CITY OF COSTA MESA
PROFESSIONAL SERVICES AGREEMENT
WITH
Z&K CONSULTANTS, INC

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made and entered into this 20th day of June, 2023 ("Effective Date"), by and between the CITY OF COSTA MESA, a municipal corporation ("City"), and Z&K Consultants, Inc ("Consultant").

RECITALS

A. City proposes to utilize the services of Consultant as an independent contractor to provide on-call public works and engineering staffing support services, as more fully described herein; and

B. Consultant represents that it has that degree of specialized expertise contemplated within California Government Code section 37103, and holds all necessary licenses to practice and perform the services herein contemplated; and

C. City and Consultant desire to contract for the specific services described in Exhibit "A" and desire to set forth their rights, duties and liabilities in connection with the services to be performed; and

D. No official or employee of City has a financial interest, within the provisions of sections 1090-1092 of the California Government Code, in the subject matter of this Agreement.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions contained herein, the parties hereby agree as follows:

1.0. SERVICES PROVIDED BY CONSULTANT

1.1. Scope of Services. Consultant shall provide the professional services described in City's Request for Proposals, attached hereto as Exhibit "A," and Consultant's Proposal, attached hereto as Exhibit "B," both incorporated herein.

1.2. Professional Practices. All professional services to be provided by Consultant pursuant to this Agreement shall be provided by personnel experienced in their respective fields and in a manner consistent with the standards of care, diligence and skill ordinarily exercised by professional consultants in similar fields and circumstances in accordance with sound professional practices. Consultant also warrants that it is familiar with all laws that may affect its performance of this Agreement and shall advise City of any changes in any laws that may affect Consultant's performance of this Agreement.

1.3. Performance to Satisfaction of City. Consultant agrees to perform all the work to the complete satisfaction of the City. Evaluations of the work will be done by the City Manager or his or her designee. If the quality of work is not satisfactory, City in its discretion has the right to:

(a) Meet with Consultant to review the quality of the work and resolve the matters of concern;

(b) Require Consultant to repeat the work at no additional fee until it is satisfactory; and/or

(c) Terminate the Agreement as hereinafter set forth.

1.4. Warranty. Consultant warrants that it shall perform the services required by this Agreement in compliance with all applicable Federal and California employment laws, including, but not limited to, those laws related to minimum hours and wages; occupational health and safety; fair employment and employment practices; workers' compensation insurance and safety in employment; and all other Federal, State and local laws and ordinances applicable to the services required under this Agreement. Consultant shall indemnify and hold harmless City from and against all claims, demands, payments, suits, actions, proceedings, and judgments of every nature and description including attorneys' fees and costs, presented, brought, or recovered against City for, or on account of any liability under any of the above-mentioned laws, which may be incurred by reason of Consultant's performance under this Agreement.

1.5. Non-Discrimination. In performing this Agreement, Consultant shall not engage in, nor permit its agents to engage in, discrimination in employment of persons because of their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military or veteran status, except as permitted pursuant to section 12940 of the Government Code.

1.6. Non-Exclusive Agreement. Consultant acknowledges that City may enter into agreements with other consultants for services similar to the services that are subject to this Agreement or may have its own employees perform services similar to those services contemplated by this Agreement.

1.7. Delegation and Assignment. This is a personal service contract, and the duties set forth herein shall not be delegated or assigned to any person or entity without the prior written consent of City. Consultant may engage a subcontractor(s) as permitted by law and may employ other personnel to perform services contemplated by this Agreement at Consultant's sole cost and expense.

1.8. Confidentiality. Employees of Consultant in the course of their duties may have access to financial, accounting, statistical, and personnel data of private individuals and employees of City. Consultant covenants that all data, documents, discussion, or other information developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed by Consultant without written authorization by City. City shall grant such authorization if disclosure is required by law. All City data shall be returned to City upon the termination of this Agreement. Consultant's covenant under this Section shall survive the termination of this Agreement.

2.0. COMPENSATION AND BILLING

2.1. Compensation. Consultant shall be paid in accordance with the fee schedule set forth in Exhibit "C," attached hereto and made a part of this Agreement. Consultant's total compensation shall not exceed Three Hundred Thousand Dollars ($ 300,000.00).

2.2. Additional Services. Consultant shall not receive compensation for any services provided outside the scope of services specified in the Consultant's Proposal unless the City Manager or designee, prior to Consultant performing the additional services, approves such additional services in writing. It is specifically understood that oral requests and/or approvals of such additional services or additional compensation shall be barred and are unenforceable.

2.3. Method of Billing. Consultant may submit invoices to the City for approval on a progress basis, but no more often than two times a month. Said invoice shall be based on the total of all Consultant's services which have been completed to City's sole satisfaction. City shall pay Consultant's invoice within forty-five (45) days from the date City receives said invoice. Each invoice shall describe in detail, the services performed, the date of performance, and the associated time for completion. Any additional services approved and performed pursuant to this Agreement shall be designated as "Additional Services" and shall identify the number of the authorized change order, where applicable, on all invoices.

2.4. Records and Audits. Records of Consultant's services relating to this Agreement shall be maintained in accordance with generally recognized accounting principles and shall be made available to City or its Project Manager for inspection and/or audit at mutually convenient times from the Effective Date until three (3) years after termination of this Agreement.

3.0. TIME OF PERFORMANCE

3.1. Commencement and Completion of Work. Unless otherwise agreed to in writing by the parties, the professional services to be performed pursuant to this Agreement shall commence within five (5) days from the Effective Date of this Agreement. Failure to commence work in a timely manner and/or diligently pursue work to completion may be grounds for termination of this Agreement.

3.2. Excusable Delays. Neither party shall be responsible for delays or lack of performance resulting from acts beyond the reasonable control of the party or parties. Such acts shall include, but not be limited to, acts of God, fire, strikes, pandemics (excluding COVID-19), material shortages, compliance with laws or regulations, riots, acts of war, or any other conditions beyond the reasonable control of a party (each, a "Force Majeure Event"). If a party experiences a Force Majeure Event, the party shall, within five (5) days of the occurrence of the Force Majeure Event, give written notice to the other party stating the nature of the Force Majeure Event, its anticipated duration and any action being taken to avoid or minimize its effect. Any suspension of performance shall be of no greater scope and of no longer duration than is reasonably required and the party experiencing the Force Majeure Event shall use best efforts without being obligated to incur any material expenditure to remedy its inability to perform; provided, however, if the suspension of performance continues for sixty (60) days after the date of the occurrence and such failure to perform would constitute a material breach of this Agreement in the absence of such Force Majeure Event, the parties shall meet and discuss in good faith any amendments to this Agreement to permit the other party to exercise its rights under this Agreement. If the parties are not able to agree on such amendments within thirty (30) days and if suspension of performance continues, such other party may terminate this Agreement immediately by written notice to the party experiencing the Force Majeure Event, in which case neither party shall have any liability to the other except for those rights and liabilities that accrued prior to the date of termination.

4.0. TERM AND TERMINATION

4.1. Term. This Agreement shall commence on July 10, 2023, and continue for a period of three years, ending on July 9, 2026, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties. This Agreement may be extended by two additional one year periods upon mutual written agreement of both parties.

4.2. Notice of Termination. The City reserves and has the right and privilege of canceling, suspending or abandoning the execution of all or any part of the work contemplated by this Agreement, with or without cause, at any time, by providing written notice to Consultant. The termination of this Agreement shall be deemed effective upon receipt of the notice of termination. In the event of such termination, Consultant shall immediately stop rendering services under this Agreement unless directed otherwise by the City.

4.3. Compensation. In the event of termination, City shall pay Consultant for reasonable costs incurred and professional services satisfactorily performed up to and including the date of City's written notice of termination. Compensation for work in progress shall be prorated based on the percentage of work completed as of the effective date of termination in accordance with the fees set forth herein. In ascertaining the professional services actually rendered hereunder up to the effective date of termination of this Agreement, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents pertaining to the services contemplated herein whether delivered to the City or in the possession of the Consultant.

4.4. Documents. In the event of termination of this Agreement, all documents prepared by Consultant in its performance of this Agreement including, but not limited to, finished or unfinished design, development and construction documents, data studies, drawings, maps and reports, shall be delivered to the City within ten (10) days of delivery of termination notice to Consultant, at no cost to City. Any use of uncompleted documents without specific written authorization from Consultant shall be at City's sole risk and without liability or legal expense to Consultant.

5.0. INSURANCE

5.1. Minimum Scope and Limits of Insurance. Consultant shall obtain, maintain, and keep in full force and effect during the life of this Agreement all of the following minimum scope of insurance coverages with an insurance company admitted to do business in California, rated "A," Class X, or better in the most recent Best's Key Insurance Rating Guide, and approved by City:

(a) Commercial general liability, including premises-operations, products/completed operations, broad form property damage, blanket contractual liability, independent contractors, personal injury or bodily injury with a policy limit of not less than One Million Dollars ($1,000,000.00) per occurrence, Two Million Dollars ($2,000,000.00) general aggregate.

(b) Business automobile liability for owned vehicles, hired, and non-owned vehicles, with a policy limit of not less than One Million Dollars ($1,000,000.00) combined single limit per accident for bodily injury and property damage.

(c) Workers' compensation insurance as required by the State of California.

Consultant agrees to waive, and to obtain endorsements from its workers' compensation insurer waiving subrogation rights under its workers' compensation insurance policy against the City, its officers, agents, employees, and volunteers arising from work performed by Consultant for the City and to require each of its subcontractors, if any, to do likewise under their workers' compensation insurance policies.

(d) Professional errors and omissions ("E&O") liability insurance with policy limits of not less than One Million Dollars ($1,000,000.00), combined single limits, per occurrence and aggregate. Architects' and engineers' coverage shall be endorsed to include contractual liability. If the policy is written as a "claims made" policy, the retro date shall be prior to the start of the contract work. Consultant shall obtain and maintain, said E&O liability insurance during the life of this Agreement and for three years after completion of the work hereunder.

5.2. Endorsements. The commercial general liability insurance policy and business automobile liability policy shall contain or be endorsed to contain the following provisions:

(a) Additional insureds: "The City of Costa Mesa and its elected and appointed boards, officers, officials, agents, employees, and volunteers are additional insureds with respect to: liability arising out of activities performed by or on behalf of the Consultant pursuant to its contract with the City; products and completed operations of the Consultant; premises owned, occupied or used by the Consultant; automobiles owned, leased, hired, or borrowed by the Consultant."

(b) Notice: "Said policy shall not terminate, be suspended, or voided, nor shall it be cancelled, nor the coverage or limits reduced, until thirty (30) days after written notice is given to City."

(c) Other insurance: "The Consultant's insurance coverage shall be primary insurance as respects the City of Costa Mesa, its officers, officials, agents, employees, and volunteers. Any other insurance maintained by the City of Costa Mesa shall be excess and not contributing with the insurance provided by this policy."

(d) Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the City of Costa Mesa, its officers, officials, agents, employees, and volunteers.

(e) The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5.3. Deductible or Self Insured Retention. If any of such policies provide for a deductible or self-insured retention to provide such coverage, the amount of such deductible or self-insured retention shall be approved in advance by City. No policy of insurance issued as to which the City is an additional insured shall contain a provision which requires that no insured except the named insured can satisfy any such deductible or self-insured retention.

5.4. Certificates of Insurance. Consultant shall provide to City certificates of insurance showing the insurance coverages and required endorsements described above, in a form and content approved by City, prior to performing any services under this Agreement.

5.5. Non-Limiting. Nothing in this Section shall be construed as limiting in any way, the indemnification provision contained in this Agreement, or the extent to which Consultant may be held responsible for payments of damages to persons or property.

6.0. GENERAL PROVISIONS

6.1. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to any matter referenced herein and supersedes any and all other prior writings and oral negotiations. This Agreement may be modified only in writing, and signed by the parties in interest at the time of such modification. The terms of this Agreement shall prevail over any inconsistent provision in any other contract document appurtenant hereto, including exhibits to this Agreement.

6.2. Representatives. The City Manager or his or her designee shall be the representative of City for purposes of this Agreement and may issue all consents, approvals, directives and agreements on behalf of the City, called for by this Agreement, except as otherwise expressly provided in this Agreement.

Consultant shall designate a representative for purposes of this Agreement who shall be authorized to issue all consents, approvals, directives and agreements on behalf of Consultant called for by this Agreement, except as otherwise expressly provided in this Agreement.

6.3. Project Managers. City shall designate a Project Manager to work directly with Consultant in the performance of this Agreement.

Consultant shall designate a Project Manager who shall represent it and be its agent in all consultations with City during the term of this Agreement. Consultant or its Project Manager shall attend and assist in all coordination meetings called by City.

6.4. Notices. Any notices, documents, correspondence or other communications concerning this Agreement or the work hereunder may be provided by personal delivery or mail and shall be addressed as set forth below. Such communication shall be deemed served or delivered: (a) at the time of delivery if such communication is sent by personal delivery, and (b) 48 hours after deposit in the U.S. Mail as reflected by the official U.S. postmark if such communication is sent through regular United States mail.

IF TO CONSULTANT:	IF TO CITY:
Z&K Consultants	City of Costa Mesa
17130 Van Buren Blvd. #122	77 Fair Drive
Riverside, CA 92504	Costa Mesa, CA 92626
Tel: (951) 310-7470	Tel: (714) 754-5323
Attn: Crystal Fraire	Attn: Seung Yang

Courtesy copy to:

City of Costa Mesa
77 Fair Drive
Costa Mesa, CA 92626
Attn: Finance Dept. | Purchasing

6.5. Drug-Free Workplace Policy. Consultant shall provide a drug-free workplace by complying with all provisions set forth in City's Council Policy 100-5, attached hereto as Exhibit "D" and incorporated herein. Consultant's failure to conform to the requirements set forth in Council Policy 100-5 shall constitute a material breach of this Agreement and shall be cause for immediate termination of this Agreement by City.

6.6. Attorneys' Fees. In the event that litigation is brought by any party in connection with this Agreement, the prevailing party shall be entitled to recover from the opposing party all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party in the exercise of any of its rights or remedies hereunder or the enforcement of any of the terms, conditions, or provisions hereof.

6.7. Governing Law. This Agreement shall be governed by and construed under the laws of the State of California without giving effect to that body of laws pertaining to conflict of laws. In the event of any legal action to enforce or interpret this Agreement, the parties hereto agree that the sole and exclusive venue shall be a court of competent jurisdiction located in Orange County, California.

6.8. Assignment. Consultant shall not voluntarily or by operation of law assign, transfer, sublet or encumber all or any part of Consultant's interest in this Agreement without City's prior written consent. Any attempted assignment, transfer, subletting or encumbrance shall be void and shall constitute a breach of this Agreement and cause for termination of this Agreement. Regardless of City's consent, no subletting or assignment shall release Consultant of Consultant's obligation to perform all other obligations to be performed by Consultant hereunder for the term of this Agreement.

6.9. Indemnification and Hold Harmless. Consultant agrees to defend, indemnify, hold free and harmless the City, its elected officials, officers, agents and employees, at Consultant's sole expense, from and against any and all claims, actions, suits or other legal proceedings brought against the City, its elected officials, officers, agents and employees arising out of the negligence, recklessness, or willful misconduct of the Consultant, its employees, and/or authorized subcontractors, in the performance of the work undertaken pursuant to this Agreement. The defense obligation provided for hereunder shall apply without any advance showing of negligence or wrongdoing by the Consultant, its employees, and/or authorized subcontractors, but shall be required whenever any claim, action, complaint, or suit asserts as its basis the negligence, errors, omissions or misconduct of the Consultant, its employees, and/or authorized subcontractors, and/or whenever any claim, action, complaint or suit asserts liability against the City, its elected officials, officers, agents and employees based upon negligence, recklessness, or willful misconduct in the work performed by the Consultant, its employees, and/or authorized subcontractors under this Agreement, whether or not the Consultant, its employees, and/or authorized subcontractors are specifically named or otherwise asserted to be liable.

Notwithstanding the foregoing, the Consultant shall not be liable for the defense or indemnification of the City for claims, actions, complaints or suits arising out of the sole active negligence or willful misconduct of the City. 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 defendants is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, Consultant shall meet and confer with other parties regarding unpaid defense costs. This provision shall supersede and replace all other indemnity provisions contained either in the City's specifications or Consultant's Proposal, which shall be of no force and effect.

6.10. Independent Contractor. Consultant is and shall be acting at all times as an independent contractor and not as an employee of City. Consultant shall have no power to incur any debt, obligation, or liability on behalf of City or otherwise act on behalf of City as an agent. Neither City nor any of its agents shall have control over the conduct of Consultant or any of Consultant's employees, except as set forth in this Agreement. Consultant shall not, at any time, or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of City. Consultant shall secure, at its sole expense, and be responsible for any and all payment of Income Tax, 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 are required, in connection with the services to be performed hereunder. Consultant shall indemnify and hold City harmless from any and all taxes, assessments, penalties, and interest asserted against City by reason of the independent contractor relationship created by this Agreement. Consultant further agrees to indemnify and hold City harmless from any failure of Consultant to comply with the applicable worker's compensation laws. City shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to City from Consultant as a result of Consultant's failure to promptly pay to City any reimbursement or indemnification arising under this paragraph.

6.11. PERS Eligibility Indemnification. In the event that Consultant or any employee, agent, or subcontractor of Consultant providing services under this Agreement claims or is determined by a court of competent jurisdiction or the California Public Employees Retirement System (PERS) to be eligible for enrollment in PERS as an employee of the City, Consultant shall indemnify, defend, and hold harmless City for the payment of any employee and/or employer contributions for PERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of City.

Notwithstanding any other agency, state or federal policy, rule, regulation, law or ordinance to the contrary, Consultant and any of its employees, agents, and subcontractors providing service under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any claims to, any compensation, benefit, or any incident of employment by City, including but not limited to eligibility to enroll in PERS as an employee of City and entitlement to any contribution to be paid by City for employer contribution and/or employee contributions for PERS benefits.

6.12. Cooperation. In the event any claim or action is brought against City relating to Consultant's performance or services rendered under this Agreement, Consultant shall render any reasonable assistance and cooperation which City might require.

6.13. Ownership of Documents. All findings, reports, documents, information and data including, but not limited to, computer tapes or discs, files and tapes furnished or prepared by Consultant or any of its subcontractors in the course of performance of this Agreement, shall be and remain the sole property of City. Consultant agrees that any such documents or information shall not be made available to any individual or organization without the prior consent of City. Any use of such documents for other projects not contemplated by this Agreement, and any use of incomplete documents, shall be at the sole risk of City and without liability or legal exposure to Consultant. City shall indemnify and hold harmless Consultant from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from City's use of such documents for other projects not contemplated by this Agreement or use of incomplete documents furnished by Consultant. Consultant shall deliver to City any findings, reports, documents, information, data, in any form, including but not limited to, computer tapes, discs, files audio tapes or any other Project related items as requested by City or its authorized representative, at no additional cost to the City.

6.14. Public Records Act Disclosure. Consultant has been advised and is aware that this Agreement and all reports, documents, information and data, including, but not limited to, computer tapes, discs or files furnished or prepared by Consultant, or any of its subcontractors, pursuant to this Agreement and provided to City may be subject to public disclosure as required by the California Public Records Act (California Government Code section 6250 *et seq*.). Exceptions to public disclosure may be those documents or information that qualify as trade secrets, as that term is defined in the California Government Code section 6254.7, and of which Consultant informs City of such trade secret. The City will endeavor to maintain as confidential all information obtained by it that is designated as a trade secret. The City shall not, in any way, be liable or responsible for the disclosure of any trade secret including, without limitation, those records so marked if disclosure is deemed to be required by law or by order of the Court.

6.15. Conflict of Interest. Consultant and its officers, employees, associates and subconsultants, if any, will comply with all conflict of interest statutes of the State of California applicable to Consultant's services under this agreement, including, but not limited to, the Political Reform Act (Government Code sections 81000, *et seq*.) and Government Code section 1090. During the term of this Agreement, Consultant and its officers, employees, associates and subconsultants shall not, without the prior written approval of the City Representative, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subconsultants to abstain from a decision under this Agreement pursuant to a conflict of interest statute.

6.16. Responsibility for Errors. Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the City's representative, regarding any services rendered under this Agreement at no additional cost to City. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to City, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of City and to participate in any meeting required with regard to the correction.

6.17. Prohibited Employment. Consultant will not employ any regular employee of City while this Agreement is in effect.

6.18. Order of Precedence. In the event of an inconsistency in this Agreement and any

of the attached Exhibits, the terms set forth in this Agreement shall prevail. If, and to the extent this Agreement incorporates by reference any provision of any document, such provision shall be deemed a part of this Agreement. Nevertheless, if there is any conflict among the terms and conditions of this Agreement and those of any such provision or provisions so incorporated by reference, this Agreement shall govern over the document referenced.

6.19. Costs. Each party shall bear its own costs and fees incurred in the preparation and negotiation of this Agreement and in the performance of its obligations hereunder except as expressly provided herein.

6.20. Binding Effect. This Agreement binds and benefits the parties and their respective permitted successors and assigns.

6.21. No Third Party Beneficiary Rights. This Agreement is entered into for the sole benefit of City and Consultant and no other parties are intended to be direct or incidental beneficiaries of this Agreement and no third party shall have any right in, under or to this Agreement.

6.22. Headings. Paragraphs and subparagraph headings contained in this Agreement are included solely for convenience and are not intended to modify, explain or to be a full or accurate description of the content thereof and shall not in any way affect the meaning or interpretation of this Agreement.

6.23. Construction. The parties have participated jointly in the negotiation and drafting of this Agreement and have had an adequate opportunity to review each and every provision of the Agreement and submit the same to counsel or other consultants for review and comment. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement, this Agreement shall be construed as if drafted jointly by the parties and in accordance with its fair meaning. There shall be no presumption or burden of proof favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

6.24. Amendments. Only a writing executed by the parties hereto or their respective successors and assigns may amend this Agreement.

6.25. Waiver. The delay or failure of either party at any time to require performance or compliance by the other of any of its obligations or agreements shall in no way be deemed a waiver of those rights to require such performance or compliance. No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the party against whom enforcement of a waiver is sought. The waiver of any right or remedy in respect to any occurrence or event shall not be deemed a waiver of any right or remedy in respect to any other occurrence or event, nor shall any waiver constitute a continuing waiver.

6.26. Severability. If any provision of this Agreement is determined by a court of competent jurisdiction to be unenforceable in any circumstance, such determination shall not affect the validity or enforceability of the remaining terms and provisions hereof or of the offending provision in any other circumstance. Notwithstanding the foregoing, if the value of this Agreement, based upon the substantial benefit of the bargain for any party, is materially impaired, which determination made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.

6.27. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original. All counterparts shall be construed together and shall constitute one agreement.

6.28. Corporate Authority. The persons executing this Agreement on behalf of the parties hereto warrant that they are duly authorized to execute this Agreement on behalf of said parties and that by doing so the parties hereto are formally bound to the provisions of this Agreement.

[Signatures appear on following page.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their respective authorized officers, as of the date first above written.

CONSULTANT

_____ Date: _____
Signature

_____
[Name and Title]

CITY OF COSTA MESA

_____ Date: _____
Lori Ann Farrell Harrison
City Manager

ATTEST:

_____
Brenda Green
City Clerk

APPROVED AS TO FORM:

_____ Date: _____
Kimberly Hall Barlow
City Attorney

APPROVED AS TO INSURANCE:

_____ Date: _____
Ruth Wang
Risk Management

APPROVED AS TO CONTENT:

_____ Date: _____

Seung Yang,
Project Manager

DEPARTMENTAL APPROVAL:

_____ Date: _____

Raja Sethuraman
Public Works Director

APPROVED AS TO PURCHASING:

_____ Date: _____

Carol Molina
Finance Director

Our proposed personnel are local to the community and worked in the City of Costa Mesa and surrounding areas. We are excited to serve the City of Costa Mesa.

Costa Mesa
City of the Arts

City of Costa Mesa







REQUEST FOR PROPOSAL (RFP NO. 23-13) ON-CALL PUBLIC WORKS/ENGINEERING STAFF SUPPORT SERVICES

Z&K CONSULTANTS
BUILDING SOLUTIONS

April 6, 2023

COVER LETTER

April 6, 2023

Stephanie Urueta
City of Costa Mesa, Public Works Department
77 Fair Drive, 1st Floor, Costa Mesa, CA 92626

Subject: Request for Proposal (RFP No. 23-13) for On-Call Public Works/Engineering Staff Support Services

Dear Ms. Urueta,

Z&K Consultants Inc. (Z&K) proudly presents our proposal to the City of Costa Mesa Request for Proposal (RFP No. 23-13) for On-Call Public Works/Engineering Staff Support Services. Our Team has successfully completed Projects in the City of Costa Mesa, including the **Citywide Parkway Maintenance, Street Rehabilitation, and Slurry Seal Project (City Project No. 21-03) and the Jack Hammett Sports Complex Parking Lot and ADA Upgrades Project, City Project No. 21-05.**

Z&K is a certified Disadvantaged Business Enterprise (DBE), Women's Business Enterprise (WBE), and Small Business Enterprise (SBE) in Southern California. The Z&K Team specializes in the provision of On-Call Services, Civil Design, Construction Management, Project Management, Engineering Services, Construction Administration, Construction Inspection, Pre-Construction Inspection, Staff Augmentation, and other Professional Engineering Consulting Services. The Z&K Team has held numerous similar contracts for local agencies.

