### Reimbursable Expenses

Direct Cost	Rates
Photocopies - B/W	\$0.25 (single-sided), \$0.45 (double-sided)
Photocopies - Color	\$1.55 (single-sided), \$3.10 (double-sided)
Photocopies - 11" by 17"	\$0.55 (B/W), \$3.40 (color)
Oversized Maps	\$8.50/square foot
Digital Production	\$15/CD, \$20/flash drive
Light-Duty and Passenger Vehicles*	\$90/day
4WD and Off-Road Vehicles*	\$150/day
100 1100 100	and for all miles incurred in ampleyee owned vehicles

<sup>\*</sup>Current IRS mileage rate for mileage over 50 and for all miles incurred in employee-owned vehicles.

Other Direct Costs. Other direct costs associated with the execution of a project, that are not included in the hourly rates above, are billed at cost plus 16%. These may include, but are not limited to, laboratory and drilling services, subcontractor services, authorized travel expenses, permit charges and filing fees, mailings and postage, performance bonds, sample handling and shipment, rental equipment, and vehicles other than covered by the above charges.

Annual Escalation. Standard rates subject to 3.5% annual escalation, on January 1.

Payment Terms. All fees will be billed to Client monthly and shall be due and payable upon receipt or as indicated in the contract provisions for the assignment. Invoices are delinquent if not paid within 10 days from receipt or per the contractually required payment terms.

Effective January 1, 2025









Equipment	Rate
Environmental Site Assessment	
Soil Vapor Extraction Monitoring Equipment	\$160
Four Gas Monitor	\$137
Flame Ionization Detector	\$110
Photo Ionization Detector	\$82
Hand Auger Sampler	\$62
Water Level Indicator, DC Purge Pump	\$46
CAPDash	\$7,500
Natural Resources Field Equipment	
UAS Drone	\$300
Spotting or Fiberoptic Scope	\$170
Petterson Bat Ultrasound Detector/Recording Equipment	\$170
Sound Level Metering Field Package (Anemometer, Tripod and Digital Camera)	\$113
GPS (Sub-meter Accuracy)	\$67
Infrared Sensor Digital Camera or Computer Field Equipment	\$57
Scent Station	\$23
Laser Rangefinder/Altitude	\$11
Pit-fall Traps, Spotlights, Anemometer, GPS Units, Sterilized Sample Jar	\$9
Mammal Trap, Large/Small	\$1.55/\$0.55
Water and Marine Resources Equipment	4000
Boat (20 ft. Boston Whaler or Similar)	\$800
Multi Parameter Sonde (Temp, Cond, Turbidity, DO, pH) with GPS	\$170
Water Quality Equipment (DO, pH, Turbidity, Refractometer, Temperature)	\$62
Refractometer (Salinity) or Turbidity Meter	\$38
Large Block Nets	\$114
Minnow Trap	\$98
Net, Hand/Large Seine	\$57
Field Equipment Packages Standard Field Package (Digital Camera, GPS, Thermometer, Binoculars, Tablet, Safety Equipment,	\$114
and Botanic Collecting Equipment)  Remote Field Package (Digital Camera, GPS, Thermometer, Binoculars, Tablet and Mifi, Delorme Satellite Beacon, 24-Hour Safety Phone)	\$144
Amphibian/Vernal Pool Field Package (Digital Camera, GPS, Thermometer, Decon Chlorine, Waders, Float Tube, Hand Net, Field Microscope)	\$170
Fisheries Equipment Package (Waders, Wetsuits, Dip Nets, Seine Nets, Bubblers, Buckets)	\$57
Underwater and Marine Sampling Gear (U/W Photo/Video Camera, Scuba Equipment (Tanks, BCD, Regulators, Wetsuits, etc.)	\$57/dive
Marine Field Package (PFDs - Personal Flotation Devices, 100-foot Reel Tapes with Stainless Carabiners, Pelican Floats, Underwater Slates, Thermometer, Refractometer, Anemometer, Various Field Guides)	\$100
Insurance, Hazard and Fees	<b>*</b>
Historic Research Fees	\$55
L&H Dive Insurance	\$57/dive
Level C Health and Safety	\$70/persor