We are proud to team up with EXP U.S. Services, Inc., David Evans & Associates, and Converse Consultants to provide the requested services. Z&K is proposing the same experienced team members that successfully managed similar on-call contracts. This Team works efficiently and with great comradery with City staff to achieve the community's goals.

Z&K has carefully selected this "A-Team" and has committed our most qualified staff for the duration of the contract to deliver successful the City's Projects. Our team members' unmatched experience in On-Call Public Works/Engineering Staff Support Services of similar projects makes the Z&K team uniquely qualified to provide the requested services.

We maintain an extensive history of working with various local agencies, including the City of Costa Mesa. Throughout the completion of many projects, our team has demonstrated an unparalleled ability to work well with local agency staff, project stakeholders, engineers, designers, and contractors. We have successfully delivered projects in a timely and cost-effective manner and have acquired a keen understanding of local agency requirements. We will dedicate the necessary resources to complete each assignment on time and within budget. Our key personnel will be assigned to the project for the entire duration and will not be removed or replaced without concurrence from the City.

I will serve as the contact person for the full duration of the contract, and I am authorized to bind the firm to the terms of the proposal and execute legal documents on behalf of the firm. Z&K Consultants, Inc. does not have any exceptions and commits to accept the terms and conditions to in the RFP and Professional Services Agreement. We acknowledge that the City issued did not issue any addendums or Q&A responses. By signing below, I attest that all information submitted with the proposal is true and correct. The proposal and cost proposal will remain valid for a period of not less than 180 calendar days from the date of submittal.

Sincerely,

Crystal Fraire

Crystal Fraire, PE | President, Z&K Consultants Inc.
17130 Van Buren Blvd. | Suite 122 | Riverside, CA 92504
951.310.7470 | cfraire@zandkconsultants.com

Our proposed Team have successfully served the following Cities/Agencies (OVER 50) with exceptional client service to:

- City of Chino
- City of Rancho Pales Verdes
- City of Manhattan Beach
- City of Irwindale
- City of San Bernardino
- City of Oceanside
- City of Norco
- City of Pomona
- City of Corona
- City of Lancaster
- City of Beaumont
- City of Temecula
- City of Moreno Valley
- City of Eastvale
- City of Laguna Beach
- City of Santa Monica
- City of Compton
- City of Torrance
- City of San Marino
- City of Alhambra
- City of Norwalk
- City of Rosemead
- City of Costa Mesa
- City of Lake Forest
- City of Los Angeles
- City of Seal Beach
- City of Huntington Beach
- City of Long Beach
- City of La Mirada
- City of Yorba Linda
- City of Bakersfield
- Long Beach Water Department
- County of Riverside Transportation Department
- County of Los Angeles
- County of Orange
- County of San Bernardino
- Caltrans D8 PM
- Caltrans D8 A&E
- Caltrans D7 A&E

BACKGROUND AND PROJECT SUMMARY SECTION

Z&K Consultants Inc. (Z&K) is a leading provider of Public Works/Engineering Staff Support Services. We are a full-service civil engineering firm specializing in professional engineering services ranging from design, program management, project management, construction management, construction inspection, structural engineering, plan review, surveying, environmental, and staff augmentation.

The Z&K Team with EXP U.S. Services, Inc. has successfully completed similar contracts with local municipalities in the past. Z&K has exceptional experience providing Public Works/Engineering Staff Support Services of projects for Southern California municipal agencies in the following project types/features: Street resurfacing and reconstruction, including pavement design, concrete curb, gutter and ramps, street and storm drain in-ground and above-ground pump stations, sewer and storm drain pipe replacement, shoreline upgrades and repairs, including rip-rap, concrete seawalls, bridge abutments, and docks, lagoon pumps and weir systems, park improvements, including play fields and courts, pathways, buildings, and field lighting, site grading retaining walls, and utility replacement, traffic signal and street lighting equipment replacement, including pole and cabinet foundations and conduits, and land surveying, mapping, tract and parcel map processing.

Z&K has successfully held over 5On-Call contracts in the last 5 years providing Design, Project Management, Construction Management, Inspection, and Program Management.

Our proposed Z&K team has successfully delivered numerous similar projects, ahead of schedule and under budget. Z&K has identified a multidisciplinary team to deliver excellent engineering services for the City of Costa Mesa's upcoming Projects. The Z&K team knows the importance of providing qualified and experienced personnel, capable of working independently, that arrive on-site properly equipped and have the necessary safety and technical training to start work with no learning curve.

Z&K commits to providing our best engineering services for timely project completion. We will dedicate the necessary resources to complete each assignment on time and within budget. Our key personnel will be assigned to the project for the entire duration and will not be removed or replaced without concurrence from the City. We maintain close attention to our clients by tracking our contract budgets and schedules.

The Z&K Team has extensive experience providing On-Call Engineering Services on similar projects to over 40 agencies in the last 5 years. The Z&K Team has provided On-Call Engineering Services for the following agencies:

- City of Chino
- City of Rancho Pales Verdes
- City of Manhattan Beach
- City of Irwindale
- City of San Bernardino
- City of Oceanside
- City of Norco
- City of Pomona
- City of Corona
- City of Lancaster
- City of Beaumont
- City of Temecula
- City of Moreno Valley
- City of Eastvale
- City of Laguna Beach
- City of Santa Monica
- City of Compton
- City of Torrance
- City of San Marino
- City of Alhambra
- City of Norwalk
- City of Rosemead
- City of Costa Mesa
- City of Lake Forest
- City of Los Angeles
- City of Seal Beach
- City of Huntington Beach
- City of Long Beach
- City of La Mirada
- City of Yorba Linda
- City of Bakersfield
- Long Beach Water Department
- County of Riverside Transportation Department
- County of Los Angeles
- County of Orange
- County of San Bernardino
- Caltrans D8 PM and A&E
- Caltrans D7 A&E
- Caltrans D11 PM
- Caltrans D59 A&E
- Caltrans D5 A&E

Z&K is proud to team up with EXP U.S. Services, Inc. (EXP), David Evans, and Converse Consultants (Converse) deliver the City's Projects. The Z&K Team has carefully identified the City's diverse projects from the list.

We put together a multidisplinary team to deliver all phases of a project including project development, design and construction. Our Team is composed of experts in transportation, streets, traffic, water, sewer, storm drains, sanitation, parks, public facilities, GIS, and other miscellaneous projects.

SCOPE OF WORK

Z&K has thoroughly reviewed the Request for Proposals (RFP); we confirmed our team will provide all scope of work tasks as outlined in the RFP scope of services to ensure the success of the City of Costa Mesa's Project. Z&K acknowledges our ability to meet potential project requirements for the variety of work listed under the scope of services. The Z&K Team, at a minimum, will perform the following:

1. Provide Staff and Services on an On-Call, As-Needed Basis | Z&K will provide staff and services for Costa Mesa's projects on an on-call and as-needed basis. Z&K has carefully selected this "A-Team" and committed our most qualified staff for the duration of the contract to deliver successful projects. Z&K's philosophy is to protect the Owner's interests, be fair and understanding of the Contractor's issues, and document that the Owner receives a quality product. Our team is composed of experienced personnel with careers dedicated to public works construction. Our team is local with the capacity and flexibility to serve the City's needs. Our services are focused on assuring the highest quality of construction in the most cost effective and responsive manner.

2. Provide Civil Design and/or Construction Management Services for Repair and Replacement of City Infrastructure, Ranging from Street Improvement, Building Maintenance, and Any Other Infrastructure Related Projects | We will develop a clear understanding of design criteria, guidelines and standards up-front that will be used for the project is critical to the success of any project. Our team of designers have diverse experience allowing Z&K to offer design services for repair and replacement of City infrastructure, street improvements, building maintenance, land development, roadway, buildings, wastewater/water treatment facilities, pipelines, and seismic retrofit. Z&K will ensure that technical clearly identify key design criteria for a project and obtain concurrence from the appropriate Agency personnel. In addition, Z&K assigned project manager and our key Leaders have a long history of performing similar work, thus our team is intimately familiar with all aspects of the project Development process including design standards and design manuals, and preparation of specifications and bid documents. Z&K will provide civil design and/or construction management services for repair and replacement of City infrastructure. The Z&K Team has the knowledge, skill, and experience to provide the requested services for this contract. Throughout the project, the Team will review contract documents, plans, and permits. Inspectors will monitor and enforce construction noticing requirements. The Inspectors' primary duties will be to inspect and verify all work in place meets the requirements of the contract plans and specifications, traffic control plans, shop drawings, change orders, and O&M. Inspectors will meet with the project design team, City's consultants, and City staff to work out any problems and resolve issues quickly and efficiently. The Team will make recommendations to the City for any required special inspection or testing of work not in compliance with the provisions of the contract documents. Z&K Consultants take extreme pride for being a very safety conscious organization implementing a safe environment both in our offices and on our project sites. We monitor the Contractor and their subcontractors for safety compliance for meeting local, state, and federal safety requirements. Z&K will review the contractor's safety program for compliance with Cal/OSHA.

3. Provide In-House Personnel or Sub-Consultants for Civil, Land Surveying, Structural, Mechanical, Electrical, and Landscaping Architecture | The Z&K team will provide in-house personnel or sub-consultants based on the City's needs. The Z&K Team has carefully identified the City's diverse projects. We put together a multi-disciplinary team to deliver all phases of a project including project development, design and construction. Our Team is composed of experts in transportation, streets, traffic, water, sewer, storm drains, sanitation, parks, public facilities, and other miscellaneous projects. This team can provide services for specialty categories such as electrical, structures, and landscape.

4. Provide the Full Range of Engineering Services Including Preliminary Studies, Public Outreach, Drawings, Specifications, Estimates and Other Professional Services | We will provide the Full Range of Engineering Services Including Preliminary Studies, Public Outreach, Drawings, Specifications, Estimates and Other Professional Services Z&K understands the importance of public outreach and community interaction. When filling an extension of staff role, as we would anticipate with this contract, we know that we are always representing the City. Our inspectors and engineers strive to manage each project with as little inconvenience to the surrounding public as possible and are constantly vigilant of possible problems and/or complaints. While always attempting to resolve issues in the field, we will also keep City management informed of any significant issues immediately, so they are aware of the situation before it becomes escalated to senior management or council members. Z&K will perform a constructability review of the construction documents, prepare the Construction Management Procedures Manual, establish project filing, and conduct a project schedule workshop for the Contractor. Z&K will schedule, coordinate, and conduct a pre-construction conference with the City, contractor, utilities and other agencies.

5. Review and Develop Standard Plans and Specifications | Z&K will review and develop standard plans and specifications. Z&K has a strong knowledge of the City, County, State, and Federal codes and procedures that are required to deliver a successful project. The team proposed on these projects have extensive experience in project management, construction inspection, and construction management. We have successfully utilized PM/CM Agency delivery on a host of projects. Through this experience, we have developed project management procedures that promote collaboration and teamwork, improve quality and maximize the value of the above project. Z&K's past performance with Cities, Counties, and other agencies shows our remarkable ability to control project costs, guarantee great quality of work, and meet all project deadlines. We understand the importance of adhering to the project budget and schedule control and are known in the industry for assisting the contractor to cut the project schedule and to yield significant savings for our clients through reduction of overhead construction management and construction costs. The most significant saving is less inconvenience to the traveling public and less public exposure due to shortened construction duration. This will help extend excess project funds into other important projects.

Z&K team members have the knowledge, skill, and experience to ensure that all the materials and anticipated construction operations for this contract and will be on site to monitor and document daily progress of the contractor and verify that all work in place is compliant with the project plans and specifications, and design criteria. Z&K has a strong knowledge of the City, County, State, and Federal codes and procedures that are required to deliver a successful project. Z&K will ensure that all codes and procedures are properly followed for the City's Project. Z&K will ensure that the City has all necessary information to comply with any funding requirements. Our team is experienced in complying with funding reporting and filing requirements. Our Project Managers, Construction Managers, and Inspectors will be able to provide an in-depth field review and biddability, constructability, and claim avoidance review.

6. Respond to Plan Check Comments for Building Permits | The team will respond to plan check comments for building permits. Our Project Managers will track the plan check process and ensure that all stakeholders and City personnel complete the appropriate plan check reviews. Z&K's Project Managerwill prepare and maintain a critical path method schedule to monitor the project progress, define the critical path tasks, and provide, on a monthly basis, an update of accomplishments and projected project schedule goals for the following month. We will check the schedule for activities with start dates that did not begin during the review period. This proactive approach flags potential delay issues.

7. During Construction, Make On-Site Visits; Review Material Submittals, Shop Drawings and Test Results; Respond to RFPs; Draft Change Orders; and Review Pay Estimates | The team will make frequent on-site visits during the duration of the project. We will review all material submittals and respond to RFPs. Z&K will create redlines on as-built drawings and coordinate the as-built plans with the Design Engineer. We will manage the Design Engineer's performance on the as-built drawings and check the record drawings prior to transferring to the City. Z&K Consultants will prepare a final report detailing the work completed, costs, changes, warranties, and documentation provided to the City. The report will also include a section on future suggestions and lessons learned. Z&K works proactively to eliminate or reduce project impacts from potential change orders.



Z&K will provide first-line management of change order administration including evaluation of change order requests; independent estimates; project mitigation; written approval from the City prior to approval of any extra work; investigation and inspection of differing site conditions; schedule impact analysis; impact mitigation; and verification of costs. Z&K will continuously prepare independent cost estimate change orders and schedule analysis of work to ensure that all change orders are of technical merit prior to execution. We will work closely under the direction of the City and with the Contractor to verify that the contractor's payments are processed, provide recommendations, and ensure they are executed promptly by the contract documents and City's procedures. Z&K will work with the Contractor on required corrections to the pay requests and progress payments. The pay requests will be submitted to the City with a statement that they have been reviewed and will include recommendations for processing.

METHOD OF APPROACH

IMPLEMENTATION PLAN

The team proposed on this project have extensive experience in project management, construction management, construction inspection and design. We have successfully utilized CM/PM Agency delivery on a host of projects. Through this experience we have developed management procedures that promote collaboration and teamwork, improve quality and maximize the value of the above project. Z&K past performance with Cities, Counties, and other agencies shows our remarkable ability to control costs, guarantee great quality of work, and meet all project deadlines. We understand the importance of Schedule Control and are known in the industry for assisting the contractor to cut the project schedule and to yield significant savings for our clients through reduction of overhead management and construction costs. The most significant saving is less inconvenience to the traveling public and less City exposure due to shortened construction duration. This will help extend excess project funds into other important projects.

PROJECT MANAGEMENT APPROACH | The team proposed on these projects have extensive experience in project management, construction inspection, and construction management. We have successfully utilized PM/CM Agency delivery on a host of projects. Through this experience, we have developed project management procedures that promote collaboration and teamwork, improve quality and maximize the value of the above project. Z&K's past performance with Cities, Counties, and other agencies shows our remarkable ability to control project costs, guarantee great quality of work, and meet all project deadlines. We understand the importance of adhering to the project budget and schedule control and are known in the industry for assisting the contractor to cut the project schedule and to yield significant savings for our clients through reduction of overhead construction management and construction costs. The most significant saving is less inconvenience to the traveling public and less public exposure due to shortened construction duration. This will help extend excess project funds into other important projects. Our firm is very experienced providing project management services. Our team provides program and project management to numerous agencies throughout Southern California and is very experienced in all of the project life cycles. We understand not only construction, but how to work with designers and architects as an extension of City staff.

Our Project Managers are licensed Professional Engineers have provided project management for many Cities. They are experts at technical reviews of projects. They are known to push projects through, provide comprehensive constructability and cost savings options, and provide excellent final plans and specifications for bidding and construction. They are very thorough and ensure that the project plans and specifications are clear and inclusive, and do not leave gray areas for contractors to capitalize on. The constructability review will be crucial to the project success. A thorough constructability review of the improvements and the project specifications will be central to construction running smoothly. Z&K will have our proposed CM team, made up of licensed Professional Engineers and certified building officials, certified plan examiners, and certified building/structural/mechanical/electrical and plumbing inspectors perform constructability reviews. In addition to the CM teams review, we will have our in-house architects and structural and MEP designers perform a thorough constructability review.

Since our team will have the opportunity to be brought on during the design phase, we have had a lot of success with pre-purchasing long lead item materials on our projects. We work with the architect/designer to identify the crucial long lead items and procure these items around the 90% design. Some examples of the long lead items are the fire alarm, high performance sports lighting, mechanical equipment, traffic signal poles, etc. This helps architects/designers since they will be able to review the long lead item submittals prior to construction and will not be bombarded with all submittals at once. This also helps the project budget because the City avoids mark up on these items. The contractor also does not have to build in the risk of guaranteeing the price of the items for longer than the 30 days that vendors quote, so it provides less risk to the contractor and a better priced bid.

Since we are managing the projects, we have the opportunity to employ bidding strategies. In the current bidding environment, we have noticed that bids have been coming in significantly higher than the engineer's estimate. This creates problems and delays since the project funding was based on the engineer's estimate. Due to the current bidding environment, the engineer's estimate becomes outdated quickly. We have many options for addressing this. Z&K will thoroughly analyze the engineer's estimate at 90% design and 100% design. Z&K has in-house designers in addition to our strong project management team that are very familiar with cost estimating and the current bidding environment. We will also discuss bidding strategies with the City to help mitigate the effects of the bidding environment. Z&K provides program and project management for many agencies and have created great bidding strategies to keep the bids within budget.

We have successfully utilized CM/PM Agency delivery on a host of projects. Through this experience we have developed project management procedures that promote collaboration and teamwork, improve quality and maximize the value of the above project. Z&K's past performance with Cities, Counties, and other agencies show our remarkable ability to control costs, guarantee great quality of work, and meet all project deadlines. We understand the importance of Schedule Control and are known in the industry for assisting the contractor to cut the project schedule and to yield significant savings for our clients through reduction of overhead construction management and construction costs. The most significant saving is less inconvenience to the traveling public and less City exposure due to shortened construction duration. This will help extend excess project funds into other important projects.

CONSTRUCTION MANAGEMENT APPROACH | Z&K Consultants, Inc. provides proven professional construction management techniques to ensure the safe construction of a quality project completed on time and within budget. Z&K accomplished this by establishing the systems, policies, and procedures necessary to ensure adequate project controls are in place. The Construction Manager (CM) must ensure all parties understand the basic responsibilities and interrelationships of all team member such as the Owner (both project management and operations), the Design Engineer, the Contractor, the construction management team, and the subconsultants. Additionally, a good CM must have the knowledge and experience to effectively understand the interrelationships between the key management components of time, information, cost, and quality. Decision making, including obtaining sufficient information to make reasoned decisions, is the key element leading to a successful project.

One of the key planning tools used in contract administration is the Project Procedures Manual, which details the specific processes to implement the various management components to meet the objectives of the project plan. Z&K will prepare a project-specific Project Procedures Manual to detail the specific processes to successfully manage the project. The Z&K approach is founded on a thorough understanding of each of the management components critical to the project.

TIME MANAGEMENT | Time management uses scheduling to accurately manage and track the restrictive elements of time and resources throughout the project. The key to a successfully implemented and managed schedule is the development of an accurate, detailed, and realistic baseline schedule. Z&K will review the Contractor's baseline schedule to ensure it is accurate and reasonable. Activity durations and logic ties will be examined for accuracy and constructability. The schedule logic and activity durations will also be analyzed to ensure the Contractor does not use float suppression techniques. Schedule float is a valuable resource for the Owner and the Contractor.



Schedule implementation and administration is the next step in proper time management. The Contractor's actual progress will be documented daily. The Z&K Team will review the progress with the Contractor at the weekly meetings. The Contractor's three-week-look-ahead schedule will be compared with the work plan on the record schedule to ensure the Contractor continues to use the record schedule as a management tool. We will check the record schedule for activities with start dates that did not begin during the review period. This proactive approach flags potential delay issues for further discussion. The Z&K Team has extensive experience in dealing with changes from unforeseen conditions, owner-initiated changes, and other types of delates. The Contractor will be required to submit a time impact analysis for any issue with the potential to delay the overall progress of the work. Z&K will seek ways to mitigate the delay as the first course of action. This enables creative solutions for potential delay issues.

COST MANAGEMENT | Z&K will take the lead to ensure a cost management system is properly implemented and maintained. Z&K's cost management role will be in two parts. The first is to track the value of the completed work to ensure accurate and detailed monthly progress billing by the contractor. Secondly, Z&K will proactively manage the change order process. The monthly progress billing will be tied to the construction schedule. A cost loaded critical path method (CPM) schedule is a valuable management tool. Each month, the Construction Inspector will review and approve the updated cost loaded CPM. Work activities and material deliveries will be assigned the correct completion percentage by the Contractor. This will be reviewed by the Construction Inspector and discrepancies will be addressed. If necessary, the Contractor will revise and resubmit the schedule of values. This process ensures the Owner is accurately billed for the completed work on a monthly basis.

Changes in work and unforeseen conditions will be closely monitored. Any costs for changes will be managed by the Z&K construction management team. An ongoing log of potential change issues will be maintained. These issues will be discussed and updated at each weekly meeting.

FUNDING MANAGEMENT | For state/federally funded projects, the City must comply with federal reporting requirements. Our team is experienced in complying with state and federal grant reporting and filing requirements. We pay close attention to these requirements and deadlines so that project funding remains unaffected and so that file audits are conducted quickly and efficiently. Our team is also experienced in ensuring that project documents show compliance with DBE reporting requirements, DBE goals, and/or good faith effort documented. Z&K is extremely familiar with Federal-Aid implementation and the Caltrans' Local Assistance Procedures. Proper Project documentation is key in audits conducted by the Federal Highway Administration (FHWA) and Caltrans.

INFORMATION MANAGEMENT | Proper information flow is crucial to the success of a project. A construction project generates a large amount of information, which must be disseminated to all parties on a timely basis. The source of this information will cover the full spectrum including contracts, meeting minutes, drawings and specifications, submittals, requests for information (RFIs), pay requests, invoices, inspection reports, and so forth. Z&K, as CM, will act as the hub for the management of all information flow. Z&K has extensive experience providing web-based document management solutions for its clients. Z&K's approach to information management also includes building a communication framework to continually foster partnering and teamwork relationships for all of the project stakeholders. Z&K builds this framework from the start of the project with an all-inclusive kick-off meeting where the lines of communication and project responsibilities will be clearly explained to all of the project stakeholders.

The emphasis on project communication continues throughout the project with the weekly construction meetings. At each weekly meeting, all ongoing issues will be reviewed and discussed. All project stakeholders will be invited to the weekly meeting. An agenda of meeting topics will be distributed in advance and include items such as safety, old business, updated progress of the work, RFIs, submittals, testing and inspection reports, non-conformance notices, environmental monitoring, change orders, three-week-look-ahead schedule, pay requests, and so forth. Unresolved issues will be carried over to the next week's meeting until a final resolution is obtained.

Z&K has a strong knowledge of the City, County, State, and Federal codes and procedures that are required to deliver a successful project. Some of the requirements are as follows:

- Project Construction Documents
- California Building Code
- California Plumbing Code
- California Mechanical Code
- California Electrical Code
- California Building Energy Efficiency Standards
- Title 24, Part 2, 2.5, 3, 4, 5, 6, 11
- California Fire Code
- California Residential Code
- California Green Building Code
- California Disabled Regulations
- City Codes & Ordinances
- City Grading Code & Manual
- APWA "Greenbook" Standard Specifications for Public Works Construction
- Caltrans Standards, Specifications, and Procedures
- Caltrans Construction Manual





- Caltrans Safety Manual
- OSHA Construction Safety Orders
- 10/30-hr OSHA Training Certification
- Local Assistance Procedures Manual (LAPM)
- City Standards and Design Manuals
- State and Federal Building Codes (Site Accessibility)
- County Procedures and Guidelines
- Work Area Traffic Control Handbook (WATCH) Manual
- Manual of Uniform Traffic Control Devices (MUTCD)
- Project Safety Plan (PSP)
- Site Health and Safety Plan
- Activity Hazard Analysis (AHA)

QUALITY MANAGEMENT | Quality management is an inherent CM responsibility. Z&K is knowledgeable and capable in all aspects of quality management. Quality assurance is the application of systematic methods to verify the effective implementation of quality control procedures. Z&K will manage the quality of the project by taking the quality assurance lead role and implementing the Z&K quality assurance program, which allocates quality control responsibilities to the various project participants to ensure the constructed product conforms to the contract plans and specifications. This includes a detailed inspection plan, inspection procedures, and documentation procedures for all inspection and test reports. Z&K will review the Contractor's quality control procedures to ensure adequacy. Quality control issues will be discussed at each weekly meeting. A deficiencies/corrective items list will be maintained, reviewed, and updated weekly.

APPROACH TO PROJECTS & CLIENT SATISFACTION

STREET REHABILITATION AND IMPROVEMENT | To support the City with their Street Rehabilitation program, our team with their expertise and local knowledge can provide solutions to extend the life of local streets and major thoroughfares. Our team of roadway and traffic engineers uses a life cycle cost analysis to work towards a pavement design that reduces overall maintenance cost to the City. In addition to pavement repair, other roadway improvement considerations include sidewalks, curb ramps, curb and gutter and drainage correction.

SITE CIVIL, PARKING LOTS, ADA COMPLIANCE | Our strong experience with ADA compliance across a variety of clients gives our team the ability to quickly assess the challenges and develop the right solutions to improve pedestrian safety and accessibility. We consider both temporary and permanent impacts to the project site and adjacent properties in the development of solutions since construction activities will occur near residential and business areas. Based on very recent project experience, we are well-versed at assessing existing ramps and developing solution alternatives that comply with current ADA and municipal standards that minimize impacts to adjacent properties. Our team also has vast experience with civil design in existing and new parking lots for electric vehicle charging stations that must comply with local jurisdiction, EV manufacturer, utility company and ADA standards. We have developed unique and effective solutions when working within an existing parking lot with space constraints to minimize loss of parking stalls and impacts to both pedestrian and vehicular circulation.

DRAINAGE | Our Drainage Team has been providing design services in Orange County for over 15 years. studies have been conducted to identify deficiencies along PCH for a traffic rehabilitation and ADA upgrades project. This experience along with our understanding of the City's flood protection requirements will provide the City of Costa Mesa with the team to successfully complete any drainage related projects. Our specialized and technical drainage engineers have prepared numerous drainage studies from complex hydrologic modeling to detailed storm drain design. We understand specific requirements and design standards set forth by the City. Our typical approach to drainage follows the same proven process applied to all projects. We take each step of the analysis to ensure that it meets not only the design criteria, but also sound engineering judgment. We eliminate unnecessary assumptions with calculations and documentations. Parameters used in the analysis have been carefully assessed. We don't take the easy route of being conservative in our design. We make sure every design element has back-up calculations. Drainage Plans will be prepared to follow the City checklist such as catch basin locations, outlets, grading, flow direction, proposed easements, down drains and terrace drains, slopes, channels, and other structures.

TRAFFIC ANALYSIS | Our team will work closely with City's Traffic Engineering team to review residents' and other stakeholders' concerns regarding capital improvements, traffic operation and analysis, traffic safety and relevant tasks such as parking demand, traffic control devices, traffic simulation, schools and in general, traffic circulation and traffic operation matters and address their concerns. We are experienced in performing roadside safety analysis and traffic safety studies for intersections, pedestrian crossings, bicycle paths, schools, and other areas where the City has a safety concern. Our traffic team can evaluate the need for traffic control devices and lighting conditions to provide improvement plans and alternatives for traffic calming measures. We will conduct site visits to collect required data and relevant information to evaluate the existing condition and utilize appropriate measures and tools to develop effective approaches to address any issues. We have been working with Caltrans and local municipalities and is very familiar with existing guidelines, manuals, specifications, and applicable tools. We will provide reports to meet Caltrans requirements for TOAR, ICE, DSDD and PEER and other documents.

CONSTRUCTION MANAGEMENT | The Construction Management Team prides itself in delivery projects from cradle to grave. We services begin with constructability reviews for projects that will be anticipate to be list for bid. Our thorough reviews include our findings, potential solutions, and any impacts to the contract. We will meet with the Designer to rectify any matters that may come up, so we ultimately have a buildable and billable bid document. Our services continue throughout the bid phase where we can summarize a validate the bids for the projects. Once bids are received, we will perform a bid analysis with the use of a Bid Summary spreadsheet to assess the most responsive bidder and determine the lowest bidder. We will also assist the City in the preparation of the contract award package and agenda items for City Council meetings. We will also support the City in preparing for the Pre-Construction meeting. During construction we will provide services that may include roadway inspection, structures inspection, answering RFI's, submittal revies, shop plan reviews, drafting change orders, claims support, scheduling and review pay estimates. Our team is committed to closing out most projects within 2 months. This includes as-built drawings and providing all documents for the City's archiving. All documents will be provided both in a hard-copy format as well as electronic copies in an external hard drive for the City's usage.

QUALIFICATIONS & EXPERIENCE OF FIRM

Z&K Consultants, Inc. is a California C Corporation. Our corporate office address is 17130 Van Buren Blvd., Suite 122, Riverside, CA 92504. Crystal Fraire, PE, QSD/P is the President and officer of the firm. There are no other businesses owned or controlled by the applicant doing similar business in California under another name. There are no other businesses for which the business manager is or was an officer, director, partner doing similar business in California under another name. Z&K Consultants, Inc. has been in business since 2009, or 14 years.

Our Projects include the following similarities to the City's upcoming Projects:

- ✓ Street Resurfacing & Reconstruction
- ✓ Pavement Design
- ✓ Concrete Curb, Gutter & Ramps
- ✓ Sewer and Storm Drain In-Ground and Above-Ground Pump Stations
- ✓ Sewer and Storm Drain Pipe Replacement
- ✓ Shoreline Upgrades & Repairs
- ✓ Rip-rap, Concrete seawalls, bridge abutment, and docks
- ✓ Lagoon Pumps and Weir Systems
- ✓ Park Improvements
- ✓ Play Fields and Courts, Pathways, Buildings, and Field Lighting
- ✓ Site Grading, Retaining Walls, and Utility Replacement
- ✓ Traffic Signal and Street Lighting Equipment Replacement
- ✓ Pole and Cabinet Foundations and conduits
- ✓ Land Surveying, Mapping, Tract and Parcel Map Processing
- ✓ On-Call Services
- ✓ Civil Design
- ✓ Construction Management
- ✓ Engineering Services
- ✓ Plan Check Services

The Z&K Team has successfully performed similar on-call projects numerous public agencies. The following projects have been completed on time and within budget.

TRANSPORTATION GROUP (STREET AND TRAFFIC)

CITY OF COSTA MESA | CITYWIDE PARKWAY MAINTENANCE, STREET REHABILITATION & SLURRY SEAL PROJECT

Z&K has successfully held over 5On-Call contracts in the last 5 years providing Design, Project Management, Construction Management, Inspection, and Program Management.

Z&K Consultants, Inc. provided Construction Management and Construction Inspection of this citywide street improvement program in the City of Costa Mesa, which involves street improvements, intersection improvements, electrical and lighting improvements, drainage improvements, landscaping improvements, ADA ramp improvements, bike lanes and bike trails, conduit installation, traffic signal improvements, mobilization, curb and gutters, sidewalks, driveway approaches, spandrels, cross gutters, crack sealing, traffic signing, striping and markings, installation of traffic markers and speed humps, and implementation of traffic control. Z&K's responsibilities included attending and coordinating preconstruction conferences and progress meetings, providing contract administration for proper enforcement of the contract plans and specifications, making as-built revisions, coordinating efforts between the City and the contractor, reviewing and tracking RFIs and RFCs, reviewing progress payment requests and making recommendations, providing coordination with other agencies, submitting permit and grant applications, coordinating schedules with designers, surveyors, and materials testing laboratories, and ensured compliance with traffic control plans.

CITY OF LAKE FOREST | STREET RESURFACING OF GLENN RANCH ROAD FROM PORTOLA TO EL TORO AND SLURRY SEAL ZONE F AND ARTERIAL SLURRY SEAL JERONIMO AND MUIRLANDS FROM LOS ALISOS TO BAKE

The Z&K Team is performing construction management, contract administration, and construction inspection services for this project, which involves the street resurfacing of Glenn Ranch Road from Portola Parkway to El Toro Road, as well as the slurry seal of and arterial slurry seal of Jeronimo and Muirlands from Los Alisos to Bake. Relevant project features include street resurfacing and rehabilitation, application of slurry seal, grinding and overlay, cold milling, ARHM pavement, AC base course, aggregate base, curb and gutters, ADA ramp construction, driveway approaches, signing striping, markings and pavement legends, dig-outs, traffic signal loops, sewer and storm drain manholes, and water valves and meters.

CITY OF SAN MARINO | STREET REHABILITATION PROGRAM – PHASE 1 & 2

Z&K Consultants, Inc. is providing Construction Inspection Services for the City of San Marino's Annual Street Rehabilitation Program. The improvements include construction of cold-milling asphalt concrete pavement and re-paving with hot mix asphalt and asphalt rubber hot mix, markings, pavement legends, loop detectors, replacing damaged curb and gutter, sidewalks, driveways and driveway approaches, installing speed humps, adjusting utility frames and grates, inspection and replacement of sewer manholes, water valves, water meters, and storm drain manholes, coordinating with local utilities, preparation and implementation of NPDES and temporary construction BMPs, and providing temporary traffic control in conformance with the contract documents and applicable permits and regulations.

CITY OF CHINO | ON-CALL SERVICES

Z&K Consultants, Inc. is providing Engineering, Project Management, Construction Management, and Construction Inspection Services for this long-term, on-call contract for the City of Chino. The Z&K team has served a wide range of projects, which includes the following:

- 16th, 17th, & 18th St. Between Tronkeel Ave. and Tangerine Ave. Street Widening Project
- Ramona Ave. and Walnut Ave. Street Rehabilitation and Traffic Signal Modifications Project
- 11th St. Pavement Reconstruction Alley and Intersection Accessibility Project
- CDBG Alley Project and Alley/Sanitation Rehabilitation Project
- FY 20/21 Alley/Sanitation Rehabilitation Project
- 11th Street/B Street Project
- Kimball Ave Street Improvement Project
- G6220 - CDBG Alley Project, East-West North Chino Avenue
- SN231 - Alley Rehabilitation Project - Pioneer St from Monte Vista Ave to 5th St.
- SN221 - FY21/22 Alley Reconstruction Project
- ST222 - Kimball/El Prado/Central Traffic Improvement Project
- ADA Grievance 21-004 Curb Ramps at Olive Place & Walnut Ave
- Madison Street & Kellogg Ave Gap Closure Project
- MS 222 Slurry Seal Program
- MS 202 & ST 221 Chino Avenue Accessibility and Curb Ramp Improvements at 15th,17th and 19th Streets and Norton Avenue PCC Walk and Curb Ramps
- NC231 Schaefer Ave Localized Asphalt Repairs
- ST162 Localized Asphalt Repairs Various Locations
- R7200 Masonry Block Wall at Chino Police Department
- Yorba Ave Street Improvements – From Midblock between Chino Ave to Schaefer Ave
- F Street, G Street, 5th Street - Street Improvements
- City Hall EMT Parking Lot Improvements

CITY OF NORWALK | CDBG LOCAL STREETS REHABILITATION PROJECT

Z&K Consultants, Inc. is providing Construction Management and Inspection services for the Local Streets Rehabilitation Project, funded by the Community Development Block Grant (CDBG) fund. The scope of work includes improvements to concrete appurtenances, including cross gutters, curb and gutters, upgrades of curb ramps to ADA standards, electrical and lighting improvements, traffic signal improvements, landscaping improvement, drainage improvements, bike lanes, underground utility coordination, conduit installation, and rehabilitation of roadway pavement conditions. The Z&K Team provided engineering support, coordinated efforts between the City and the Contractor, reviewed and tracked RFIs, RFCs, and submittals, reviewed progress payment requests, performed constructability review of the plans and specifications, reviewed the contractor's schedule, monitored overall project schedule and provided the City with updates of progress, provided public relations services, coordinated with public utilities, ensured compliance with the SWPPP, and coordinated inspection of the work.

CITY OF ALHAMBRA | FY 19-20 & 20-21 STREET REHABILITATION PROJECTS (TWO SEPARATE PHASES)

The Z&K Team is performing construction management services for this project, which consists of the pavement and street rehabilitation of 23 local street segments located south of Mission Road, west of Garfield Avenue, east of Atlantic Boulevard, and north of Valley Boulevard. Improvements included slurry seal treatment, varying depths of cold mill and overlay, full depth removal and reconstruction, concrete improvements such as removal and replacement of broke and off-grade sidewalk, ADA ramps that need updating, broke and off-grade curb and gutter, driveway aprons in need or repairs, and concrete cross gutter reconstruction. Z&K provided services such as shop drawing and submittal review, daily inspection and documentation, coordination with contractor, review of contractor pay applications to verify quantities, NPDES inspection and reporting, NPDES inspection and reporting, collection of material deliveries, and quality control services.

CITY OF COMPTON: ANNUAL RESIDENTIAL REHABILITATION PROJECT – PHASE 1 & 2

Z&K Consultants, Inc. provided Construction Management and Inspection Services for this Project, along with Converse Consultants as a subconsultant providing Geotechnical Engineering Services. The scope of work consists of clearing and grubbing, construction of cold mill and AC overlay, slurry seal application, HMA pavement, ARHM overlay, AC base course, aggregate base, full depth AC slot pavement, PCC sidewalk and pavement, PCC curb and gutters, PCC cross gutter, alley intersection, sidewalk, driveway approach, curb ramps including detectable warning surfaces, PCC bus pad construction, signing, striping, markings, pavement legends, speed hump, landscaping, irrigation, storm drain and pipeline improvements, adjusting manhole and utility covers to grade, water valve, water meter, street lighting, installation of loop detectors and bicycle loop detectors, traffic signal improvement, adjustment of streetlight and traffic signal pull boxes to grade.

WATER, SEWER, STORM DRAIN, AND SANITATION

CITY OF CHINO | ON-CALL SERVICES

Z&K Consultants, Inc. is providing **Engineering, Project Management, Construction Management, and Construction Inspection** Services for this long-term, on-call contract for the City of Chino. The Z&K team has served a wide range of projects, which includes the following:

- SD223 - Chino Avenue Storm Drain Improvement Plan System
- SD222 - Philadelphia Street and Monte Vista Avenue Storm Drain Extension Project
- WA212 - State Street Water Treatment Plant
- WA214 – Well 17 Equipping Project
- WA224 - B Street Alley Water Main Line Replacement Project
- WA231 - Wells 4 & 6 Treatment Plant Project
- WA223 - Russell Ave Waterline Replacement Project
- WA17B - Chino Quad 1.2
- SW211 – Yorba Avenue & Eucalyptus Avenue Sewer Main Line Replacement Project
- WA221 & WA222 - Central Avenue and Dupont Avenue Waterline Project
- WA211 - Well 11 Pipeline Project
- D4215 Prado Inundation Area Remediation - Watertight Sewer Manhole Assembly and Streetlight Connections Retrofit Project

Z&K has successfully delivered over 36 storm drain and water/wastewater projects serving in a similar capacity over the past 5 years.

CITY OF VERNON | 50TH STREET WATER MAIN REPLACEMENT PROJECT

The Z&K Team is providing Construction Management and Inspection Services for the City of Vernon's 50th Street Water Main Replacement Project. The project's scope of work includes demolition and reconstruction of the 12" iron ductile pipeline and all associated renovations to the City's existing water services, such as installation of all appurtenances, fittings, valves, blow-offs, siphons, concrete pipe supports, thrust blocks, cathodic protection, shoring, over excavation, fill re-grade, temporary and permanent pavement, steel plating, and roadway improvements and repair. Other improvements include installation of commercial services and laterals, industrial services and laterals, installation of fire service lateral, and installation of fire hydrants and hydrant laterals.

CITY OF LAGUNA BEACH | JASMINE STREET STORM DRAIN IMPROVEMENTS CIP NO. 154

Z&K Consultants, Inc is providing Construction Inspection Services for this project for the City of Laguna Beach. The project includes the installation of approximately 2,400 linear feet of storm drainpipe within Heisler Park, Jasmine Street, Monterey Drive, Locust Street, and High Drive; including the jacking of one 28-inch steel casing and the installation of a 24-inch PVC pipe within the casing beneath North Coast Highway. The work also includes the installation of a Low-flow diversion with a 12-inch PVC pipe, the installation and/or replacement of catch basins, and connecting storm drain laterals at various locations along the project alignment, trenching, the removal and replacement of A.C. pavement and P.C.C. street improvements as required to install storm drain facilities, jacking of 28-inch steel casing, striping, pavement markings, pavement markers, and traffic control.

CITY OF FULLERTON | LONGVIEW DRIVE WATER/SEWER MAIN REPLACEMENT & STREET IMPROVEMENTS

This water, sewer, and street rehabilitation project for the City of Fullerton included replacing 2,500 LF of an 8-inch ductile iron pipe water main, as well as 2,500 LF of 8-inch vitrified clay pipe (VCP), PVC SDR 26 sewer main, installation of new manholes, removal and replacement of existing sewer and video inspection and abandoning existing water mains and valves. The project also included street and drainage improvement work, which included asphalt paving, cold planning, excavation, concrete paving, aggregate base, curb and gutter, access ramps, cross gutter, driveway approach and sidewalk replacement.

CITY OF OCEANSIDE | ON-CALL CONSULTING SERVICES FOR WATER UTILITIES DEPARTMENT

ROJA LIFT STATION IMPROVEMENT PROJECT | CITY OF OCEANSIDE

The project scope of work consists of construction of civil, mechanical, structural, electrical, controls, and instrumentation improvements at the City of Oceanside's Roja Lift Station. The lift station structures, and mechanical components have reached the end of their useful life and require complete rehabilitation. The existing submersible pumps will be removed and replaced with new submersible chopper pumps on slide rail systems that will be installed inside of the existing/rehabilitated wet well. The project includes a new concrete valve vault, rehabilitated wet well, replacement of force main yard piping, seismic retrofit of the existing structure, fall-protection safety improvements, such as exterior steel stairwell railings, as well as civil site work, new level control devices, various associated electrical and control system improvements, temporary bypass pumping, and appurtenant lift station improvement features, per Plan.

PARKS, BUILDINGS & PUBLIC FACILITIES

CITY OF COSTA MESA | JACK HAMMETT SPORTS COMPLEX IMPROVEMENT PROJECT

Z&K has successfully delivered over 32 parks and facility projects serving in a similar capacity over the past 5 years.

The Z&K Team provided Construction Management and Inspection services for the City of Costa Mesa's Jack Hammett Sports Complex Improvement project. Relevant improvements within the project include parking lot improvements including increase parking and improved circulation, concrete flatwork, ADA improvements, electrical runs to the pull boxes for storage buildings within the complex, all grading, retaining walls, fencing, park lighting, irrigation, and landscaping, rough and precise grading, foundation, construction and installation of two new storage buildings, all electrical and mechanical work within the buildings, finish grading, and flat work. Z&K is performing pre-construction services, coordinating pre-construction meeting, performing document control and tracking, managing weekly and monthly construction meetings, coordination submittal and ship drawing review, performing resolution of day-to-day construction issues, ensuring labor and safety compliance, providing claims management, and preparing progress reports.

CITY OF LYNWOOD | YVONNE BURKE – JOHN HAM PARK COMMUNITY CENTER

Z&K Consultants provided Construction Management, Project Management, and Inspection Services for this new 8,645 SF Community Center as a subconsultant to GKK Works. The project includes a kitchen, multipurpose rooms, administration offices, restrooms, game room, concession room, landscaping, irrigation, retaining walls, CMU block walls, site lighting, concrete walkways, water features, outlet structures, and paving. The building is utilizing a dual plumbed system and the site is using reclaimed water for irrigation. The project has required close coordination with SCE, Region Water Quality Control Board, and Los Angeles County Department of Public Health.

CITY OF LAKE FOREST | VARIOUS NEIGHBORHOOD PARK RENOVATIONS

Z&K Consultants, Inc. is providing Construction Management and Inspection Services for this park improvement program for the City of Lake Forest. This project involves major building renovations to numerous parks, including the Arbor Mini Parks, Vintage Park, Sundowner Park, Borrego Overlook Park, Regency Park, and Rancho Serrano Park. Improvements includes installation of new playground equipment, playground foundation improvements, removal of existing hardscape, installation of new landscaping and irrigation, installation of decorative iron fencing around the perimeter of the park site, ADA sidewalk improvements, cold mill and overlay, construction of concrete walkway and exercise trail with exercise equipment, installation of barbeque areas and picnic tables, park lighting, drinking fountains, installation of rubber surfacing, renovation of existing shade structures, installation of park seating areas, and ADA improvements to parking lots and other existing park structures. Z&K personnel is providing full time construction management and inspection services to ensure compliance with the contract documents, evaluating the Contractor's daily performance, coordinating and conducting regularly scheduled construction meetings, tracking and reviewing RFIs and submittals, ensuring contractor's compliance with public right-of-way, performing utility coordination, monitoring compliance with BMPs, and assisting with community outreach. Project is ongoing.

CITY OF TUSTIN | VETERANS SPORTS PARK AT TUSTIN LEGACY

Z&K Consultants is providing Construction Management and Deputy Inspection Services as a subconsultant for the City of Tustin's Veterans Sports Park at Tustin Legacy as a subconsultant to GKK Works. This park is the City of Tustin's largest park carved from 31.5-acres. It is bounded by Lansdowne Road, Valencia Avenue, and Severyns Road. This project is 100% locally funded, utilizing several funding sources. Phase 1 of the construction for the Veterans Sports Park is complete and consists of demolition, grading, storm drain, water, reclaimed water, and sanitary sewer installation. The sports park contains a wide variety of recreational facilities such as softball, soccer, tennis, basketball, racquetball, sand volleyball and pickleball. The park will also include a passive recreation area, fitness stations, concession/restroom/storage buildings, a veteran's memorial feature, skate plaza, a parking lot, and a children's play environment. Additional relevant park features include lighting installation, retaining walls, outlet structures, outdoor seating areas, ADA compliant concrete walkways, ADA compliant parking lot spaces, landscaping, and water features.

CITY OF LA QUINTA | SILVERROCK PARK VENUE SITE

Z&K provided Construction Management and Inspection Services for this Project, which sits on approximately 14 acres with approximately eight (8) acres of walking paths, turf, and landscaping. Construction work included precise grading, hardscape, landscaping and irrigation, stream and lake construction, furnishing and installation of lighting, decomposed granite parking lot construction, concrete ADA parking space construction, concrete and decomposed walkways, construction of a stage, installation of playground equipment, picnic and BBQ areas, park lighting, construction of an outdoor theater with seating area.

EXP PROJECT EXPERIENCE

CITY OF CHINO | PHILADELPHIA ST. & MONTE VISTA AVE. MDP SYSTEM 22

The City of Chino Master Plan of Drainage (MPD) was developed in 1993 to recommend the most viable and cost-effective storm drain facilities to relieve the existing deficiencies and meet future needs. The project scope includes: install storm drain along Monte Vista Avenue and Philadelphia Street, connect the proposed storm drain to the existing double reinforced concrete box in Chino storm drain, install new catchbasins to capture surface flow, and also install lateral connections to the new storm drain.

CITY OF CHINO | PINE AVENUE EXTENSION TO STATE ROUTE 71

The project consists of widening SR-71 northbound and southbound off ramps to increase the ramps capacities, install a traffic signal at the SR-71 northbound off ramp to Pine Avenue and restripe the overcrossing between the SR-71 northbound and southbound off ramps in the cities of Chino and Chino Hills in San Bernardino County. **Scope of Work:** The need and purpose of the project is to improve the operational efficiency of the interchange. The addition of a right-turn lane at both off-ramps, is expected to significantly improve the operation of the intersections. by reducing delays and queues and improve the overall level of service of the intersection. EXP team is responsible for the Engineering Studies and Right of Way/Utilities, Project Management and complete PS&E package.

CITY OF SEAL BEACH | CIVIL ENGINEERING ON-CALL

EXP is providing comprehensive professional civil engineering services on an on-call/as-needed basis that include developing plans, technical specifications and estimates, bid support, construction management, survey, geotechnical, community outreach, public/private development plans, processing required permits and agreements, hydrology and hydraulic analysis, water and sewers studies, National Pollutant Discharge Elimination System (NPDES), Water Quality Management Plan (WQMP), Storm Water Pollution Prevention Plans (SWPPP), Grant Writing and Coastal Commissioning coordination. **Task Orders:** City of Seal Beach Annual Paving Program: The City of Seal Beach is proposing to Mill and Overlay four residential streets as well Main Street which intersects the Major State Highway Pacific Coast Highway. The current asphalt is sub-standard with multiple areas with alligator crack failures. EXP recently developed plans, technical specifications and estimates for the Annual Paving Program and was instrumental in providing the IFB package on schedule for the City's procurement of a contractor. Services include roadway geometric design, Traffic Control Plan, and plan production.

ORANGE COUNTY PUBLIC WORKS | ADA UPGRADES, NORTHEAST TUSTIN

The purpose of these ADA upgrades project is to bring the curb ramps to compliance with the 2010 ADA Federal Standards, and to the California Title 24 Disabled Access Requirements. These upgrades will enhance mobility by removing obstacles within the path of travel. In addition, compliant curb ramps benefit wheelchair users by allowing a smooth transition from sidewalk to street and informing the visually impaired of an approaching vehicular travel lane. The proposed project will provide accessibility for pedestrians and wheelchair users with mobility issues and/or other physical impairments. Also, the project will prevent potential injuries and improve comfort for pedestrians.

CALTRANS DISTRICT 12 | SR-1 TRAFFIC SIGNAL UPGRADES AND PAVEMENT REHABILITATION

Upgrade Traffic Signal project located on SR 1 between Crystal Heights Drive and First Street, in the cities of Newport Beach, Huntington Beach, and Seal Beach in Orange County. The proposed project limit is between Crystal Height Drive and First Street in the cities of Newport Beach, Huntington Beach, and Seal Beach. This project would improve 20 intersections between PM 13.0 and PM 33.6. The proposed improvements for this location are to remove and replace the existing traffic signals and equipment due to age and serviceability with current Caltrans standard traffic signals and equipment, upgrade the existing curb ramps to the current ADA standards, relocate/adjust the existing drainage facility due to ADA curb ramp improvements, trim the existing median island, and remove the existing pedestrian push button on the median island.

Z&K Consultants, Inc. has also provided on-call services for the following agencies. A full list of agencies may be provided upon request.