Effective January 1, 2025







16310 Bake Parkway

# **ESTIMATE**

 Your First Choice for Potholing Services
 Date:
 Morch 11, 2025

 To:
 Quote #
 TC31125-09H

 Safa Kamangar, PE
 Expiration Date:
 December 31, 2025

 MKN
 TC31125-09H
 December 31, 2025

	roject Name:	HB Water/Wastewater On Call			Sales Person:	TC
Item# Qt		no water/ wastewater on car		Unit Price	Sales Person:	Line Total
,		Day March March Brown				Line total
1	Pothole Service (	Prevailing Wage) Per Day	\$	2,925.00		
ASPHALT REPAIR						
2	Cold Patch Aspha	It Repair (Ea)	\$	85.00		
3	10" Core (Ea)		\$	200.00		<u> </u>
4	Synthetic Overlay	(Ea) up to 4'x4' area	\$	575.00		
RAFFIC CONTROL				ì		
5	Traffic Control Pl	ans - Non Eng Stamped (Each)	\$	135.00		
6	Traffic Control PI	ans - Eng Stamped (Each)	\$	550.00		
7	Standard Traffic (	Control (Per Day)	\$	650.00		
8	Major Traffic Con	trol (Per Day)	\$	1,350.00		
9	Encroachment /	Traffic Permit Processing Fee	\$	680.00		
TRAVEL			į			
10	Mobilization / De	mobilization - (Per Day)	\$	425.00		
REPORTING						
11	PDF/Digital Flash C	ard Utility Report (1 - 10 potholes)	\$	350.00		
12	PDF/Digital Flash C	ard Utility Report (10 - 20 potholes)	\$	450.00		
OTHER COSTS						
13	Fuel Surcharge - (Pe	er Day)	\$	185.00		
14	USA Dig Alert Delinat	ion and Mark Out	\$	325.00		
15	USA Markout Paint	Removal (Per Hour) min (4) Hrs	\$	175.00		ļ., ,
16	Sand / Class II Base		\$	35.00		
	•	e paid by client prior to start of work				
Encroachment & Tra	ffic Permits N/A	Parking Meter Buyor	ts	N/A		
Deposit Amt			ŀ			
USI to:					Subtotal	\$
Delineate for USA	markout					\$
	each site, determine diameter ar	d depth of utilities			Total	\$
Backtill, compact						i
	n with PK nail, paint or stake for t	-				
repare a "Subsur	face Utility Report" w/data, photo	s and Philocation map				
Customer to:						
	ic Permit if required					
Supply pothole loc	ations					
Final restoration o	f pothole locations					
This proposal is	based on digable condition	s using the air excavation process				
Standard Notes: I	Excludes Grind/Overlay, Striping	, Sidewalk Panel Replacements				
Terms: Existing Acco		·				
-	imate", final costs will be determined	by the actual				
	irs and travel time logged.					
		This is a quotation on the	goods na	med, subject to the cond	litions, inclusions an	d/or exclusions noted above.
	ay apply if job iscancelled at site.	To accept this quotati				
Credit Application R	equired To Open Account					
		Х				Date

120 N. Andreasen Dr. Escondido, CA 92029 PH# 760/294-9449 Fax# 760/294-9490







# **PETERSON STRUCTURAL ENGINEERS**

2025 Hourly Rates

Principal-in-Charge	<i>\$305</i>
Principal	\$290
Senior Associate	\$275
Associate	\$266
Senior Project Manager	\$260
Senior Structural Engineer	\$260
Project Manager	\$242
Structural Engineer	\$242
Associate Project Manager	\$228
Senior Project Engineer	\$216
Project Engineer	\$208
Staff Engineer	\$202
Staff Designer	<i>\$196</i>
CADD Drafting	\$161
Administrative	\$150

- Vehicle mileage will be billed at current U.S. General Services Administration allowable rates and periodically adjusted according to federal updates
- Direct expenses will be billed at cost plus 10%