MUNICIPAL AGENCY	SERVICES PROVIDED	TERM OF CONTRACT/ DATE OF SERVICES
City of Chino (Multiple Contract Extensions)	On-Call Civil Engineering Services	Fiscal Years 2020 – 2023
City of San Bernardino (Multiple Contract Extensions)	On-Call Project Management and Services	Fiscal Years 2019 – 2023
City of San Bernardino (Multiple Contract Extensions)	On-Call Public Works Inspection Services	Fiscal Years 2019 – 2023
City of Oceanside (Multiple Contract Extensions)	On-Call Construction Management Services	Fiscal Years 2019 – 2024
City of Oceanside (Multiple Contract Extensions)	On-Call Project Management Services	Fiscal Years 2019 – 2024
Long Beach Water Department (5-Year Contract)	On-Call Program, Project, and Construction Management Services	Fiscal Years 2021 – 2026
City of Norco	On-Call Construction Management and Inspection Services for PW	Fiscal Years 2021 – 2024
City of Fontana	On-Call Construction Management and Inspection Services for PW	Fiscal Years 2022 – 2025
City of Pomona	On-Call Construction Management and Inspection Services	Fiscal Years 2021 – 2024
City of Norco	On-Call Professional Inspection Services for Building Department	Fiscal Years 2021 – 2024
City of Corona	On-Call Public Works Inspection Services	Fiscal Years 2020 – 2023
City of Corona	On-Call ADA Inspection Services	Fiscal Years 2020 – 2023
City of Lancaster	On-Call Construction Management and Inspection Services	Fiscal Years 2021 – 2024
City of Beaumont (Multiple Contract Extensions)	On-Call Construction Management Services	Fiscal Years 2019 – 2022
City of Beaumont (Multiple Contract Extensions)	On-Call Public Works Inspection	Fiscal Years 2019 – 2022
City of Beaumont (Multiple Contract Extensions)	On-Call Project Management Services	Fiscal Years 2019 – 2022
City of Temecula (Multiple Contract Extensions)	On-Call Construction Management Services	Fiscal Years 2019 – 2024
City of Moreno Valley (Multiple Contract Extensions)	On-Call Construction Management and Inspection Services	Fiscal Years 2019 – 2024
County of Los Angeles (Multiple Contract Extensions)	On-Call Construction Management and Inspection Services	Fiscal Years 2019 – 2024
City of Eastvale	On-Call Construction Management Services	Fiscal Years 2022 – 2025
City of Eastvale	On-Call Public Works Inspection Services	Fiscal Years 2022 – 2025
City of Eastvale	On-Call Project Management Services	Fiscal Years 2022 – 2025
County of Riverside Transportation Department	On-Call Construction Management and Inspection Services	Fiscal Years 2022 – 2025
City of La Mirada	On-Call Inspection Services	Fiscal Years 2022 – 2025

FINANCIAL CAPACITY

Z&K Consultants, Inc. and its subconsultants have the financial capability to perform the requested work. If requested, Z&K will provide sufficient data to allow an evaluation of firm's financial capabilities.

KEY PERSONNEL

Our team members are multidisciplinary and have numerous licenses and certifications. Our proposed team is exceptionally strong and will ensure the successful delivery of the City's projects. Z&K has carefully selected this **"A-Team"** and committed our most qualified staff for the duration of this contract to consistently deliver the City's projects. We understand the importance of meeting budgets and schedules; we have a strategic plan in place to deliver this project with such benchmarks in mind. Our proposed Z&K team has worked together on numerous projects and share great synergy. Our personnel can perform all services resulting in **cost savings** for the City. The project team is **committed 100%** to this contract. **Additional Resumes are included in Appendix A.**

The key to a successful project is a highly qualified and well-managed team. We offer the City a cohesive, talented team of licensed and certified professionals. Our Professionals are recognized as leaders in the industry and will act as a seamless extension of City Staff. The Z&K Team has the knowledge of the principles and practices of engineering as related to design, construction and maintenance of streets, traffic, water, sewer, storm drains, sanitation, parks, and public facilities, as well as an understanding of the principles, applicable laws and state permits associated with storm water treatment and pollution prevention.

Our team is very familiar with the methods and materials used in the testing of construction materials and the laws, codes, and standards applicable to public works construction. Our professionals keep these key objectives in mind: **quality services and project deliverables, time and budget efficiency, adherence to quality and assurance standards, constant communication, application of technical and practical expertise**.

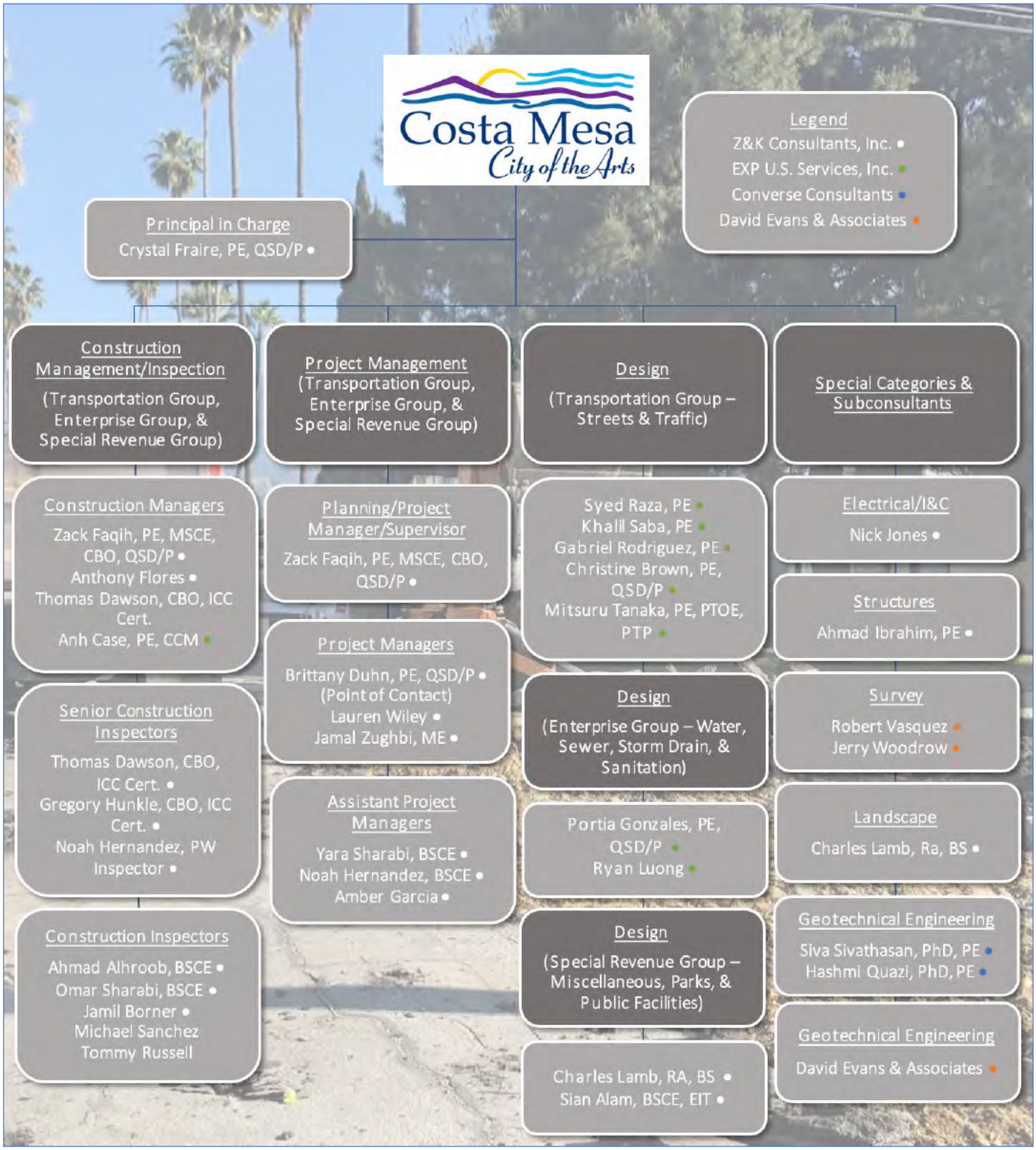
SUBCONSULTANTS

EXP U.S. SERVICES, INC. (EXP) | With a mission to understand, innovate, partner and deliver, EXP provides engineering, architecture, design and consulting services to the world's built and natural environments. Their heritage dates back to 1906, when the earliest of EXP's predecessor companies started its engineering infrastructure practice. Today, over 3,500 creative EXP professionals across North America provide the passion and experience needed to deliver successful projects around the world. They have worked with numerous local agencies and municipalities to provide multidisciplinary services for public works projects in urban environments. EXP brings a full range of services from planning and feasibility through design and construction management, as well as overall program management. EXP is consistently recognized by their clients for their quality of our services.

CONVERSE CONSULTANTS (CONVERSE) | In 1946, Professor Frederick J. Converse established Converse Consultants (Converse) in Pasadena, California to provide the construction industry with geotechnical engineering and geological services. Converse is an employee-owned corporation, with 9 offices and more than 150 employees throughout the United States. Their professional and technical staff includes in-house geotechnical engineers, engineering geologists, environmental scientists, deputy inspectors, laboratory and field technicians, drafting/CAD specialists, and other specialized support personnel. Their laboratories are certified by the Division of the State Architect (DSA), California Department of Transportation (Caltrans), US Army Corps of Engineers, American Association of State Highway and Transportation Officials (AASHTO), and the Cement and Concrete Reference Laboratory (CCRL). A registered civil engineer supervises each lab to ensure all of our equipment is calibrated regularly, and quality control is available 24/7.

DAVID EVANS AND ASSOCIATES, INC. (DEA) | Founded in 1976, David Evans and Associates, Inc. (DEA) is a recognized leader in the design and management of complex transportation, land development, energy, and water projects nationwide. The firm includes over 900 employee owners and maintains 30 offices throughout the US. The mission of DEA's surveying and geomatics team is simple; to be a national leader in collecting, managing, and delivering geographic data solutions to clients. They offer a variety of traditional surveying services along with utilizing the newest technology such as static/mobile laser scanners, sUAS units, and subsurface utility locating and mapping to provide high resolution, detailed information. DEA staff are talented, accomplished, and experienced; and include over 150 technical and professional surveyors.

ORGANIZATIONAL CHART



ZACK FAQIH, MSCE, PE, QSD/P C.B.O.

Planning/Project Manager/Supervisor



EDUCATION
» MSCE - Structures
Cal State Fullerton 2005
» BSCE - Civil /Transportation
Cal State LA 1985

LICENSES & REGISTRATION
» Professional Engineer, P.E. State of California, C57958
» Certified Accessibility Inspector/Plans Examiner
» Certified Building Official
» Certified Plans Examiner
» Certified Mechanical Inspector
» Certified Plumbing Inspector
» Certified Electrical Inspector
» SWPPP (QSD) & (QSP) Certificate # 22055
» OSHA 30 Hour Construction Safety & Health
» State Certified HERS Rater
» Certified Emergency Inspector
» C.G.B.P Certified Green Building Inspector
» Certified Special Inspector for Fire Proofing
» Certified Special Inspector for Structural Welding
» Certified Special Inspector for Structural Steel
» Certified Special Inspector for Reinforced Concrete

Mr. Faqih has **32 years** of experience in the Construction Management, Construction Inspection, Project Management, and Contract Administration of capital imporvement and public works projects, including street improvements, slurry seal, pavement rehabilitation, intersection improvements, sewer and storm drain improvements, traffic signal improvements, curbs, gutters, sidewalks, bridge projects, and access ramps. He has extensive experience managing multiple projects in Los Angeles County and Orange County since 1999. Mr. Faqih's experience extends to interfacing and coordinating with the Caltrans-Local Assistance Program, Counties, Cities, Funding Agencies. He has excellent skills in understanding construction contracts, review and control project cost and schedule, coordinate and assist in negotiating change orders, maintain project as-builts, managing multiple subconsultants and supervise inspection staff. Mr. Faqih excels in providing detailed constructability review of project plans and specifications, which minimizes the potential project delays and change orders and assists the client from pre-award to project close-out to ensure full funding reimbursement. Zack has extensive experience managing multiple projects requiring interfacing and coordination with Caltrans, counties, funding agencies, Federal-FHWA/BIA, railroad and utility companies, and environmental and regulatory agencies.

Relevent Project Experience

City of Costa Mesa: Citywide Parkway Maintenance, Street Rehabilitation and Slurry Seal Project, No. 21-03, Costa Mesa, CA | Senior Construction Manager: This citywide street improvement program in the City of Costa Mesa involved mobilization, removal and reconstruction of curb and gutters, sidewalks, driveway approaches, spandrels, cross gutters, ADA curb ramps, removal and reconstruction of existing pavement, milling and overlaying with new asphalt, adjustment of manholes and utility covers to grade, application of slurry seal, crack sealing, traffic signing, striping and markings, traffic markers and speed humps, installation of specialty and bicycle loop detectors, and implementation of traffic control. Mr. Faqih performed value engineering and constructability review of the project plans and specifications, prepared permits, conducted preconstruction meeting, processed RFIs, submittals, and contract change orders, and managed compliance with federal and state funding requirements.

Wastewater Treatment Plant Expansion/Renovation & Brine Pipeline Installation Project, Beaumont CA - Senior Project Manager/Supervisor: Mr. Faqih provides Project Management and Local Agency Coordinator Services for the Wastewater Treatment Plant Expansion/Renovation & Brine Pipeline Installation Project, sewer lift stations, and other sewer system projects. The expansion increases the permitted capacity from 4.0 MGD to 6.0 MGD. The pretreatment for the RO system includes two stage screening, grit removal, conventional aeration/biological treatment, and a membrane bioreactor process. The City is also constructing a 23-mile, 12-inch diameter gravity pipeline from the Beaumont WWTP that will connect to the Inland Empire Brine Line (IEBL) in San Bernardino to discharge brine that will be treated at Orange County Sanitation District (OCSD). The Brine Line is installed within existing right-of-way and unpaved roads using open trench methods, auger jack and bore, and hydraulic directional drilling (HDD).

Inland Empire Utilities Agency, CA – Senior Construction Manager/Supervisor:
Mr. Faqih served as the Resident Engineer/Lead Construction Inspector for this multi-story, steel construction, new laboratory intended to replace the existing facility and consolidate Agency staff in a single location. He maintained the project filling system as per the project requirement to assure the state funding requirements, monitor the progress and development of the BIM model, monitor and document the required gold LEED project certification, assisted the Agency in the resolution of existing claims with the contractor based on prior construction management approach issues. Inspection per existing ordinance and special codes on: concrete, masonry, rebar, plumbing, electrical, HVAC, Fire sprinkler. Coordinate weekly meeting with the contractor and the owner rep from the Agency.

City of Costa Mesa: Jack Hammett Sports Complex Improvement Project, Costa Mesa, CA | Senior Construction Manager: This $2.3M project includes various improvements to the Jack Hammett Sports Complex, a 14.5-acre park with six illuminated utility fields, a restroom building, picnic benches, and on-site parking. The project involves parking lot improvements, concrete flatwork, ADA improvements, electrical runs to the pull boxes for multiple storage buildings, retaining walls, lighting, irrigation and landscaping, foundation improvements, construction and installation of two new storage buildings, electrical and mechanical work within the buildings, and all associated work with the buildings.

BRITTANY DUHN, PE, QSD/P

Project Manager (Designated POC)



EDUCATION
» BSCE - Civil Engineering, California State Polytechnic University, Pomona

LICENSES & REGISTRATION
» Professional Engineer, P.E. State of California, #91078
» SWPPP (QSD) & (QSP) Certificate #27609
» 30-Hr. Cal OSHA
» Defensive Driving Training

Ms. Duhn has extensive experience of program management and project management of major public works and capital improvement projects including transportation, street improvements, roadway widenings, bridges, parks, water and wastewater projects, involving flood risk management, water conservation facilities, water mains, pressure regulating and pumping stations, wells, valves, fittings, and other appurtenances, reservoirs, channels, and storm drains, as well as access roads, culverts, and bridges. **Her recent program and project management experience, managing the City of Chino water/wastewater projects and a $110 million dollar Wastewater Treatment Plant Expansion and Renovation & Brine Pipeline Project in the city of Beaumont, is a great testament of Brittany's program management and oversight project experience**. Brittany provided complete project management and construction management services on this project from inception to substantial completion. She is knowledgeable of the latest construction practices and requirements, communicates effectively, and possesses computer usage and writing skills. His experience includes an extensive background in construction management and inspection, construction contracting, project management, quality control and assurance, and project coordination He has excellent skills in understanding construction contracts, review and control project cost and schedule, coordinate and assist in negotiating change orders, provide project updates to the client, ensure timely review of critical path method (CPM) schedule to track any changes in critical path and delays, maintain project as-builts, managing multiple subconsultants and supervise inspection staff. Ms. Duhn provided construction and project management services that included conceptual, 30%, 60%, 90% and 100% design review and support. She has provided Project Management services for all stages of projects, from design to construction.

Brittany managed and oversaw the discretionary review process of CEQA guidelines and requirements, managed budgets and schedules, assisted with the development of budgets, prepared RFPs, prepared sewer rate fees, provided public assistance and information of water and wastewater affecting the community, prepared reports for committees, commissions, and City Council, prepared staff reports, and made oral presentations. Ms. Duhn has a strong background in the fields of water, wastewater, and recycled water engineering design, operations, and construction.

Relevent Project Experience

City of Chino: On-Call Project Management | Project Manager: Brittany is a Project Manager on various enterprise projects including:

- SD223 - Chino Avenue Storm Drain Improvement Plan System
- SD222 - Philadelphia Street and Monte Vista Avenue Storm Drain Extension Project
- WA212 - State Street Water Treatment Plant
- WA214 – Well 17 Equipping Project
- WA224 - B Street Alley Water Main Line Replacement Project
- WA231 - Wells 4 & 6 Treatment Plant Project
- WA223 - Russell Ave Waterline Replacement Project
- WA17B - Chino Quad 1.2
- SW211 – Yorba Avenue & Eucalyptus Avenue Sewer Main Line Replacement Project
- WA221 & WA222 - Central Avenue and Dupont Avenue Waterline Project
- WA211 - Well 11 Pipeline Project

City of Chino: On-Call Project Management | Project Manager: Brittany is a Project Manager on various transportation projects including:

- G6220 - CDBG Alley Project, East-West North Chino Avenue
- SN231 - Alley Rehabilitation Project - Pioneer St from Monte Vista Ave to 5th St.
- SN221 - FY21/22 Alley Reconstruction Project
- ST222 - Kimball/El Prado/Central Traffic Improvement Project
- City of Chino – 16th, 17th, and 18th Street between Tronkeel Avenue and Serene Avenue & Tangerine Avenue Street Widening
- FY 20/21 Alley/Sanitation Rehab Project, Phase II
- Philadelphia Street and Monte Vista Avenue Storm Drain Extension Project
- 11th Street Pavement Reconstruction Alley Accessibility and Intersection Accessibility Project
- CDBG Alley Project and Alley/Sanitation Rehab FY2021-22 Various Locations Project
- Ramona Avenue & Walnut Avenue Street Rehabilitation and Traffic Signal Modifications Project
- SD211 – 11th Street/B Street Project
- ST232 – Kimball Ave Street Improvement
- MS202 – ADA Grievance 21-004 Curb Ramps at Olive Place & Walnut Ave
- SN211 – Alley Sanitation Rehab 20-21 Phase 1, II, and III
- ST223 – Madison St & Kellogg Ave Gap Closure Project



Portia Gonzalez, PE, QSD/QSP

Drainage Lead

Professional Registrations

- Professional Engineer (Civil): AZ, CA
- Qualified SWPPP Developer (QSD)
- Construction General Permit Qualified SWPPP Practitioner (QSP)

Education + Training

- M.S., Water Resources, California State University-Long Beach, 2010
- B.S. Civil Engineering, California State Polytechnic University, Pomona, CA, 1991

Affiliations + Memberships

- ASCE Orange County, Hydrology and Hydraulics Executive Committee Member

Key Projects:

***SR55 (I-5 to I-405), CA, USA**

***I-10 Improvement Project, CA**

***I-10/Jackson Interchange Improvement, CA, USA**

***I-405 Sepulveda Pass, CA, USA**

***TCA Drainage Task Orders, CA**

***Perkinsville/SR 78 Intersection Project, CA**

***I-405 Widening (I-605 to SR-55), CA**

***Gerald Desmond Bridge, CA**

***Centennial Corridor Project, CA,**

***SR-91/East Street Interchange Project, CA**

***City of San Juan Capistrano, Del Obispo Road Improvement, San Juan Capistrano, CA**

***Katella Smart Street, Anaheim**

***City of Laguna Beach Master Storm Drain Plan, Laguna Beach,**

***City of Chino Hills Master Storm Drain Plan, Chino Hills, CA**

***Agua Fria River and Gila Rivers Analysis of Sand and Gravel Operations,**

***Zone A Floodplain Delineation for Lower Centennial Wash**

Portia Gonzalez brings more than 30 years of experience. She has served as project manager for various transportation projects in California, Arizona and Nevada. Her expertise includes project management, drainage design, hydrologic and hydraulic modeling, storm water management, 2D modeling, river modeling, floodplain delineation studies, storm drain master planning, detention basin design, bridge scour, roadway drainage and design, water resource planning, sediment transport and water distribution. She brings working knowledge of software such as AES, WSPG, HEC-HMS, HEC-6, HEC-RAS, Flow-Master, Storm CAD, CulvertMaster, InRoads Storm and ArcGIS. She has worked with Caltrans (Districts 7, 8, 11 and 12), SBCTA, RCTC, OCTA, SANDAG and LA Metro, among others.

Project Experience

City of Beaumont, Master Drainage Plan (MDP) Line 2 Stage 1, Beaumont, CA
The Beaumont Master Drainage Plan (MDP) Line 2 Stage 1 is a new major storm drain trunk line for the City of Beaumont between Chestnut Avenue and First Street. The project is to design a storm drain for the 100-year storm event from a large watershed. The storm drain will have to accommodate several existing and future systems in the Line 2 watershed including a future UPRR grade separation. The project also includes design of a detention basin to attenuate flows prior to discharging to the existing Berkshire channel. The EXP Team is providing the hydrology, hydraulics, geotechnical studies, storm drain design, environmental document, traffic control, utilities, right of way and UPRR and Caltrans coordination. Portia is serving as Project Manager.

City of Chino Philadelphia St. and Monte Vista Avenue MDP System 22, Chino, CA
The City of Chino Master Plan of Drainage (MPD) was developed in 1993 to recommend the most viable and cost-effective storm drain facilities to relieve the existing deficiencies and meet future needs. The project scope includes: install a storm drain along Monte Vista Avenue and Philadelphia Street, connecting the proposed storm drain to the existing double-reinforced concrete box in the Chino storm drain, installing new catchbasins to capture surface flow, and also installing lateral connections to the new storm drain. Portia serves as the Project Manager.

***City of Chino, Hills Storm Drain Master Plan, Chino Hills, CA**
The City's Storm Drain Master Plan establishes an approach to creating a prioritized Capital Improvement Projects to mitigate the impacts of stormwater runoff in the City. This document identifies the steps taken to inventory and analyze the existing storm drain system, analyzes capacity restrictions within the storm drain networks and provides recommendations. Portia was the Project Manager for a team of drainage engineers and GIS specialist that analyzed the existing drainage deficiencies throughout the City and provided a range of drainage concepts for the construction of future facilities required to serve the City at buildout of the General Plan and establishes criteria for selecting and prioritizing projects. AES Software was used to for the hydrology and hydraulic computation. Output data was extracted using a project specific programming. This data was then incorporated into the City's GIS storm drain data base.

City of Temecula, Diaz Road Improvements, Temecula, CA, USA
The project proposes to improve Diaz Road to a major arterial road between Cherry Street and Rancho California Road. Design elements includes roadway widening and extension, raised median, landscaping, curb and gutter, sidewalk and trail realignment, drainage facilities, and treatment BMPs. Portia is responsible for the drainage analysis to comply with the City's and Riverside County Flood Control District design criteria, WQMP and PS&E.



APPENDIX A
RESUMES

ZACK FAQIH, MSCE, PE, QSD/P C.B.O.

Senior Construction Manager



EDUCATION
» MSCE - Structures
Cal State Fullerton 2005
» BSCE - Civil /Transportation
Cal State LA 1985

LICENSES & REGISTRATION
» Professional Engineer, P.E.
State of California, C57958
» Certified Accessibility Inspector/Plans Examiner
» Certified Building Official
» Certified Plans Examiner
» Certified Mechanical Inspector
» Certified Plumbing Inspector
» Certified Electrical Inspector
» SWPPP (QSD) & (QSP) Certificate # 22055
» OSHA 30 Hour Construction Safety & Health
» State Certified HERS Rater
» Certified Emergency Inspector
» C.G.B.P Certified Green Building Inspector
» Certified Special Inspector for Fire Proofing
» Certified Special Inspector for Structural Welding
» Certified Special Inspector for Structural Steel
» Certified Special Inspector for Reinforced Concrete

Mr. Faqih has **32 years** of experience in the Construction Management, Construction Inspection, Project Management, and Contract Administration of capital imporvement and public works projects, including street improvements, slurry seal, pavement rehabilitation, intersection improvements, sewer and storm drain improvements, traffic signal improvements, curbs, gutters, sidewalks, bridge projects, and access ramps. He has extensive experience managing multiple projects in Los Angeles County and Orange County since 1999. Mr. Faqih's experience extends to interfacing and coordinating with the Caltrans-Local Assistance Program, Counties, Cities, Funding Agencies. He has excellent skills in understanding construction contracts, review and control project cost and schedule, coordinate and assist in negotiating change orders, maintain project as-builts, managing multiple subconsultants and supervise inspection staff. Mr. Faqih excels in providing detailed constructability review of project plans and specifications, which minimizes the potential project delays and change orders and assists the client from pre-award to project close-out to ensure full funding reimbursement. Zack has extensive experience managing multiple projects requiring interfacing and coordination with Caltrans, counties, funding agencies, Federal-FHWA/BIA, railroad and utility companies, and environmental and regulatory agencies.

Relevent Project Experience

Enterprise

Wastewater Treatment Plant Expansion/Renovation & Brine Pipeline Installation Project, Beaumont CA - Senior Project Manager/Local Agency Coordinator: Mr. Faqih provides Project Management and Local Agency Coordinator Services for the Wastewater Treatment Plant Expansion/Renovation & Brine Pipeline Installation Project, sewer lift stations, and other sewer system projects. The expansion increases the permitted capacity from 4.0 MGD to 6.0 MGD. The pretreatment for the RO system includes two stage screening, grit removal, conventional aeration/biological treatment, and a membrane bioreactor process. The City is also constructing a 23-mile, 12-inch diameter gravity pipeline from the Beaumont WWTP that will connect to the Inland Empire Brine Line (IEBL) in San Bernardino to discharge brine that will be treated at Orange County Sanitation District (OCSD). The Brine Line is installed within existing right-of-way and unpaved roads using open trench methods, auger jack and bore, and hydraulic directional drilling (HDD).

Inland Empire Utilities Agency, CA – Resident Engineer
Mr. Faqih served as the Resident Engineer/Lead Construction Inspector for this multi-story, steel construction, new laboratory intended to replace the existing facility and consolidate Agency staff in a single location. He maintained the project filling system as per the project requirement to assure the state funding requirements, monitor the progress and development of the BIM model, monitor and document the required gold LEED project certification, assisted the Agency in the resolution of existing claims with the contractor based on prior construction management approach issues. Inspection per existing ordinance and special codes on: concrete, masonry, rebar, plumbing, electrical, HVAC, Fire sprinkler. Coordinate weekly meeting with the contractor and the owner rep from the Agency.

Victoria Avenue Recharge Water Facility, Riverside, CA - Construction Manager: This major capital improvement project for Western Municipal Water District includes the installation of new groundwater extraction wells as a means to help increase the groundwater basin quantity and improve its quality. Major improvements on this project include: mass grading operations, the installation of three stormwater basins, a divergent structure, numerous interior roadway improvements for vehicular and pedestrian access, two concrete trapezoidal rerouting channels into the water basin, stormwater collection structure, the installation of 4000 linear feet of 20" reclaimed **water pipeline** three local city streets connecting the gage canal reservoir into the three proposed storm water basins. Mr. Faqih maintains project records and is the Inspector of Records for this major capital improvement project. His responsibilities include roadway construction inspection, material testing, traffic handling, flagging operations, inspection of concrete and paving activities. He provides inspection of retaining walls, drainage improvements, water line installation, storm drain installation, sewer line installation, subdrains, ADA compliant sidewalk driveways, and SWPPP. He performs all deputy inspections as per project plans and specifications.

Transportation

City of Compton: Annual Residential Rehabilitation Project ($5.4M)

Construction Manager: This project included street rehabilitation of seven major City streets. Streets included were: Caldwell Street, Myrrh Street, Grandee Avenue, 134th/Elva Avenue, Tajauta Avenue, Bradfield Avenue and Alondra Boulevard. Scope of work consisted of construction of cold mill, ARHM pavement, AC base course, aggregate base, full depth AC slot pavement, curb and gutters, sidewalks, cross gutter, alley intersection, driveway approach, curb ramps, signing, striping, markings, and pavement legends, speed hump, traffic signal loop, adjust to grade existing sewer manhole, water valve, water meter, and storm drain manhole, and such other items or details, not mentioned above, that are required by the plans and standard specifications. Scope included full-service construction management, pre-construction, management information system, reviewing traffic control plans, meetings, issues management, scheduling, cost control, labor compliance, reviewing RFIs and Submittals, change orders, dispute resolution, quality control/inspection, public relations, permits/environmental compliance, progress payments, monthly staff reports, site safety, as-builts drawings, final walkthrough, and project completion reports. Project is within schedule and budget. Project is on-going.

City of Costa Mesa: Citywide Parkway Maintenance, Street Rehabilitation and Slurry Seal Project, No. 21-03, Costa Mesa, CA | Senior Construction Manager: This citywide street improvement program in the City of Costa Mesa involved mobilization, removal and reconstruction of curb and gutters, sidewalks, driveway approaches, spandrels, cross gutters, ADA curb ramps, removal and reconstruction of existing pavement, milling and overlaying with new asphalt, adjustment of manholes and utility covers to grade, application of slurry seal, crack sealing, traffic signing, striping and markings, traffic markers and speed humps, installation of specialty and bicycle loop detectors, and implementation of traffic control. Mr. Faqih performed value engineering and constructability review of the project plans and specifications, prepared permits, conducted preconstruction meeting, processed RFIs, submittals, and contract change orders, and managed compliance with federal and state funding requirements.

County of Riverside: I-215/Van Buren Interchange Improvement - Principal Assistant RE / Construction Manager
Principal Assistant RE / Construction Manager for $32M project included the realignment of the Van Buren Boulevard, overcrossing bridge over 1-215 freeway, westbound left turn lane and an eastbound dedicated right turn lane over the freeway, replacing existing railroad overcrossing with pre-cast structure. Roadway improvements included a right-turn lane for eastbound to northbound entrance ramp, and two westbound receiving lanes to accommodate the southbound exit ramp, new hook-type ramp, auxiliary lanes added to the mainline and the southbound main lane on I-215 were widened to the west to accommodate the ultimate configuration of the freeway. Five retaining walls up to 30 feet high were constructed along Railroad tracks/southbound on-ramp, southbound off ramp, north and south sides of Van Buren Blvd/west of the I-215 freeway, and east of northbound on-ramp to minimize impact to the railroad and MARB right-of-way. Additional features include curb ramps, sidewalk, cross walks, signal and electrical, water line, sewer line, and storm drain installation.

Parks & Public Facilities

City of Costa Mesa: Jack Hammett Sports Complex Improvement Project, Costa Mesa, CA | Senior Construction Manager: This $2.3M project includes various improvements to the Jack Hammett Sports Complex, a 14.5-acre park with six illuminated utility fields, a restroom building, picnic benches, and on-site parking. The project involves parking lot improvements, concrete flatwork, ADA improvements, electrical runs to the pull boxes for multiple storage buildings, retaining walls, lighting, irrigation and landscaping, foundation improvements, construction and installation of two new storage buildings, electrical and mechanical work within the buildings, and all associated work with the buildings.

SilverRock Park Venue Site, City of La Quinta ($5.4M) – Construction Manager This project is a community park for passive use. The SilverRock Park Venue Project is located on the southeast corner of SilverRock Way and Avenue 52. The park site sits on approximately 14 acres with approximately eight (8) acres of walking paths, turf, and landscaping. Construction work includes but is not limited to precise grading, landscaping and irrigation, utility construction including a grinder pump, stream and lake construction with floating fountain, furnishing and installation of pump for lake, furnishing and installation of lighting, decomposed granite parking lot construction, concrete ADA parking space construction, concrete and decomposed walkways, construction of a stage, construction of outlet structures, construction of retaining walls, construction of an outdoor theater with seating area.

Veteran Sports Park at Tustin Legacy, Tustin, CA – Construction Manager/IOR
This project is a $24M major capital improvement project for the City of Tustin. The project is a 31.5-acre sports community park bounded by Lansdowne Road, Valencia Avenue, and Severyns Road. Major improvements include infrastructure improvement, installation of drainage devices, water lines, gas lines, communication lines, interior roadway construction, and ADA compliant facilities such as sidewalks, driveways, curb ramps, and recreational buildings. Mr. Faqih monitored and observed all construction activities on this 31.5-acre project site including major grading activities, AC & PCC paving, reinforced concrete channels, local street improvements, ADA compliant sidewalks, driveways, and curb ramps, curb & gutter, utility installation including water and sewer lines, landscape, and hardscape. Retaining wall, block wall and site fencing, safety inspection & reporting of daily construction activities, preparing and verifying field measurements for payment, monitoring, and verifying extra work invoices, coordinating field-testing and sampling. Project Scheduling (CPM), material testing, compression and rapture of concrete cylinders and soil sampling.

City of Yorba Linda, CA – Deputy Building Official
Provided plan checking and served as the inspections supervisor. Reviewed architectural, structural, plumbing, mechanical, electrical, acoustic, energy for residential, commercial, and industrial buildings. Supervised construction and the project management staff to assure compliance with the city's requirements for building facilities, including the city's community center and the library expansion projects.

BRITTANY DUHN, PE, QSD/P

Project Manager



EDUCATION
» BSCE - Civil Engineering, California State Polytechnic University, Pomona

LICENSES & REGISTRATION
» Professional Engineer, P.E. State of California, #91078
» SWPPP (QSD) & (QSP) Certificate #27609
» 30-Hr. Cal OSHA
» Defensive Driving Training

Ms. Duhn has extensive experience of program management and project management of major public works and capital improvement projects including transportation, street improvements, roadway widenings, bridges, water and wastewater projects, involving flood risk management, water conservation facilities, water mains, pressure regulating and pumping stations, wells, valves, fittings, and other appurtenances, reservoirs, channels, and storm drains, as well as access roads, culverts, and bridges. **Her recent program and project management experience, managing the City of Chino water/wastewater projects and a $110 million dollar Wastewater Treatment Plant Expansion and Renovation & Brine Pipeline Project in the city of Beaumont, is a great testament of Brittany's program management and oversight project experience**. Brittany provided complete project management and construction management services on this project from inception to substantial completion. She is knowledgeable of the latest construction practices and requirements, communicates effectively, and possesses computer usage and writing skills. His experience includes an extensive background in construction management and inspection, construction contracting, project management, quality control and assurance, and project coordination He has excellent skills in understanding construction contracts, review and control project cost and schedule, coordinate and assist in negotiating change orders, provide project updates to the client, ensure timely review of critical path method (CPM) schedule to track any changes in critical path and delays, maintain project as-builts, managing multiple subconsultants and supervise inspection staff. Ms. Duhn provided construction and project management services that included conceptual, 30%, 60%, 90% and 100% design review and support. She has provided Project Management services for all stages of projects, from design to construction.
Brittany managed and oversaw the discretionary review process of CEQA guidelines and requirements, managed budgets and schedules, assisted with the development of budgets, prepared RFPs, prepared sewer rate fees, provided public assistance and information of water and wastewater affecting the community, prepared reports for committees, commissions, and City Council, prepared staff reports, and made oral presentations. Ms. Duhn has a strong background in the fields of water, wastewater, and recycled water engineering design, operations, and construction.

Relevent Project Experience

Enterprise

City of Chino: On-Call Project Management | Project Manager: Brittany is a Project Manager on various enterprise projects including:

- SD223 - Chino Avenue Storm Drain Improvement Plan System
- SD222 - Philadelphia Street and Monte Vista Avenue Storm Drain Extension Project
- WA212 - State Street Water Treatment Plant
- WA214 – Well 17 Equipping Project
- WA224 - B Street Alley Water Main Line Replacement Project
- WA231 - Wells 4 & 6 Treatment Plant Project
- WA223 - Russell Ave Waterline Replacement Project
- WA17B - Chino Quad 1.2
- SW211 – Yorba Avenue & Eucalyptus Avenue Sewer Main Line Replacement Project
- WA221 & WA222 - Central Avenue and Dupont Avenue Waterline Project
- WA211 - Well 11 Pipeline Project

Wastewater Treatment Plant Expansion/Renovation and Brine Pipeline Installation Project, City of Beaumont - Project Manager/Program Manager: Ms. Duhn provided Project Management Services for the City of Beaumont Project ($110M), sewer lift stations, and other sewer/pipeline projects. Brittany provided complete project management and construction management services on this project from inception to substantial completion. She prepared funding applications for CWSRF and IBank. Ms. Duhn managed the Proposition 218 process to increase the City's sewer rates. This process included coordinating with the Utility Rate Consultant, City, and Beaumont Cherry Valley Water District to calculate the rates and prepare the rate study. She oversaw the City's community meetings, community outreach for the Notice of Public Hearing, and City Council presentations and agenda items. After the rates were established, Ms. Duhn provided support to the City for customers with questions and concerns. Ms. Duhn managed the process the next year to recalculate the rates based on the new water data and implement the rates to provide a smooth transition for the City and customers. Ms. Duhn assisted in the IS/MND adoption process, CEQA guidelines and requirements, and coordinated with utilities/cities for the Brine Line

Project permits. Ms. Duhn prepared Request for Proposals for Construction Management and bid packages for the three (3) contractors. She managed the constructability review process for the wastewater treatment plant project and brine line projects. Ms. Duhn tracked the budgets for the Wastewater Treatment Plant and Brine Line projects and documented all purchase orders/invoices. She prepared WWTP, Brine Line, and wastewater City Council staff reports for change orders, monthly updates, agreements, and other required items for Council. She assisted the City in any tasks necessary to ensure the Project stays on budget and meets any and all scheduled deadlines.

Transportation

City of Chino: On-Call Project Management | Project Manager: Brittany is a Project Manager on various transportation projects including:

- G6220 - CDBG Alley Project, East-West North Chino Avenue
- SN231 - Alley Rehabilitation Project - Pioneer St from Monte Vista Ave to 5th St.
- SN221 - FY21/22 Alley Reconstruction Project
- ST222 - Kimball/El Prado/Central Traffic Improvement Project
- City of Chino – 16th, 17th, and 18th Street between Tronkeel Avenue and Serene Avenue & Tangerine Avenue Street Widening
- FY 20/21 Alley/Sanitation Rehab Project, Phase II
- Philadelphia Street and Monte Vista Avenue Storm Drain Extension Project
- 11th Street Pavement Reconstruction Alley Accessibility and Intersection Accessibility Project
- CDBG Alley Project and Alley/Sanitation Rehab FY2021-22 Various Locations Project
- Ramona Avenue & Walnut Avenue Street Rehabilitation and Traffic Signal Modifications Project
- SD211 – 11th Street/B Street Project
- ST232 – Kimball Ave Street Improvement
- MS202 – ADA Grievance 21-004 Curb Ramps at Olive Place & Walnut Ave
- SN211 – Alley Sanitation Rehab 20-21 Phase 1, II, and III
- ST223 – Madison St & Kellogg Ave Gap Closure Project

City of Compton | Annual Residential Rehabilitation Project (Construction Phase) | Project Manager | The scope of work consisted of asphalt overlay, clearing and grubbing, construction of cold mill and AC overlay, slurry seal application, HMA pavement, ARHM overlay, AC base course, aggregate base, full depth AC slot pavement, PCC sidewalk and pavement, PCC curb and gutters, PCC cross gutter, alley intersection, sidewalk, driveway approach, curb ramps including detectable warning surfaces, signing, striping, markings, pavement legends, speed hump, landscaping, irrigation, adjusting manhole and utility covers to grade, water valve, water meter, street lighting, installation of loop detectors and bicycle loop detectors, traffic signal modification, adjustment of streetlight and traffic signal pull boxes to grade.

Parks & Public Facilities

City of Lake Forest | Arbor Mini Parks & Neighborhood Park Renovations Project (Construction Phase) | Project Manager | This project includes removing existing hardscape, installing new landscaping and irrigation, and installing decorative iron fencing around the perimeter of the park site. Additional improvements include installation of new playground equipment and other park amenities, and the construction of a concrete walkway/exercise trail with exercise equipment. The Project also includes the installation of rubber surfacing, renovation of the existing shade structure, and the installation of new picnic tables and replacement of other existing site amenities.

City of Beaumont | Wastewater Treatment Plant & Brine Line (Design, Bidding & Construction Phase) | Project Manager | Ms. Duhn provided Project Management Services for the City of Beaumont Project ($110M), sewer lift stations, and other sewer/pipeline projects. She prepared funding applications for CWSRF and IBank. Ms. Duhn managed the Proposition 218 process to increase the City's sewer rates. This process included coordinating with the Utility Rate Consultant, City, and Beaumont Cherry Valley Water District to calculate the rates and prepare the rate study. She oversaw the City's community meetings, community outreach for the Notice of Public Hearing, and City Council presentations and agenda items. After the rates were established, Ms. Duhn provided support to the City for customers with questions and concerns. Ms. Duhn managed the process the next year to recalculate the rates based on the new water data and implement the rates to provide a smooth transition for the City and customers.

City of Costa Mesa | Jack Hammett Sports Complex Improvement Project (Bidding & Construction Phase) | Project Manager | Ms. Duhn is providing Project Management services for the City of Costa Mesa's $2.3M Jack Hammett Sports Complex Improvement Project, which involves various improvements to the a 14.5-acre park, which includes six illuminated utility fields, a restroom building, picnic benches, and on-site parking. The project involves hardscape improvements, ADA parking lot improvements, concrete flatwork, ADA sidewalk improvements, electrical runs to the pull boxes for multiple storage buildings, retaining walls, fencing installation, improvements to lighting, irrigation and landscaping, rough and precise grading, foundation improvements, construction and installation of two new storage buildings, electrical and mechanical work within the buildings, finish grading, flat work and all associated work with the buildings.

Anthony Flores, EIT

Construction Manager



EDUCATION
» Bachelor of Science in Civil Engineering – California State University, Long Beach

TRAINING & REGISTRATION
» Engineer-In-Training (EIT), State of California, #170698
» Caltrans Temporary Pedestrian Facilities Training
» 30-Hr. Cal OSHA
» Defensive Driving Training
» Sexual Harassment Prevention Training

Mr. Flores has experience in project management, construction management, contracting, field investigation, project management, and quality control for numerous capital improvement projects and federally funded projects, involving street improvement, bridge construction, storm drains, traffic signals, traffic signs, streetlights, pavement markings, construction projects, and maintenance projects. Mr. Flores has a thorough understanding of Cal-OSHA practices and procedures, ADA and Caltrans ADA requirements, as well as extensive knowledge of Caltrans construction practices, physical characteristics and properties of highway construction materials, and approved methods and equipment used in making physical tests of construction materials. Additionally, Mr. Flores is familiar with Caltrans field and construction office procedures, with experience assisting in inspection to assure compliance with plans and specifications, assisting in preparation of contract change orders, contract estimates, and progress payments, coordinating field testing of materials for compliance with project specifications and the Caltrans Quality Assurance Program, maintaining accurate project records, performing analytical calculations, and monitoring Contractor progress by preparing progress reports as required.

Relevant Project Experience

City of Alhambra: FY 19-20 & 20-21 Street Rehabilitation Projects, Alhambra, CA | Construction Manager: These street improvement programs consist of the pavement and street rehabilitation of 23 local street segments located south of Mission Road, west of Garfield Avenue, east of Atlantic Boulevard, and north of Valley Boulevard. Improvements included slurry seal treatment, varying depths of cold million and overlay, full depth removal and reconstruction, concrete improvements to ADA curb ramps, curb and gutters, and driveway approaches, intersection improvements, traffic signal hardware installation, fiber optic utility coordination, traffic signal loops, driveway aprons in need of repairs, and concrete cross gutter reconstruction. Mr. Flores provided daily construction inspection services, monitored contractors' daily progress through daily reports and photos, reviewed traffic control procedures, coordinated scheduling, issues management, meetings, monitored cost control, labor compliance, reviewed RFIs and submittals, change orders, dispute resolution, coordinated public relations activities, and organized final walkthrough and project completion reports.

City of Chino: On-Call Construction Management | Construction Manager: Anthony is a Project Manager on various transportation projects including:

- SD211 – 11th Street/B Street Project
- ST232 – Kimball Ave Street Improvement
- MS202 – ADA Grievance 21-004 Curb Ramps at Olive Place & Walnut Ave
- D4215 Prado Inundation Area Remediation - Watertight Sewer Manhole Assembly and Streetlight Connections Retrofit Project
- MS 222 Slurry Seal Program
- MS 202 & ST 221 Chino Avenue Accessibility and Curb Ramp Improvements at 15th,17th and 19th Streets and Norton Avenue PCC Walk and Curb Ramps
- NC231 Schaefer Ave Localized Asphalt Repairs
- SN211 – Alley Sanitation Rehab 20-21 Phase 1, II, and III
- ST223 – Madison St & Kellogg Ave Gap Closure Project
- ST162 Localized Asphalt Repairs Various Locations
- R7200 Masonry Block Wall at Chino Police Department
- Yorba Ave Street Improvements – From Midblock between Chino Ave to Schaefer Ave
- F Street, G Street, 5th Street - Street Improvements
- City Hall EMT Parking Lot Improvements

City of Norwalk: CDBG Local Streets Rehabilitation Project, Norwalk, CA | Construction Manager: This project is part of a local street rehabilitation program within Zone 28 of the City of Norwalk and is Community Block Development Grand funded. The project's scope includes repairs and reconstruction of concrete appurtenances, including cross gutters, curb and gutters, upgrades of ADA ramps to be compliant with ADA standards. Mr. Flores provided full time inspection, prepared daily diaries documenting daily construction activities and including progress photos, attends construction progress meetings, reviewed construction progress schedules, reviewed materials testing certifications of compliance, monitored

utility coordination, monitored the project site for safety, maintained public relations with surrounding residents and businesses, and ensured SWPPP compliance.

City of Vernon: 50th Street Water Main Replacement Project, Vernon, CA | Construction Manager: The project's scope of work includes demolition and reconstruction of the 12" iron ductile pipeline to the City's existing water services, such as installation of all appurtenances, fittings, valves, blow-offs, siphons, concrete pipe supports, thrust blocks, trenching, bedding and backfill, replacement of traffic markings, shoring, over excavation, temporary and permanent pavement, steel plating, and roadway improvements and repair, installation of commercial services and laterals, pressure testing and disinfection of installed pipeline. Mr. Dawson provided construction inspection for this project with daily tasks including inspection of pipeline welding and installation, inspection of the project site to ensure safety and compliance with SWPPP, preparation of daily reports, change order review, and quantity calculations.

City of Lake Forest: Street Resurfacing Program, Lake Forest, CA | Construction Manager: Mr. Flores is performing construction inspection services for this project, which involves the street resurfacing of Glenn Ranch Road from Portola Parkway to El Toro Road, as well as the slurry seal of and arterial slurry seal of Jeronimo and Muirlands from Los Alisos to Bake. Relevant project features include street resurfacing and rehabilitation, application of slurry seal, grinding and overlay, cold milling, ARHM pavement, AC base course, aggregate base, curb and gutters, ADA ramp construction, intersection improvements, traffic signal hardware installation, fiber optic utility coordination, traffic signal loops, signing striping, markings and pavement legends, dig-outs, sewer and storm drain manholes, and water valves and meters.

City of Hesperia and SANBAG: I 15/Ranchero Road Overcrossing Project - Construction Manager: This $50M dollar project was for construction of a new 8-lane overcrossing bridge and temporary on and off ramps for I-15 both Northbound and Southbound. The project consisted of the construction of new off and on ramps for both Northbound and Southbound, new drainage systems. Mr. Flores worked extensively on all bridge items including, but not limited to: bridge pours, pile driving, rebar, backfilling, four-scale grades, field grades, calculating bridge quantities, and falsework construction during day, night, and full closures. In addition, he performed the necessary calculations for falsework review and bridge clearance forms. He inspected roadway excavation, base and sub-base work, grading, AC/PCC pavement, delineation, sign installation, traffic control.

Infill Housing Street Rehabilitation Improvements of Five Major Streets, City of San Bernardino, CA
Construction Manager: The project includes concrete improvements and pavement improvements of five major streets in the City of San Bernardino. Streets are as follows: 21st Street, Genevieve Street, Union Street, E Street, and 8th Street. The project also included the rehabilitation and resurfacing of various street intersections. Project included street rehabilitation and resurfacing, full depth removal and replacement of asphalt concrete, cold milling and overlay of existing asphalt concrete, removal of traffic striping, installation of traffic striping and pavement markers, and construction of cross walks. The concrete improvements included the removal and replacement of sidewalk, driveways, curb and gutter, gross gutters, spandrels, curb ramps along both residential and commercial streets. Additional improvements included cross gutters, curb & gutter, survey monument reestablishment, traffic striping, manhole/utility vault adjustments, replacement of traffic signal loop detectors, and storm drain catch basin adjustment. The project cost was approximately $2.8 Million.

Pavement Rehabilitation and Resurfacing Eleven Major Streets, City of San Bernardino, CA
Construction Manager: Project included the pavement rehabilitation and resurfacing of 11 major City streets including North Sierra Way, Valencia Avenue, Baseline Street, North Arrowhead Avenue, Mountain View Avenue, Wabash Street, Olive Street, Waterman Avenue, Temple Street, and Victoria Street. Mr. Flores performed constructability reviews of the project plans and specifications prior to the bid release, and full-service construction management and construction inspection for pre-construction, construction, and project closeout of all 11 major City streets. Technical project features include: full depth asphalt concrete removal and replacement, cold mill and overlay of existing asphalt concrete, removal and replacement of sidewalk, curb ramps, curb and gutter, cross gutters, spandrels, cross walks, traffic striping and pavement markers, concrete and asphalt speed humps, traffic signal improvements, adjustment of numerous existing utility manholes, and storm drainage improvement. The project cost is approximately $5.5 Million.

Yvonne Burke John Ham Park & Community Center, City of Lynwood, CA
Construction Manager: This project was a 36,000 sf park and community center. The project included educational classrooms, multi-purpose rooms, exercise and wellness center, commercial kitchen. The foundation system was a unique mat foundation. This project was designed for a silver LEED rating and is on track for gold attainment. Project progress is being monitored for compliance with special funding under state proposition 84 requirements. Project technical features include: concrete walkways, curb ramps, landscaping, irrigation, lighting, community center, restrooms, retaining walls, parking lot, curb and gutter, site fencing, mass and precise grading, and utility installation. This project was completed ahead of schedule, within scope, and within budget. Total cost of project was $4.7M.

Thomas Dawson, CBO, ICC Certified

Senior Construction Inspector



LICENSES & REGISTRATION

- » International Code Counsel Certifications
- » Fire Inspector 1
- » Building Plan Examiner
- » California Commercial
- » Combination Inspect/Legacy
- » California Commercial Plumbing Inspector
- » California Commercial Mechanical Inspector
- » California Residential Mechanical Inspector
- » California Residential Electrical Inspector
- » California Residential Plumbing Inspector
- » Certified Building Official
- » CLB License No. 674861
- » OSHA 30 Hour Training

Mr. Dawson has over 25 years of experience in transportation, capital improvement projects, facilities, parks, water/wastewater, building, heavy civil, water treatment, lift stations, pipelines, and recharge water facilities. Mr. Dawson is ICC Certified in electrical, mechanical, plumbing. Mr. Dawson has served as an electrical inspector for powerplants, residential, industrial, commercial, fire stations, and medium voltage substations/cable splicing. He has extensive experience with switchgear, duct banks, motor control systems, PLC MCC and UPS systems, back-up generators 480v/12kv-65kv, industrial equipment, cable pulling, wiring, high voltage splicing, and industrial equipment and troubleshooting. He has coordinated with SCE on numerous projects. Mr. Dawson also provides project management both during planning stages and with continuous inspection and onsite project supervision of all trades. He provides onsite supervision to ensure compliance with all local, state, and federal requirements from concept to completion. He provides quality control and code compliance inspection services with observation reports for owners, engineers, and local jurisdictions. He provides all required government permits and coordinating required inspections. Some highlight projects Mr. Dawson provided electrical inspection for are as follows: System CCWRF RW pump Station Expansion, Philly PS Philadelphia Pump Station, Montclair Lift Station, 930 Zone Reservoir, and Turner Basin Turnout Installation. Mr. Dawson has worked on various treatment plants and lift station projects that require expansion and upgrade and has a thorough understanding of maintenance of plant operation (MOPO).

Relevent Project Experience

Enterprise

Victoria Avenue Recharge Water Facility, Riverside, CA – Senior Construction Inspector: This major capital improvement project for Western Municipal Water District includes the installation of new groundwater extraction wells as a means to help increase the groundwater basin quantity and improve its quality. Major improvements on this project include: SCADA and Storage Building, mass grading operations, the installation of three stormwater basins, a divergent structure, numerous interior roadway improvements for vehicular and pedestrian access, two concrete trapezoidal rerouting channels into the water basin, stormwater collection structure, the installation of 4000 linear feet of 20" reclaimed water pipeline three local city streets connecting the gage canal reservoir into the three proposed storm water basins. Scada building included construction, installation, and furnish SCADA and storage building complete and in place including but not limited to masonry structure, doors, foundation, roofing, reinforcement, electrical switchgear, unit substation, motor load centers, control panels, switchboards, and motor control centers. Mr. Dawson conducted MOPO meetings at project site prior to commencing shutdown for tie-in or modification of specific plant systems.

City of Vernon: 50th Street Water Main Replacement Project, Vernon, CA | Senior Construction Inspector: The project's scope of work includes demolition and reconstruction of the 12" iron ductile pipeline to the City's existing water services, such as installation of all appurtenances, fittings, valves, blow-offs, siphons, concrete pipe supports, thrust blocks, trenching, bedding and backfill, replacement of traffic markings, shoring, over excavation, temporary and permanent pavement, steel plating, and roadway improvements and repair, installation of commercial services and laterals, pressure testing and disinfection of installed pipeline. Mr. Dawson provided construction inspection for this project with daily tasks including inspection of pipeline welding and installation, inspection of the project site to ensure safety and compliance with SWPPP, preparation of daily reports, change order review, and quantity calculations.

Wastewater Treatment Plant Expansion/Renovation & Brine Pipeline Installation Project ($110M) - Beaumont, CA – Senior Construction Inspector: Mr. Dawson provided electrical inspection the Wastewater Treatment Plant Expansion/Renovation & Brine Pipeline Installation Project ($110M), sewer lift stations, and other sewer system projects for the City of Beaumont. This project has a valuation of Wastewater Treatment plant consists of the following: WWTP Expansion/Renovation – The WWTP Expansion/Renovation Project consist of expanding and upgrading the City's WWTP from 4 million gallons per day (MGD) to 6 MGD. The WWTP upgrades include installation of Membrane (MBR) system, Reverse osmosis (RO) system for salt mitigation, dewatering system, and sludge solar drying beds. The pretreatment for the RO system will include two stage screening, grit removal, conventional aeration/biological treatment, and a membrane bioreactor process. The system will continue to utilize UV disinfection. A 23 mile Brine Pipeline – to be installed to covey brine from the WWTP location to the Inland Empire Brine Line (IEBL) at the Santa Ana River at E Street in San Bernardino. This brine will be treated at Orange

County Sanitation District (OCSD). Mr. Dawson provided construction inspection for this project with daily tasks including: inspection of pipeline installation, inspection of the project site to ensure safety and compliance with SWPPP, preparation of daily reports, change order review, and quantity calculations for contractors progress pay estimate. Mr. Dawson understands and is proficient at various maintenance of plan operations, MOPO.

Secondary Treatment Facility, Whittier Narrows Water Reclamation Plant, Los Angeles County Sanitation Districts, Whittier, CA. Senior Electrical/Construction Inspector. This $9M project constructed a new RAS pump station and pipe gallery and installed process air compresses, fine air diffusion, mechanical piping, pumping equipment, power, and controls. Mr. Dawson understands and is proficient at various maintenance of plan operations, MOPO. Mr. Dawson conducted MOPO meetings at project site prior to commencing shutdown for tie-in or modification of specific plant systems. Mr. Dawson reviewed the contractors submitted MOPO including conditions of shutdown, preparation, and installation procedures.

Transportation

City of Compton: Annual Residential Rehabilitation Project ($5.4M)

Lead Construction Inspector: This project included street rehabilitation of seven major City streets. Streets included were: Caldwell Street, Myrrh Street, Grandee Avenue, 134th/Elva Avenue, Tajauta Avenue, Bradfield Avenue and Alondra Boulevard. Scope of work consisted of construction of cold mill, ARHM pavement, AC base course, aggregate base, full depth AC slot pavement, curb and gutters, sidewalks, cross gutter, alley intersection, driveway approach, curb ramps, signing, striping, markings, and pavement legends, speed hump, traffic signal loop, adjust to grade existing sewer manhole, water valve, water meter, and storm drain manhole, and such other items or details, not mentioned above, that are required by the plans and standard specifications. Scope included full-service construction management, pre-construction, management information system, reviewing traffic control plans, meetings, issues management, scheduling, cost control, labor compliance, reviewing RFIs and Submittals, change orders, dispute resolution, quality control/inspection, public relations, permits/environmental compliance, progress payments, monthly staff reports, site safety, as-builts drawings, final walkthrough, and project completion reports. Project is within schedule and budget. Project is on-going.

Caltrans District 5: SR-264 Paving, Buellton, California

Senior Construction Inspector for the project to repair failed roadway areas, cold plane roadway, and repave RHMA on Route 264 from Route 101/264 separation to Santa Rosa Creek (~6 miles). Project was completed within schedule and within project budget.

Pavement Rehabilitation Program – Winchester Road (Jefferson Avenue to Ynez Road), City of Temecula, CA

Senior Construction Inspector: for the City of Temecula pavement rehabilitation program. The work for this project generally includes pavement Improvements along Winchester Road from Jefferson Avenue to Ynez Road. Improvements Include, remove and replace existing asphalt pavement, reconstruction of traffic loops, adjust existing manholes and valves for different utilities, and installation of striping and pavement markers. The project cost is approximately $1.4 million. Technical Features include: Remove and replace existing asphalt pavement, Reconstruction of Traffic loops, Adjust Manholes, Sidewalk, Curb ramps, driveways, Adjust Valves for different utilities, Installation of Striping, Pavement Markers. Project was completed within schedule and within project budget.

Street Rehabilitation and Resurfacing of Ten City Streets, City of San Bernardino, CA

Senior Construction Inspector: This project included the street rehabilitation and resurfacing of 10 City residential and commercial streets. The project technical features include: resurfacing; concrete overlays; unclassified excavation/fill; coldmill & overlay; removal of existing sidewalk, curb and gutter; driveway approaches, and speed humps; and the construction of sidewalk, curb ramps, cross walks, cross gutters, driveway approaches, and asphalt and concrete improvements of several City streets. The project also includes tree removals and several manhole/utility adjustments. The project cost is approximately $5.1 Million.

City of Moreno Valley | 801-0081 Citywide Pavement Rehabilitation Project 18/19

Senior Construction Inspector: The project is a citywide rehab of Moreno Valley City Streets. As per plan, it includes cold milling to 1.5" and place 1.5" ARHM asphalt, curb ramps, curb and gutter, cross gutter and spandrels, full depth asphalt removal and replacement, installation of traffic striping and placement of traffic markers, adjustment of existing utility manholes, and asphalt concrete overlay.

County of Riverside: I-215/Van Buren Interchange Improvement

Senior Construction Inspector, I-215/Van Buren Interchange Improvement is a $32M project that included the realignment of the Van Buren Boulevard, overcrossing bridge over 1-215 freeway, westbound left turn lane and an eastbound dedicated right turn lane over the freeway, replacing existing railroad overcrossing with pre-cast structure. Roadway improvements included a right-turn lane for eastbound to northbound entrance ramp, and two westbound receiving lanes to accommodate the southbound exit ramp, new hook-type ramp, auxiliary lanes added to the mainline and the southbound main lane on I-215 were widened to the west to accommodate the ultimate configuration of the freeway. Five retaining walls up to 30 feet high were constructed along Railroad tracks/southbound on-ramp, southbound off ramp, north and south sides of Van Buren Blvd/west of the I-215 freeway, and east of northbound on-ramp to minimize impact the railroad and MARB right-of-way. Mr. Dawson provided inspection for roadway, traffic control, compliance with the SWPPP Plan, and ADA compliance. He assisted in contract change orders, RFIs, and submittals preparation, review, and analysis. Mr. Dawson assisted in measurement and filling out required ADA forms after project completion and forwarded documentation to

Caltrans ADA compliance unit. He worked with Caltrans and the local agencies for final approval and sign off. The ADA inspection included sidewalk, curb ramps, and curb cuts. He worked with the office engineer and Caltrans audit oversite resident engineer to ensure project documentation compliance with the Local Assistance Procedures Manuel and Caltrans filing system. Additional relevant project features include traffic signals, streetlight installation, drainage improvements, water lines, sewer lines, fencing, landscaping and irrigation, street striping, and paving (PCC & asphalt pavement).

Caltrans District 5: SR-264 Paving, Buellton, California
Senior Construction Inspector for the project to repair failed roadway areas, cold plane roadway, and repave RHMA on Route 264 from Route 101/264 separation to Santa Rosa Creek (~6 miles).

Pavement Rehabilitation Program – Winchester Road (Jefferson Avenue to Ynez Road), City of Temecula, CA
Senior Construction Inspector: for the City of Temecula pavement rehabilitation program. The work for this project generally includes pavement Improvements along Winchester Road from Jefferson Avenue to Ynez Road. Improvements Include, remove and replace existing asphalt pavement, reconstruction of traffic loops, adjust existing manholes and valves for different utilities, and installation of striping and pavement markers. The project cost is approximately $1.4 million. Technical Features include: Remove and replace existing asphalt pavement, Reconstruction of Traffic loops, Adjust Manholes, Sidewalk, Curb ramps, driveways, Adjust Valves for different utilities, Installation of Striping, Pavement Markers.

City of Moreno Valley | 801-0081 Citywide Pavement Rehabilitation Project 18/19
Senior Construction Inspector: The project is a citywide rehab of Moreno Valley City Streets. As per plan, it includes cold milling to 1.5" and place 1.5" ARHM asphalt, curb ramps, curb and gutter, cross gutter and spandrels, full depth asphalt removal and replacement, installation of traffic striping and placement of traffic markers, adjustment of existing utility manholes, and asphalt concrete overlay.

County of Riverside Magnolia Avenue Grade Separation, Riverside/Corona, CA
Senior Construction Inspector: for Magnolia Project to construct a railroad grade separation at the (BNSF) Burlington Northern-Santa Fe Railroad and Magnolia Avenue at Grade crossing, including a new four-lane overhead structure (bridge) over existing BNSF tracks supported by 9 bents and 2 abutments. Substructure comprises of 13' diameter x 88'-~100' deep CIDH piles (total 18 CIDH piles @ 2 piles per bent). Both bridge approaches are supported by Retaining Walls/MSE Walls systems on both ends, multiple walls systems for pedestrian and vehicular support. Construction of temporary MSE walls, shoring, and casing support system to facilitate construction of CIDH piling, stage construction on both approaches, and temporary bridge over Arlington channel to support temporary detour at the east end of the project. Responsibilities included inspections of the installation of the falsework and shoring systems all throughout the project. Inspections of the large diameter (13') CIDH, Coordinated flagging operations with BNSF/UPRR and coordinated all structures source inspections , prepares and documented all project activities with captioned photos.

Special Revenue Group
SilverRock Park Venue Site, City of La Quinta ($5.4M) – Senior Construction Inspector
This project is a community park for passive use. The SilverRock Park Venue Project is located on the southeast corner of SilverRock Way and Avenue 52. The park site sits on approximately 14 acres with approximately eight (8) acres of walking paths, turf, and landscaping. Construction work includes but is not limited to precise grading, landscaping and irrigation, utility construction including a grinder pump, stream and lake construction with floating fountain, furnishing and installation of pump for lake, furnishing and installation of lighting, decomposed granite parking lot construction, concrete ADA parking space construction, concrete and decomposed walkways, construction of a stage, construction of outlet structures, construction of retaining walls, construction of an outdoor theater with seating area.

Veteran Sports Park at Tustin Legacy, Tustin, CA –Senior Construction Inspector
This project is a $24M major capital improvement project for the City of Tustin. The project is a 31.5-acre sports community park bounded by Lansdowne Road, Valencia Avenue, and Severyns Road. Major improvements include infrastructure improvement, installation of drainage devices, water lines, gas lines, communication lines, interior roadway construction, and ADA compliant facilities such as sidewalks, driveways, curb ramps, parking spaces, and recreational buildings. Mr. Dawson provided construction inspection and deputy inspection for this project. Technical Project features also include: major grading activities, AC & PCC paving, reinforced concrete channels, local street improvements, ADA compliant sidewalks, driveways, and curb ramps, curb & gutter, utility installation including water and sewer lines, landscape and irrigation, concrete walkways, lighting installation, water features, and hardscape. Retaining wall, block wall and site fencing.

Yvonne Burke John Ham Park & Community Center, City of Lynwood, CA – Senior Construction Inspector
Mr. Dawson provided construction inspection and deputy inspection for this 36,000 sf park and community center. The project included educational classrooms, multi-purpose rooms, exercise and wellness center, commercial kitchen. The foundation system was a unique mat foundation. This project was designed for a silver LEED rating and is on track for gold attainment. Project progress is being monitored for compliance with special funding under state proposition 84 requirements. Project technical features include: concrete walkways, curb ramps, landscaping, irrigation, lighting, community center, restrooms, retaining walls, parking lot, curb and gutter, site fencing, mass and precise grading, and utility installation. This project was completed ahead of schedule, within scope, and within budget. Total cost of project was $4.7M.

Noah Hernandez, Certified PW Inspector

Senior Construction Inspector



EDUCATION & CERTIFICATIONS

- » Public Works Construction Inspection – Santiago Canyon College
- » Water Distribution System Operation and Maintenance, Cal State University, Sacramento
- » Liberal Arts, Fullerton College
- » Construction Inspection of Traffic Signals – University of California Institute of Transportation Studies
- » Quality of Hot Mix Asphalt Pavement Construction Certification – Asphalt Institute
- » Underground Safety Certification – City of Fullerton

Mr. Hernandez is a certified public works inspector with more than 25 years of construction management and inspection experience. Mr. Hernandez's public works inspection responsibilities include the ability to review improvement plans, inspect public improvements construction, negotiate and administer contracts, and prepare and maintain a variety of reports. His project experience includes large scale public works and capital improvement projects, including street improvements, slurry seal, pavement rehabilitation, intersection improvements, sewer and storm drain improvements, facilities, traffic signal improvements, curbs, gutters, sidewalks, bridge projects, and access ramps. He has detailed knowledge of various construction manuals, materials inspection & certification procedure and documentation, field measurement verification, review of submittals & RFI's, and coordination with various testing labs.

Relevent Project Experience

City of Irvine: ADA Facility Improvements, Operations Support Facility-Building 1, Irvine, CA | Senior Construction Inspector: This project involved numerous interior accessibility improvements to restrooms in public facilities in the City of Irvine. Mr. Hernandez inspected exterior accessibility upgrades to building entrances, improvements and rehabilitation of sidewalks, access ramps and handrails and installation of signage and striping for compliance with accessibility standards. Throughout the project, Mr. Hernandez provided full construction inspection services, document management, coordinated geotechnical and materials testing with retained laboratory, provided and maintained contract administration, implemented procedures for processing RFIs, and ensured compliance with all project plans and specifications, permitting requirements, agency requirements, and local regulations.

Inspection Services for the La Mirada Boulevard/Imperial Hwy Improvements, City of La Mirada, CA. Senior Construction Inspector supporting delivery of capital improvement projects such as improvements on La Mirada Boulevard at Imperial Highway and Imperial Highway at Telegraph Road Right Turn Pockets Project – CIP No. 2015-08. Responsibilities include but are not limited to: review and enforce the contractor's proposed construction schedule; require, monitor and document compliance with the contract and specifications, including the Storm Water Pollution Prevention Plan and all other requirements; assist in the review of submittals required by the specifications, and confirm compliance of materials delivered therewith; and attend the pre-construction meeting and weekly progress meetings.

City of Torrance: Residential and Arterial Pavement Improvement, I-159/I-139, Torrance, CA | Senior Construction Inspector: Improvements include application of slurry seal, cold mill and overlay localized pavement repairs, tree removals/replacements, asphalt berm replacement, repairs to curb, gutter, sidewalk, driveways, and access ramps. Mr. Hernandez performs daily duties of construction quality assurance inspection, including oversight of excavation, compaction, subgrade inspection, backfill, paving, and inspection of structures, electrical, welding, drainage, and underground utilities. Mr. Hernandez coordinated materials testing, attends meetings with City representatives, contractors, and other agencies, prepares constructability reviews, and ensures compliance with project plans.

As-Needed Public Works Inspection Services Contract, City of Long Beach, CA. Senior Construction Inspector supporting delivery of capital improvement projects. Inspecting such projects as the Third Street Bicycle Boulevard and the Civic Center, off site civil improvements for Park Broadway Luxury Apartments, Pacific Apartments, Linden Apartments, the Oceanaire Park and Dog Park, Metro Blue Line Median Improvements, and Ocean Ave and Chestnut Place Left Turn Pocket Project. Assigned to inspect all utility permits in the downtown area and to be part of The Long Beach Grand Prix Committee.

Capital Improvement Projects, City of Irvine, CA. Senior Construction Inspector responsible for the field administration and inspection of complex public works capital improvement projects. Assessed district and/or developer in providing infrastructure improvement projects related to private development for the construction phase of City and/or private infrastructure and facility projects. Inspections addressed grading roads, bridges, drainage facilities, landscaping, traffic signals, parks and buildings; reviewing plans, specifications and inspecting construction projects for conformance with local, State and Federal standards; and implementing and maintaining full oversight of methods, materials, equipment, quantities and safety practices. Identified, evaluated and facilitated the resolution of complex unanticipated construction issues working in collaboration with the contractor and project manager. Coordinated construction activities between City departments, outside agencies, utilities, developers, and other involved parties on an ongoing basis. Provided guidance and training to construction inspectors and consultant inspectors. Reviewed and recommended approval of all progress payments for contract work, after performing an independent material quantity calculation and verification. Inspected

streets, curb gutter, sidewalk, storm drains structures, sanitary sewers, check line, grade and size for conformance with plans and specifications. Observed, measured and examined sub grade for placement and compaction. Checked field grades for conformance to plans and surveys. Prepared and maintained a variety of records and reports related to project activities such as scheduling, measurements, quantities, contract change orders, daily activities and safety.

University Drive Widening between Campus Drive and MacArthur Boulevard, City of Irvine, CA. Senior Construction Inspector for the $11,472,300 street widening improvements project on University Drive. Inspected the removal of 86 Eucalyptus trees in the center median with coordination of a biologist due to nesting season for native birds along the Upper Newport Bay. Implemented traffic control modification per the traffic plans to allow construction of additional lanes in each direction. Coordinated relocation of Southern California Edison distribution, IRWD water mains, and Cox Communication facilities. Inspected installation of new traffic signals, controllers and appurtenances for the widening of University Drive. Inspected the construction of 1500 linear feet of retaining wall including shoring and bracing. Inspected aggregate base placement for street widening, asphalt concrete base course placement, asphalt concrete cold-milling, pavement fabric installation, asphalt concrete pavement overlays and slurry seal application. Inspected the placement of concrete improvements such as sidewalks, ramps and curbs and gutters. Inspected tasks such as adjusting a survey monument, water valve, sewer cleanout and manhole frames and covers to grade. Inspected installation of striping and pavement markings, providing public notifications and traffic control.

2017-2018 Annual Street Rehabilitation and Slurry Seal, City of Irvine, CA. Senior Construction Inspector for the $7,299,000 2017-2018 Annual Street Rehabilitation and Slurry Seal project. Inspection included asphalt pavement cold-milling, pavement fabric installation, asphalt concrete pavement overlays and slurry seal application. Also inspected removal and replacement of concrete improvements such as sidewalks, ramps, curbs and gutters. Inspected tasks such as adjusting a survey monument, water valve, sewer cleanout and manhole frames and covers to grade and installation of striping and pavement markings, providing public notifications and traffic control.

Harvard Avenue Roadway and Streetscape Rehabilitation, City of Irvine, CA. Senior Construction Inspector for the for $1,230,00 improvements on Harvard Avenue project, from Stanford Court to Columbia Ave. Inspected removal/disposal of Stone Pines and replacement with Afghan Pines. Monitored removal and replacement of damaged concrete sidewalks, curb and gutter. Monitored modifications to curb ramps for ADA compliance. Inspected the cold milling of asphalt concrete pavement and placement of a pavement surface overlay.

Planned Area of development (PA) 5 and 6 Residential Development Project, City of Irvine/Irvine Company. Senior Construction Inspector for storm drain improvements. Inspected construction of 18 inch to 120 inches of reinforced-concrete pipe PA 5 and 6, Orchard Hills, including trench backfill, construction of catch basins, local depressions, manholes, junction structures, reinforced concrete box (6-foot-by-4-foot), installation of curb and gutter, sidewalk, street lights, cross gutter, access ramps, drive approaches, base paving, placement of asphalt leveling course, placement of ARHM overlay, PCC pavement, installation of new landscape and irrigation, traffic striping, markings and signage, traffic signal installation, and any other appurtenances necessary to complete the improvements.

Lakeview Senior Center Rehabilitation, City of Irvine, CA. Construction Inspector for project removing and replacing concrete hardscape, installing storm drain and drainage inlet. Reviewed block-wall repair, irrigation and landscaping improvements and removal and replacement of outdoor lighting. Monitored the cleaning and painting of shade structure block walls.

Kazan/Walnut Traffic Signal Improvements, City of Irvine, CA. Construction Inspector for the installation of new traffic signal at the intersection of Kazan and Walnut. The project included the installation of new traffic signal, safety lighting, controller and appurtenances associated with the traffic signal. Performed inspection for installation of new ADA ramps, the cold milling of asphalt concrete and placement of pavement surface overlay, signing and striping.

Construction Inspection Services, City of Fullerton, CA. Construction Inspector reviewing plans, specifications and inspecting construction projects for conformance with local, State and Federal standards, while implementing and maintaining full oversight of methods, materials, equipment, quantities and safety practices. Performed inspection of streets, curb and gutter, sidewalks, storm drain structures, sanitary sewers, checked line, grade and size for conformance with plans and specifications. Observed, measured and examined sub grade for placement and compaction. Reviewed field grades for conformance to plans and survey. Prepared and maintained a variety of records and reports related to project activities such as scheduling, measurements, quantities, contract change orders, daily activities and safety. Acted as liaison between property owners, businesses, City departments, utility companies and government agencies.

Longview Drive Water Main/Sewer main Replacement and Street Improvements, City of Fullerton, CA. Construction Inspector for water, sewer and street rehabilitation project. The project included replacing 2500 linear feet of 8-inch DIP water main and appurtenances, 2500 linear feet of 8-inch VCP, PVC SDR 26 sewer main, new manholes, removing and replacing existing sewer and video inspection and abandoning existing water mains and valves. Street and drainage improvement work included cold planning, excavation, asphalt concrete, aggregate base, curb and gutter, access ramps, cross gutter, driveway approach and sidewalk replacement.

Slurry Seal of Various Streets-Fiscal Year 2006-07, City of Fullerton, CA. Senior Construction inspector to remove traffic striping and legends and apply Type 1 and 2 slurry seal to local streets. The project involved two major arterial streets and 60 residential streets. Construction required re-establishing survey monuments and re-striping all damaged or eradicated striping. Coordinated daily with city personnel, schools, trash collectors, emergency personnel and postal delivery.

Gregory Hunkle, CBO, ICC Certified

Senior Construction Inspector



EDUCATION
» Construction Technology, Orange Coast College, Costa Mesa
» Building Inspection Technology, Coastline College, Huntington Beach, CA

LICENSES & REGISTRATION
» General Contractor
» Building Inspector
» Plumbing Inspector
» Mechanical Inspector
» Electrical Inspector
» Combination Inspector
» Commercial Combination Inspector #0880906-05
» Building Official #0880906-CB
» Certified Special Inspector for Structural Welding
» Certified Special Inspector for Structural Masonry
» Certified Special Inspector for Structural Steel
» Certified Special Inspector for Reinforced Concrete

Mr. Hunkle has over 27 years of experience providing quality control and quality assurance with extensive experience on street improvements, parks and facilities, buildings, storm drain projects, roadway projects, street rehabilitations, and large-scale water and wastewater projects. Mr. Hunkle has provided quality assurance inspection as a lead inspector on numerous projects including as project features such as: project startup, excavations, jack and bore, backfill, reinforced concrete, masonry, structural steel, wood framing, coating of structures and pipes, roofing, mechanical, electrical, and plumbing, and project closeout. Mr. Hunkle has worked on various treatment plants and lift station projects that require expansion and upgrade, such operating plants require that these plants remain operational while under construction until commissioning and startup. Mr. Hunkle understands and is proficient at maintenance of plant operation – MOPO. Mr. Hunkle is ICC Certified in electrical, mechanical, plumbing, reinforced concrete, structural welding, and structural steel inspection. Mr. Hunkle has performed electrical inspection for powerplants, lift stations, residential, commercial, and industrial. He has provided inspection services on Agency wide HVAC improvements, Scada Enterprise systems, Compost facility conveyor upgrade, Co-Generation Control systems and Head works improvements. Mr. Hunkle has coordinated with SCE on numerous projects. His experience includes extensive background in building contracting. Mr. Hunkle has an impressive academic and professional background to include certifications as a building official, combinations building inspections, general contractor license, project management, quality control, project coordination, code interpretation. He has reviewed traffic handling plans, inspected flagging activities on public and private roads, and inspected roadway closures and traffic devices. Greg's experience includes extensive background in construction contracting and construction inspection. Mr. Hunkle has thorough field experience investigating construction defects issues and their causes, field inspection and monitored various project elements including falsework and shoring review, investigating structural problems and their causes, stage construction, generating PS elongation values and monitoring stressing operations for stage construction, coordination with various testing labs. His projects include wastewater plants, lift stations, water projects, pipeline projects, bridges, roadways, streets improvements, drainage structures, storm drains, residential, commercial and industrial, plan review of architectural, structural, building, sewer, pump stations, plumbing, mechanical and electrical plans. He has knowledge of various construction manuals, standard filing system, materials inspection & certification procedure and documentation, field measurement verification, review of submittals & RFI's, construction and removal, formwork, concrete pours, and coordination with various testing labs. His projects include retaining walls, block walls, channels, mass grading, buildings, roadways, streets improvements, drainage structures, utility installation, storm drains, residential, commercial and industrial, and plan review of architectural, structural, building, plumbing, mechanical and electrical plans.

Relevent Project Experience

Enterprise

Electrical Infrastructure Improvements, City of San Bernardino Municipal Water Department – Senior Electrical/Civil Inspector: Project scope includes: Expansion of the Blower Management (BLM) Switchgear, Integration of the Hoffman and Century well SCE services with the BLM Switchgear, and the construction of a plant-wide electrical duct bank to serve current and future facilities. Project consisted of six duct banks totaling over 4,300 linear feet, BLM system expansion, 16 manhole groups, 2 pull boxes, over 500 linear feet of curb and gutter replacement, and SCE coordination. Mr. Hunkle performed daily inspection of contractor's operations, completed daily inspection reports, quantity tracking, assisted with the contractors monthly pay estimate, and reviewed submittals and RFIs.

Wastewater Treatment Plant Expansion/Renovation Project and Brine Pipeline Installation Project – Senior Electrical/Pipeline Inspector: Mr. Hunkle performed electrical and pipeline inspection for the Wastewater Treatment Plant Expansion/Renovation & Brine Pipeline Installation Project ($110M), sewer lift stations, and other sewer system projects for the City of Beaumont. This project has a valuation of Wastewater Treatment plant consists of the following: WWTP Expansion/Renovation – The WWTP Expansion/Renovation Project consist of expanding and upgrading the City's WWTP from 4 million gallons per day (MGD) to 6 MGD. The WWTP upgrades include installation of Membrane (MBR) system, Reverse osmosis (RO) system for salt mitigation, dewatering system, and sludge solar drying beds. The pretreatment for the

RO system will include two stage screening, grit removal, conventional aeration/biological treatment, and a membrane bioreactor process. The system will continue to utilize UV disinfection. The City is also constructing a 23-mile, 12-inch diameter gravity pipeline from the Beaumont WWTP that will connect to the Inland Empire Brine Line (IEBL) in San Bernardino to discharge brine that will be treated at Orange County Sanitation District (OCSD). The Brine Line is installed within existing right-of-way and unpaved roads using open trench methods, auger jack and bore, and hydraulic directional drilling (HDD). Mr. Hunkle proactively coordinated with project purveyors including frequent coordination with SCE. Mr. Hunkle understands and is proficient at various maintenance of plan operations – MOPO.

Victoria Avenue Recharge Water Facility, Riverside, CA - Inspector of Records/Lead Inspector: This major capital improvement project for Western Municipal Water District includes the installation of new groundwater extraction wells as a means to help increase the groundwater basin quantity and improve its quality. Major improvements on this project include: SCADA and Storage Building, mass grading operations, the installation of three stormwater basins, a divergent structure, numerous interior roadway improvements for vehicular and pedestrian access, two concrete trapezoidal rerouting channels into the water basin, stormwater collection structure, the installation of 4000 linear feet of 20" reclaimed water pipeline three local city streets connecting the gage canal reservoir into the three proposed storm water basins. Scada building included construction, installation, and furnish SCADA and storage building complete and in place including but not limited to masonry structure, doors, foundation, roofing, reinforcement, electrical switchgear, unit substation, motor load centers, control panels, switchboards, and motor control centers. Mr. Hunkle maintains project records and is the Inspector of Records for this major capital improvement project. His responsibilities include roadway construction inspection, material testing, traffic handling, flagging operations, inspection of concrete and paving activities. He provides inspection of retaining walls, drainage improvements, water line installation, storm drain installation, sewer line installation, subdrains, ADA compliant sidewalk driveways, and SWPPP. He performs all deputy inspections as per project plans and specifications. Mr. Hunkle coordinates all field material testing and sampling and reviews the results for compliance to the project spec. He reviews the contractors submitted RFIs, CCOs, and concrete, material, and asphalt mix designs submittals and assures compliance with the approved project specs and documents. Mr. Hunkle conducted MOPO meetings at project site prior to commencing shutdown for tie-in or modification of specific plant systems. Mr. Hunkle reviewed the contractors submitted MOPO including conditions of shutdown, preparation, and installation procedures.

Wastewater Reclamation Project, Phase I, Hi-Desert Water District, Yucca Valley, CA - Senior Construction/Electrical Inspector: The $93M Sewer Project is comprised of a wastewater treatment and reclamation facility, a collection system, and private property connections that will help property owners comply with the State's mandated septic discharge prohibition dates. This project consists of three Phases. The collection System includes over 77 miles of pipeline in Phase One, with more to come in Phases 2 and 3. These pipes will transport wastewater that is collected from homes to the wastewater treatment facility. Existing streets where pipelines are installed will be removed and replaced with new roads. The system will be predominantly gravity fed, reducing energy costs, with three lift stations helping move wastewater uphill where necessary. Pipes ranging from 8 inches to 24 inches in diameter will provide service up to the property line of homes, businesses, and vacant land. The Private Property Connections process includes abandoning existing septic tanks and connecting each property to the pipes in the street that make up the collection system. Mr. Hunkle reviewed the contractors submitted MOPO including conditions of shutdown, preparation, and installation procedures.

Transportation

City of San Marino: Street Rehabilitation Program, San Marino, CA | Senior Construction Inspector: Improvements include cold-milling asphalt concrete pavement and re-paving with HMA and ARHM, clearing and grubbing, localized pavement repairs, replacing impacted traffic striping, markings, pavement legends, loop detectors, curb painting, replacing damaged curb and gutter, curb ramps, cross gutters, sidewalks, driveways and driveway approaches, inspection and replacement of sewer manholes, coordinating with local utilities, preparation and implementation of SWPPP and BMPs, and providing temporary traffic control in conformance with the contract documents and applicable permits. Mr. Hunkle's responsibilities included construction inspection, reviewing traffic control plans, issues management, cost control, labor compliance, dispute resolution, quality control/inspection, public relations, and ensuring site safety.

Slauson Avenue Revitalization, LACDPW $3M+.
Senior Construction Inspector: This project includes resurfacing of roadway pavement tire rubber modified asphalt concrete, reconstruction of curb and gutter, sidewalk, driveways, and curb ramps; construction of concrete pavement and crosswalks, and streetscape improvements; and the performance of other appurtenant work.

Firestone Blvd. Street Rehabilitation, LACDPW $2.4M+.
Senior Construction Inspector: This project includes resurfacing of roadway pavement tire rubber modified asphalt concrete, reconstruction of curb and gutter, sidewalk, driveways, and curb ramps; construction of concrete pavement and crosswalks, and streetscape improvements; and the performance of other appurtenant work.

Street Rehabilitation and Resurfacing of Ten City Streets, City of San Bernardino, CA
Senior Construction Inspector: This project included the street rehabilitation and resurfacing of 10 City residential and commercial streets. The project technical features include: resurfacing; concrete overlays; unclassified excavation/fill;

coldmill & overlay; removal of existing sidewalk, curb and gutter; driveway approaches, and speed humps; and the construction of sidewalk, curb ramps, cross walks, cross gutters, driveway approaches, and asphalt and concrete improvements of several City streets. The project also includes tree removals and several manhole/utility adjustments. The project cost is approximately $5.1 Million.

San Bernardino County Transportation Authority (SBCTA): I-10 Cherry Avenue Interchange, Fontana, San Bernardino County
Senior Roadway Construction Inspector: This project involved the reconstruction and widening of the interchange by constructing an additional bridge over UPRR tracks. Work included demolishing the existing bridge over I-10 Freeway and replacing it with a new bridge (2-span CIP-PS Box Girders supported on columns and founded on spread footings). Bridge Widening-PCPS Girders over UPRR Tracks, addition of a new loop on-ramp, constructed several retaining walls (MSE & Type-1 retaining walls, sound walls), Massive shoring- stage construction, installed metal beam guardrails, widened Cherry Avenue and rearranged utility company facilities. Mr. Hunkle provided inspection of roadway and bridge construction, including the relocation of utilities and mitigation of various environmentally sensitive areas in and around the project site. Inspected the installation of the project falsework and shoring systems throughout the project.

County of Riverside: I-215 / Van Buren Interchange Improvement, Moreno Valley, Riverside County, California
Senior Civil Construction Inspector: The I-215/Van Buren Blvd. Interchange Project ($32M) reconfigured the existing interchange with the addition of the new eastbound to northbound entrance ramps, realignment, and widening of Van Buren Boulevard, replacement of the bridge structures over the railroad and freeway, and the addition of a traffic signal at the northbound ramps. The bridge consisted of a 2-Stage pre-cast/pre-stressed I-girder structure, realignment of the Van Buren Boulevard, construction of a new post-tensioned, cast-in-place box girder overcrossing bridge over the I-215 freeway, new ramps, and auxiliary lanes on the I-215. Five Type 1 retaining walls up to 30 feet high were constructed along Railroad tracks and several ramps. Responsibilities included, inspections of the multiple retaining wall systems, structural drainage system, monitoring of the structural falsework and its release, inspection of the various shoring systems all throughout the project.

Parks & Public Facilities
SilverRock Park Venue Site, City of La Quinta ($5.4M) – Deputy Inspector: This project is a community park for passive use. The SilverRock Park Venue Project is located on the southeast corner of SilverRock Way and Avenue 52. The park site sits on approximately 14 acres with approximately eight (8) acres of walking paths, turf, and landscaping. Construction work includes but is not limited to precise grading, landscaping and irrigation, utility construction including a grinder pump, stream and lake construction with floating fountain, furnishing and installation of pump for lake, furnishing and installation of lighting, decomposed granite parking lot construction, concrete ADA parking space construction, concrete and decomposed walkways, construction of a stage, construction of outlet structures, construction of retaining walls, construction of an outdoor theater with seating area.

Veteran Sports Park at Tustin Legacy, Tustin, CA – Lead Construction Inspector/Deputy Inspector
This project is a $24M major capital improvement project for the City of Tustin. The project is a 31.5-acre sports community park bounded by Lansdowne Road, Valencia Avenue, and Severyns Road. Major improvements include infrastructure improvement, installation of drainage devices, water lines, gas lines, communication lines, interior roadway construction, and ADA compliant facilities such as sidewalks, driveways, curb ramps, parking spaces, and recreational buildings. Mr. Hunkle provided construction inspection and deputy inspection for this project. Technical Project features also include: major grading activities, AC & PCC paving, reinforced concrete channels, local street improvements, ADA compliant sidewalks, driveways, and curb ramps, curb & gutter, utility installation including water and sewer lines, landscape and irrigation, concrete walkways, lighting installation, water features, and hardscape. Retaining wall, block wall and site fencing.

Yvonne Burke John Ham Park & Community Center, City of Lynwood, CA – Lead Construction Inspector/Deputy Inspector
Mr. Hunkle provided construction inspection and deputy inspection for this 36,000 sf park and community center. The project included educational classrooms, multi-purpose rooms, exercise and wellness center, commercial kitchen. The foundation system was a unique mat foundation. This project was designed for a silver LEED rating and is on track for gold attainment. Project progress is being monitored for compliance with special funding under state proposition 84 requirements. Project technical features include: concrete walkways, curb ramps, landscaping, irrigation, lighting, community center, restrooms, retaining walls, parking lot, curb and gutter, site fencing, mass and precise grading, and utility installation. This project was completed ahead of schedule, within scope, and within budget. Total cost of project was $4.7M.

City of Lynwood: Yvonne Burke John Ham Park & Community Center, Lynwood, CA | Senior Construction Inspector: Mr. Hunkle provided construction inspection for this 36,000-sf park and community center. This project was designed for a silver LEED rating and is on track for gold attainment. Project technical features include concrete walkways, curb ramps, landscaping, irrigation, lighting, community center, restrooms, retaining walls, parking lot, curb and gutter, site fencing, mass and precise grading, and utility installation. Mr. Hunkle provided full time inspection on project site, coordinated materials testing, constructability reviews, maintained contract administration, evaluated all contractor claims and reviewed contractor's CPM schedule and monitored updates on a weekly basis.

AHMED IBRAHIM, PH.D, S.E., P.E., P.M.P

Z&K CONSULTANTS
BUILDING SOLUTIONS

Senior Highway & Bridge Designer/Structural Engineer

EDUCATION
» Doctoral Degree in Structural Engineering with Specialty on Seismic Design of Structures
» Master's Degree in Bridge Engineering

LICENSES & REGISTRATION
» Professional Engineer, P.E. State of California, C63963
» Structural Engineer, S.E. State of California, S4865
» Project Management Professional, PMP, 1576251

SELECTED PUBLICATIONS
»"Doyle Drive Replacement," 3rdInternational Congress and Exhibition, CEB-FIP, Washington,D.C, C.D Rom Paper No. 614, 15 pp., June 2010.
»"Analytical Assessment of Cellular Foundations for the SeismicRetrofit of the Dumbarton Bridge," NationalBridge Conference, Orlando, FL, CD Rom Paper No. 63, 17 pp., Oct. 2008.
»"Emergency Replacement of The Russian River Bridge," ASPIRE Magazine, pp 48-50, Chicago, IL, Fall 2008.
»"Load and Resistance Factor Design of Integral Bent Caps, "Journal of the Transportation Research Board, No. 2028, Design of Structures, pp. 96 –102. Washington, DC 2007.
»"Test of a High-Rise Core Wall: Effective Stiffness for Seismic Analysis," American Concrete Institute, Structural Journal, Vol. 104, No. 5, pp. 549-559, Sept-Oct 2007.
»"LRFD Design of Integral Bent Caps: Strut and Tie Method versus SectionalMethod,"Precast Concrete Institute, Grapevine, Texas, CD Rom Paper No. 9, 21 pp., Sept 2006.

Mr. Ibrahim has over 26 years of experience in structural engineering, construction management, and project management. He was the Project Manager for California Department of Transportation. He serves on national committees to develop bridge design guidelines and active in training bridge engineers. Mr. Ibrahim has performed structural assessment of numerous existing buildings and bridges, used computer programs to model various existing buildings, performed structural calculations for new and existing buildings, designed retaining walls, foundations, and roofing and framing plans, performed structural inspections, and performed cost estimates. Mr. Ibrahim has extensive experience in bridge engineering throughout design, construction, research, and teaching.

He is a Structural Integrity/ Seismic Retrofit Specialist. In his capacity as A&E Project Management of States buildings, Dr. Ibrahim was in responsible charge overseeing 29 technical staffs in managing the design and construction for The State of California's facilities such as jails, juvenile facilities, Data Center, Emergency Operation Center, seismic retrofits of courthouses, renovation of the state's Public Health Clinic and Laboratory, parking structures, Juvenile Justice Center, office buildings, libraries, fire stations and courthouse, harbor and park facilities, etc. Dr. Ibrahim managed the engineering staff in the Civil/Structural Department for commercial and industrial projects. He oversaw the construction management division, who were responsible for all structural inspections for the seismic retrofitting program of the state's unreinforced masonry structures.

Relevent Project Experience

Doyle Drive, South Access to the Golden Gate Bridge, San Francisco, SF County, CA
Project Engineer: Project Engineer for the SB Presidio Viaduct, a landmark bridge with 6 spans, cast in place prestressed concrete, 275 ft span with 14' overhang and aesthetic steel fins. Conceptual plan review of P3 – NB Presidio Viaduct.

Doyle Drive, South Access to the Golden Gate Bridge, San Francisco, SF County, CA
Project Engineer: Project Engineer for the SB Presidio Viaduct, a landmark bridge with 6 spans, cast in place prestressed concrete, 275 ft span with 14' overhang and aesthetic steel fins. Conceptual plan review of P3 – NB Presidio Viaduct.

Dumbarton Bridge Seismic Retrofit, SR 84, Cross over the San Francisco Bay, East Palo Alto, CA
Senior Designer for the seismic retrofit of the 5450 ft long East and West Approaches. Performed grillage nonlinear analysis, and linear time history analyses.

Fifth Avenue Overhead Replacement, I880, Oakland, Alameda County, CA
Construction support for the 2386 ft long CIP prestressed concrete overhead. Three stage construction, with 3 frames overcrossing UPPR live track.

Schuyler Heim Bridge Replacement, SR 47, Long Beach, LA County, CA
Senior Designer for all hinges on North and South Bounds for the 4122 ft long artery to the port of Long Beach.

Route 92/I–880 Interchange, Hayward, Alameda County, CA
Designer for 92/880 Separation Bridge (Replace) – CIP-PS Box Girder, 610 ft long, 6 spans, staged construction, 2-column bent, and 3-Column bent with variable width.

E. Roseville Viaduct Bridge (Widen), SR 65, Roseville, Placer County, CA
Senior Designer of the 14-spans 2100 ft long CIP-PS Box Girder with single column, and variable bridge width overcrossing Antelope Creek. Performed complete design for live load and seismic load.

Ahmad Alhroob, MSCE

Construction Inspector



EDUCATION
» Master of Science in Civil Engineering - University of Jordan, Amman, Jordan
» Bachelor of Science in Civil Engineering - Mutah University

TRAINING & REGISTRATION
» QSD/QSP Training
» Caltrans Temporary Pedestrian
» 30-Hr. Cal OSHA
» Defensive Driving Training
» Risk Management Training
» Hydrology Study
» Hydraulic Drainage Design
» Concrete Pavement Training
» Hot Mix Asphalt (HMA) Design & Verification

Mr. Alhroob is a qualified civil engineer with experience in construction inspection, construction management, field investigation, and quality control for numerous capital improvement projects and federally funded projects, involving major water/wastewater projects, pipeline projects, storm drain projects, street improvement, bridge construction, storm drains, traffic signals, traffic signs, streetlights, pavement markings, construction projects, and maintenance projects. He has successfully delivered over 12 storm drain and pipeline projects. His inspection responsibilities include the ability to review improvement plans, inspect public improvements construction, negotiate and administer contracts, and prepare and maintain a variety of reports. Mr. Alhroob has a thorough understanding of Cal-OSHA practices and procedures, traffic control, ADA and Caltrans ADA requirements, as well as extensive knowledge of Caltrans construction practices, physical characteristics and properties of traffic control and highway construction materials, and approved methods and equipment used in making physical tests of construction materials. Additionally, Mr. Alhroob is thoroughly familiar with the Greenbook and Caltrans field and construction office procedures, with experience assisting in inspection to assure compliance with plans and specifications, assisting in preparation of contract change orders, contract estimates, and progress payments, coordinating field testing of materials for compliance with project specifications and the Caltrans Quality Assurance Program, maintaining accurate project records, performing analytical calculations, and monitoring Contractor progress by preparing progress reports as required.

Relevant Project Experience

City of Costa Mesa: Jack Hammett Sports Complex Improvement Project, Costa Mesa, CA | Construction Inspector: This $2.3M project includes various improvements to the Jack Hammett Sports Complex, a 14.5-acre park with six illuminated utility fields, a restroom building, picnic benches, and on-site parking. The project involves parking lot improvements, concrete flatwork, ADA improvements, electrical runs to the pull boxes for multiple storage buildings, retaining walls, lighting, irrigation and landscaping, foundation improvements, construction and installation of two new storage buildings, electrical and mechanical work within the buildings, and all associated work with the buildings.

City of Rosemead: Walnut Grove Ave. Resurfacing Project Phase I, Rosemead, CA | Construction Inspector: This project involves intersection improvement, pavement improvements, ADA improvements, sidewalk repairs, traffic signal improvements, cold mill and overlay, pothole repairs, curb and gutter, specialty and bicycle loop detectors, speed humps, pedestrian crossings, and guardrail and roadway markers. Mr. Alhroob provided full-time inspection, prepared daily diaries, made assessments of exiting pavement conditions, coordinated with and provided direction for materials and geotechnical testing services, reviewed compliance with the SWPPP, reviewed traffic control plans, performed regular labor compliance interviews on site, verified and confirmed pay item quantities.

City of Lake Forest: Street Resurfacing and Slurry Seal Program, Lake Forest, CA | Construction Inspector: This street resurfacing and slurry seal program for the City of Lake Forest involves street resurfacing of Glenn Ranch Road from Portola to El Toro, slurry seal of residential Zone F, and arterial slurry seal of Jeronimo and Muirlands from Las Alisos to Bake, as well as asphalt overlay, clearing and grubbing, SWPPP preparation, cold mill and overlay, adjustment of manholes and utility covers, replacement of PCC sidewalk, installation of loop detectors, speed humps, pedestrian crossings, dig-outs at specific locations, updated ADA ramps, restriping of roadways for all three projects. Mr. Alhroob provided full-time inspection, prepared daily diaries, reviewed traffic control plans, coordinated materials and geotechnical testing services, filled out incident reports, reviewed compliance with the SWPPP and installation of BMPs.

City of San Bernardino: Slash Pads for Four Parks, San Bernardino, CA | Construction Inspector: This series of park projects involved splash pad equipment installation and other improvements for four parks in the City of San Bernardino (Tom Minor Park, Wildwood Park, Lytle Creek Park, and Anne Shirrels Park). In addition to the installation of splash pad and playground equipment, improvements included excavation, grading, landscaping and irrigation, installation of pumps and water features, and concrete ADA improvements. Mr, Alhroob maintained records of all contracts, drawings, specifications, change orders, RFI's, weekly statement of working days, and daily resident engineer reports for each of the four project sites.

CHARLES LAMB, R.A.

Senior Landscape Architect

EDUCATION
» BS –Landscape Architecture, California Polytechnic a 1987

LICENSES & REGISTRATION
» Licensed Landscape Architect – CA #3098-1989

Mr. Lamb has over 30 years of field and administrative experience in all phases of landscape construction and design as a licensed landscape architect. He is licensed and has practiced in Nevada, Arizona, Virginia, and Utah. Mr. Lamb has a keen understanding of the individual climate, character, and construction practices of each region of Southern California and beyond. As a licensed landscape architect, he has provided services to well-known varied companies such as: Lowe's, Pier I Imports, Bircher Development, Western Realco, Lennar Partners, Alere, Amazon, Starbuck's, Del Taco, Jaguar/Land Rover, Toyota, New Balance, K-Swiss, Majestic Realty, Hutton Development, Catellus, Mann Biomedical, Best Buy, Expo Design Center, McDonald's, Rally's, Lexus, BMW, Keyes Automotive, Springhill Suites, Holiday Inn, Winco Foods, Auto Zone, as well as Caltrans, and the cities of Los Angeles, Buena Park, Upland, Rancho Cucamonga, Santa Fe Springs, and Fullerton.

Relevent Project Experience

SR60 Moreno Beach Drive Interchange – Moreno Valley, CA: Supervising Landscape Architect: Performed Inspection Services for Construction of Rock Blankets at On and Off-ramps and Colored Stamped Concrete on Ranchero Road Median. Also Managed Hydroseed Submittals, Approvals, and Testing. Worked with Caltrans District 8

SR60 Nason Street Interchange – Moreno Valley, CA: Supervising Landscape Architect: Performed Inspection Services for Construction of Rock Blankets at On and Offramps, Over One Acre of Colored Stamped Concrete Decorative Paving, Colored Stamped Concrete on Nason Street Median, Irrigation System, Planting of Trees and Shrubs, and Application of Hydroseeded Plants. Worked with Caltrans District 8, Falcon Engineering, and City of Moreno Valley.

I-215 Van Buren Interchange – Riverside County, CA: Supervising Landscape Architect: Performed Inspection Services for Construction of Rock Blankets, Colored Concrete Decorative Paving at On and Offramps, Colored Concrete "Jet Fighter" Silhouettes, Irrigation System, Planting of Trees, and Application of Hydroseeded Plants. Also Inspected Preservation and Transplantation of Existing Palm Trees at Nearby Air Museum. Worked with CalTrans District 8, Falcon Engineering, County of Riverside, Eastern Municipal Water District, and March Air Base Joint Powers Authority

I-15 Ranchero Road Interchange – Hesperia, CA: Supervising Landscape Architect: Performed Inspection Services for Construction of Rock Blankets at On and Offramps and Colored Stamped Concrete on Ranchero Road Median. Worked with Caltrans District 8 and Falcon Engineering

I-15/SR-79 Temecula Parkway Interchange – Temecula, CA: Supervising Landscape Architect: Performing Inspection Services for Construction of Irrigation System, Planting of Trees, Shrubs, and Hydroseed, Concrete Separation Strip, and Rock Blankets at On and Offramps. Working with Caltrans D8.

Minimed / Medtronics Biotechnical Facility – Northridge, CA: Landscape Architect: Conceptual and Construction Document Preparation – Planting, Irrigation, and Elaborate Water Features, Hardscape and Accessibility Design of Biotechnical Research and Manufacturing Facility Joint Venture with Cal State Northridge.

Acacia Park Play Area – Fullerton, CA: Landscape Architect: Construction Document Preparation –Coordination w/ City Staff to develop Design – Planting, Irrigation, and Hardscape, and Accessibility Design – Prepared Successful Application for California State Grant to Subsidize Playground Surface Material.

Harbor Elementary School – Los Angeles, CA: Landscape Architect: Conceptual Landscape and Construction Document Preparation for Upgrades to Paved Play Areas and Landscape – Planting, Irrigation, and Hardscape.

Handel Stadium – Anaheim, CA: Landscape Architect: Construction Document Preparation for Western High School's Handel Stadium Football Field – Planting and Irrigation Plans

College Park Mixed-Use Project – Upland, CA: Landscape Architect: Master Planning, Conceptual Landscape and Construction Document Preparation – Planting, Irrigation, Accessibility, Fine Grading, Multiple Water Features, and Hardscape, along with Public Park and Streetscape for Large Scale Multi-Family Faculty and Student Residential, Retail and Commercial Mixed-Use Development in Conjunction with City of Upland

LA County Sanitation District: Secondary Treatment Facility, Whittier Narrows Water Reclamation Plant, Whittier, CA | Senior Construction Inspector. This $9M project constructed a new RAS pump station and pipe gallery and installed process air compresses, fine air diffusion, mechanical piping, pumping equipment, power, and controls. Mr. Alhroob understands and is proficient at various maintenance of plan operations. He provided full construction inspection services, document management, coordinated geotechnical and materials testing with retained laboratory, provided and maintained contract administration, implemented procedures for processing RFIs, and ensured compliance with all project plans and specifications, permitting requirements, agency requirements, and local regulations. Mr. Alhroob conducted preconstruction and field meetings at project site prior to commencing shutdown for tie-in or modification of specific plant systems. Mr. Alhroob reviewed the contractors submitted change orders, responded to contractors' RFI's and clarification, and ensured labor compliance.

City of Oceanside: Roja Lift Station Improvement Project, Oceanside, CA | Senior Construction Inspector. The project scope of work consists of construction of civil, mechanical, structural, electrical, controls, and instrumentation improvements at the City of Oceanside's Roja Lift Station. The existing lift station wet well that currently houses submersible pumps and piping is constructed of unlined concrete (pre-cast sections). The lift station structures and mechanical components have reached the end of their useful life and require complete rehabilitation. The existing submersible pumps will be removed and replaced with new submersible chopper pumps on slide rail systems that will be installed inside of the existing/rehabilitated wet well. The demolition and disposal of existing piping, pumps, valves, chain link fencing, concrete and asphalt pavement is included, per Plan. Additional accessibility improvements will provide Collections staff with a safe and reliable means for ingress and egress, including additional working clearances. The project includes a new concrete valve vault, rehabilitated wet well, replacement of force main yard piping, seismic retrofit of the existing structure, fall-protection safety improvements, such as exterior steel stairwell railings, as well as civil site work, new level control devices, various associated electrical and control system improvements, temporary bypass pumping, and appurtenant lift station improvement features, per Plan. Mr. Albroob provided full construction inspection services, document management, coordinated geotechnical and materials testing with retained laboratory, provided and maintained contract administration, implemented procedures for processing RFIs, and ensured compliance with all project plans and specifications, permitting requirements, agency requirements, and local regulations.

City of Oceanside: San Luis Rey Wastewater Treatment Plant and Aeration Basin Effluent Piping Replacement, Oceanside, CA – Construction Inspector. The project scope of work includes the reconfiguration of system connection piping, including six (6) 24-inch aeration basin effluent piping, as well as seismic retrofit of the existing structure, the installation of new plug valves, fittings, pipe, wall penetrations and installations of gate valves and flow meters or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents. Mr. Alhroob coordinated the project start and all meetings included preconstruction, field meetings, construction progress meetings, etc., and oversaw all documents pertaining to the project, including change orders, requests for information, as-built drawings, record drawings, contractor submittals, mix designs, etc.

City of Oceanside: San Luis Rey Water Reclamation Facility Digester No. 3 Cleaning and Valve Replacements, Oceanside, CA – Construction Inspector. The scope of work includes construction at the City of Oceanside San Luis Rey Water Reclamation Facility for cleaning and rehabilitating Digester No. 3 and replacing existing valves and sections of pipe and fittings, including: Cleaning, removal, and disposal of the contents of Digester No. 3, temporary odor control, interior and exterior inspection of coating, seismic retrofit of existing structures, installing plug valves to replace existing valves inside the Control Building for Digester No. 3, reconfiguration and installation of ductile iron pipe and fittings to replace existing PVC pipe and fittings inside the Control Building for Digester No. 3, and installing pipe support for new ductile iron pipe. provided full construction inspection services, document management, coordinated geotechnical and materials testing with retained laboratory, provided and maintained contract administration, implemented procedures for processing RFIs, and ensured compliance with all project plans and specifications, permitting requirements, agency requirements, and local regulations.

Hi-Desert Water District: Wastewater Reclamation Project, Phase I, Yucca Valley, CA | Construction Inspector: This Project is comprised of a wastewater treatment and reclamation facility, a collection system, and private property connections that will help property owners comply with the State's mandated septic discharge prohibition dates. The system includes over 77 miles of pipeline that will transport wastewater collected from homes to the treatment facility. Existing streets where pipelines are installed will be replaced with new roads. The system will be predominantly gravity fed, reducing energy costs, with three lift stations helping move wastewater uphill where necessary. Mr. Albroob provided full construction inspection services, document management, coordinated geotechnical and materials testing with retained laboratory, provided and maintained contract administration, implemented procedures for processing RFIs, and ensured compliance with all project plans and specifications, permitting requirements, agency requirements, and local regulations.

NICHOLAS JONES

Senior Electrical/I&C Inspector

LICENSES & REGISTRATION

» ICC E2
» California Certified Journeyman
» Certified Medium Voltage Cable Technnician
» ABC National Apprenticeship Program
» Confined Space Training
» Occupational Health & Safety Training
» Jobsite Safety Training
» Fall Protection Training
» Industry Tenure

Mr. Jones has over 21 years of experience in the electrical industry with extensive experience working in construction inspection, project management, and construction management. He has worked on more than 20 years of hands-on electrical installation experience that includes residential, commercial, industrial, Power plants, fire stations and large office buildings, medium voltage substations/cable splicing. He is well trained in the electrical field and also holds a number of certifications including ICC E2, California Certified Journeyman and Certified Medium Voltage Cable Tech. Working on job sites provide him the desired general construction experience and the familiarity to also inspect other trades. His career highlights include experience with motor control systems, PLC MCC and UPS systems, back-up generators 480v/12kv-65kv, industrial equipment, cable pulling, wiring, high voltage splicing. He is also experienced at trouble-shooting and has great dedication to his work. Mr. Jones has been providing inspection services on Agency wide HVAC improvements, Scada Enterprise systems, Compost facility conveyor upgrade, Co-Generation Control systems and Head works improvements. During his tenure at these wastewater treatment plants over the past 10 years he has provided Journeyman and Foreman level electrical services including wiring, cable pulling, splicing, and all types of electrical installs. Nick is skilled when working with motor control systems, PLC MCC and UPS systems, back-up generators 480v/12kv, industrial equipment and troubleshooting. Currently Mr. Jones has been providing inspection services to the Inland Empire Utilities Agency where he has been involved in reviewing in the design phase and added comments to streamline construction.

Relevent Project Experience

County of Riverside: Magnolia Avenue Grade Separation - Electrical/Signal Inspector: Proposed Improvements includes the construction of railroad grade separation at the (BNSF) Burlington Northern-Santa Fe Railroad and Magnolia Avenue at Grade crossing in the Home Gardens area of Riverside County. The purpose of this project is to separate the at-grade intersection with a new four lane overhead structure (bridge) over existing BNSF tracks. New bridge construction configuration will allow BNSF adding three future tracks. Mr. Jones's duties included field inspection and monitoring of various electrical system elements including street lighting, traffic signals, ramp metering and microwave vehicle detection systems, removal and construction of curb, gutter and sidewalk. He also performed inspection for SWPPP monitoring and compliance. He prepared daily reports. Mr. Jones assisted the Resident Engineer with construction inspection of rebar and concrete placement for retaining walls, sound walls and drainage structures.

Operations Supervisor, Inland Empire Utility Chino, CA, IEUA – Senior Electrical/I&C Inspector: Developed, oversaw and control a combined operating budget of over $4.5M. Mr. Jones supervised a staff of 11 in various disciplines of maintenance: Graffiti Abatement, Street Maintenance, Street Sweeping, Traffic Paint & Signs and Traffic Signals and Street Lighting. He reviewed engineering plans and specifications for proper materials and methods used for installation of traffic signal controls and lighting systems. He was the Project Manager for various City street light and traffic signal projects providing direction, advice and technical support to staff. Liaison for City Street light and traffic signal projects providing contractor's detailed standards for construction. Mr. Jones has been providing inspection services to the Inland Empire Utilities Agency where he has been involved in reviewing in the design phase and added comments to streamline construction. Mr. Jones has been involved in the following projects: HQ Central Plant for New Operations Laboratory EN11051.00 - Electrical inspections and new single line for 12kv distribution from PC-3, Turner Basin Turnout Installation EN113029.00 - Provided electrical inspections, System CCWRF RW pump Station Expansion EN07010.00 - General inspection/electrical inspection, Philly PS Philadelphia Pump Station Upgrades EN11035.00 - Electrical inspections, RP2 Digester No.4 Dome Improvements EN13049.00 - Electrical inspection, Montclair Lift Station Upgrades EN13054.00 - Electrical inspection, RP-1 & RP-2 Boiler Replacement EN11042 - Electrical inspection, RP-2 Gas Flare Repair EN05050.04 - Electrical inspection, Compost Facility Lock Room A/C Upgrade RA14002.00 - HVAC/electrical inspection, RP-1 Dewatering Building Warranty work EN06015.00 – Electrical Inspection, RP-1 Admin Boiler/ Heating Control EN11036.00 - Final testing support, Agency wide HVAC Improvements EN13056.00 - Electrical inspection, Jurupa Pump Station HVAC Upgrades EN14040 - HVAC/electrical inspection and input in design phase, Compost facility CONVEYOR UPGRADE RA11004.00 - Took over project from Butier Consulting group and provided general inspection/electrical inspection, CCWRF REHABILITATION CLARIFIER N.O. 3 EN14027.00 - Provided electrical inspection and input in design phase, Rp-4 Head Works Retro-Fit EN09021.00 - Provided electrical inspections and input in the design phase, RP-5 Stand By Gen Controls EN13047.00 - Provided electrical inspection and became part of solving 86 lock out relay issues, Prado Montclair Philly Monopole EN13043 - Discovered serious design issues and stalled the project until new design engineer was brought in, Bag House Compost Facility RA15001.00 - Provided electrical inspection and design input.

Khalil Saba, PE

Proposed Role: Principal-In-Charge



SPECIALTY EXPERIENCE

- Program / project management
- Highway design
- Funding
- Risk management
- Cost + time management

SCOPE TECHNICAL AREA EXPERTISE

- Schedules
- Work plans
- Risk registers
- Fund management
- Agreements
- Agency coordination

44+

YEARS OF EXPERIENCE

Khalil Saba brings more than 44 years of experience in civil engineering and program/project management. He spent 13 years with the California Department of Transportation (Caltrans) serving in numerous roles, including deputy director for program/project management, overseeing the delivery of all phases of Caltrans District 8 highway projects – from planning and environmental work, through final design and construction. Khalil's success has been the direct result of establishing relationships with clients that are built on mutual trust, understanding and respect.

PROFESSIONAL REGISTRATIONS

- Professional Engineer (Civil): CA 51144

EDUCATION + TRAINING

- Bachelor of Engineering, Civil Engineering, American University of Beirut, 1978

SELECT PROJECT AWARDS

- Certificate of Appreciation, American Association of State Highway and Transportation Officials (AASHTO) Value Engineering Task Force, 2001
- Certificate of Participation - 2001 Highway Program Financing Conference, Federal Highway Administration, 2001
- Caltrans Quality Team Award - Statewide Project Management Improvement Team, California Department of Transportation, 2000

**Work performed at previous firm.*

PROJECT EXPERIENCE

Caltrans District 8, Program / Project Management Support Services, San Bernardino, CA

Program Manager. EXP is providing consultation, research, professional and technical services required for Program/Project Management Services on an "as-needed" basis to support Caltrans, Division of Program/Project Management (PPM), District 8. The projects involved vary in scope and size and encompass any type of improvement for the State transportation system including, but not limited to, roadway rehabilitation, widening and/or realignment of existing facilities, relocation of existing facilities, and construction of new facilities.

City of Chino, Pine Avenue Extension to State Route 71, Chino, CA

Principal-In-Charge. The project consists of widening SR-71 northbound and southbound off ramps to increase the ramps capacities, install a traffic signal at the SR-71 northbound off ramp to Pine Avenue and restripe the overcrossing between the SR-71 northbound and southbound off ramps in the cities of Chino and Chino Hills in San Bernardino County. The EXP team is responsible for the Engineering Studies and Right of Way/Utilities, Project Management and complete PS&E package.

***Caltrans District 8 Capital Program, San Bernardino + Riverside Counties, CA**

Khalil served as Deputy District Director for Program/Project Management and was ultimately responsible for the delivery of the District's capital program, which included over $1.5B of transportation improvement projects in Riverside and San Bernardino Counties. He directly supervised a team of 18 project managers and supervisors and their staff of approximately 50 professionals. He was able to assemble well-functioning project development teams that delivered projects and got things done through ongoing coordination and consensus building with local cities, regional transportation planning agencies, FHWA, stakeholders, and other state and federal regulatory agencies.

***San Bernardino County Transportation Authority (SBCTA) Program Management & Other Specialty Services, San Bernardino, CA**

Program Manager, responsible for the ultimate performance of a 16-member team located permanently at the SBCTA offices. The $4.5B SBCTA transportation program includes approximately 25 projects in varying phases of development and involves freeway widening, grade separations, interchange improvements, and toll and high-occupancy vehicle (HOV) lanes. Khalil's duties included project, construction and contract management, value engineering, constructability reviews, risk assessments, administrative support, stakeholder coordination, and quality assurance (QA).



Portia Gonzalez, PE, QSD/QSP

Drainage Lead

Professional Registrations

- Professional Engineer (Civil): AZ, CA
- Qualified SWPPP Developer (QSD)
- Construction General Permit Qualified SWPPP Practitioner (QSP)

Education + Training

- M.S., Water Resources, California State University-Long Beach, 2010
- B.S. Civil Engineering, California State Polytechnic University, Pomona, CA, 1991

Affiliations + Memberships

- ASCE Orange County, Hydrology and Hydraulics Executive Committee Member

Portia Gonzalez brings more than 30 years of experience. She has served as project manager for various transportation projects in California, Arizona and Nevada. Her expertise includes project management, drainage design, hydrologic and hydraulic modeling, storm water management, 2D modeling, river modeling, floodplain delineation studies, storm drain master planning, detention basin design, bridge scour, roadway drainage and design, water resource planning, sediment transport and water distribution. She brings working knowledge of software such as AES, WSPG, HEC-HMS, HEC-6, HEC-RAS, Flow-Master, Storm CAD, CulvertMaster, InRoads Storm and ArcGIS.

She has worked with Caltrans (Districts 7, 8, 11 and 12), SBCTA, RCTC, OCTA, SANDAG and LA Metro, among others.

Project Experience

City of Beaumont, Master Drainage Plan (MDP) Line 2 Stage 1, Beaumont, CA
The Beaumont Master Drainage Plan (MDP) Line 2 Stage 1 is a new major storm drain trunk line for the City of Beaumont between Chestnut Avenue and First Street. The project is to design a storm drain for the 100-year storm event from a large watershed. The storm drain will have to accommodate several existing and future systems in the Line 2 watershed including a future UPRR grade separation. The project also includes design of a detention basin to attenuate flows prior to discharging to the existing Berkshire channel. The EXP Team is providing the hydrology, hydraulics, geotechnical studies, storm drain design, environmental document, traffic control, utilities, right of way and UPRR and Caltrans coordination. Portia is serving as Project Manager.

City of Chino Philadelphia St. and Monte Vista Avenue MDP System 22, Chino, CA

The City of Chino Master Plan of Drainage (MPD) was developed in 1993 to recommend the most viable and cost-effective storm drain facilities to relieve the existing deficiencies and meet future needs. The project scope includes: install a storm drain along Monte Vista Avenue and Philadelphia Street, connecting the proposed storm drain to the existing double-reinforced concrete box in the Chino storm drain, installing new catchbasins to capture surface flow, and also installing lateral connections to the new storm drain. Portia serves as the Project Manager.

***City of Chino, Hills Storm Drain Master Plan, Chino Hills, CA**

The City's Storm Drain Master Plan establishes an approach to creating a prioritized Capital Improvement Projects to mitigate the impacts of stormwater runoff in the City. This document identifies the steps taken to inventory and analyze the existing storm drain system, analyzes capacity

Portia Gonzalez, PE, QSD/QSP - *continued*

Drainage Lead

restrictions within the storm drain networks and provides recommendations. Portia was the Project Manager for a team of drainage engineers and GIS specialist that analyzed the existing drainage deficiencies throughout the City and provided a range of drainage concepts for the construction of future facilities required to serve the City at buildout of the General Plan and establishes criteria for selecting and prioritizing projects. AES Software was used to for the hydrology and hydraulic computation. Output data was extracted using a project specific programming. This data was then incorporated into the City's GIS storm drain data base.

City of Ontario, San Antonio Storm Drain, Ontario and Chino, CA

Project Manager. The San Antonio Storm Drain is part of the City's high priority project that will convey flows from a tributary area of approximately 2,500 acres. The project is approximately 2 miles in length with 3 major storm drain laterals. The proposed system ranges from 60" upstream at Philips St. to a 9'x7.5' RCB downstream that will discharge to the Sultana-Cypress Channel. Portia is responsible for the delivery of the PS&E including environmental documentation, geotechnical report, hydrology study, hydraulic study, storm drain plans, traffic control plans, utility coordination, and SBCFCD Encroachment Permit.

City of Temecula, Diaz Road Improvements, Temecula, CA, USA

The project proposes to improve Diaz Road to a major arterial road between Cherry Street and Rancho California Road. Design elements includes roadway widening and extension, raised median, landscaping, curb and gutter, sidewalk and trail realignment, drainage facilities, and treatment BMPs. Portia is responsible for the drainage analysis to comply with the City's and Riverside County Flood Control District design criteria, WQMPand PS&E.

City of Temecula, Santa Gertrudis Creek, Phase II, Margarita Under Crossing, Temecula, CA, USA

Portia serves as the drainage lead and the project goal is to construct an under crossing for pedestrian/bicycle use at Margarita Road. The 1000' multi-use trail along Santa Gertrudis Creek crosses Margarita Road atgrade under the existing bridge. The under crossing will provide continuous, safe passage under Margarita Road connecting schools and residential areas.

City of Hesperia, Peach Avenue Improvement, Hesperia, CA, USA

The City of Hesperia proposes to realign Peach Avenue between Centennial Street and Hinton Street on Peach Avenue where it crosses the Antelope Valley Wash. The project consists of realigning and raising the roadway profile over the Antelope Valley Wash with reinforced concrete boxes (RCBs) culvert, with new asphalt concrete pavement. Portia was responsible for the hydraulic alternative analysis and design of new RCBs. Design include channel realignment, grading and structural details for the RCBs to accommodate the new roadway.

City of Rialto, Street Overlay & Reconstruction Project, Rialto, CA, USA

This project is to provide engineering services for the City's 2020/2021 Street Overlay & Reconstruction Project. The scope of work includes pavement rehabilitation in various degrees, drainage analysis and design, utility identification and coordination, new ADA curb ramps, repair or reconstruction of damaged or deficient PCC curb ramps, curb, gutter, sidewalk, driveways approaches, and cross gutters. Portia is the lead drainage and stormwater engineer that provided the hydrology and hydraulic analysis for multiple locations throughout the City.

SBCTA, I-215 Segment 5 Landscape Project, San Bernardino County, CA

Drainage and Stormwater Lead. The project ncludes landscape architecture, environmental, stormwater, traffic, electrical, utilities, and cost estimating through the Project Approval and Environmental Document (PA/ED) phase as well as final Plan, Specifications, and Estimate (PS&E). This 1-mile-long project will provide a palms to pines themed landscape transition along I-215 between Highland Avenue and State Route (SR) 210 in the City of San Bernardino.

**Work performed at previous firm.*

Portia Gonzalez, PE, QSD/QSP - *continued*

Drainage Lead

The project will require significant coordination with SBCTA and several functional units at Caltrans District 8 including Landscape Architecture, Maintenance, Construction, Traffic, and Water Quality.

SBCTA I-215 Bi-County Landscaping PA/ED and PA&E, San Bernardino County, CA

Drainage and Stormwater Lead. The project includes landscape architecture, environmental, stormwater, traffic, electrical, right-of-way, utilities, and cost estimating through the Project Approval and Environmental Document (PA/ED) phase as well as final Plan, Specifications, and Estimate (PS&E). This 5.1 long project will provide a themed landscape transition along the I-215 between the San Bernardino County and Riverside County line and Orange Show Road in the City of San Bernardino. The project has required significant coordination with Caltrans District 8 as well the stakeholder cities of Colton, San Bernardino, and Grand Terrace in order to build consensus and ultimately gain approval of the landscape design and environmental document.

Caltrans 12A1756 SR-1 Project: EA 0P5900 & 0P6800: Traffic Signal Upgrades and Pavement Rehabilitation, Newport Beach, Huntington Beach, Seal Beach, CA, USA

The traffic signal and pavement rehabilitation project is located on State Route (SR) 1 between Newport Beach and Seal Beach. This project would improve 20 intersections between PM 13.0 and PM 33.6 and rehab the pavement between Warner Ave. and County Line. The proposed improvements for this location are to remove and replace the existing traffic signals and equipment due to age and serviceability with current Caltrans standard traffic signals and equipment, upgrade the existing curb ramps to the current American with Disability Act (ADA) standard, relocate/adjust the existing drainage facility due to ADA curb ramp improvements, trim the existing median island, and remove the existing pedestrian push button on the median island. Portia is responsible for the hydrology and hydraulics analysis, drainage report, NPDES compliance, and plan preparation. Tasks include coordinating with roadway and signal designers to ensure drainage needs are implemented. Cost: $ 13.3 M | Length of time spent on project: 3/2019- Current

I-40 Regrade Median Cross Slope Barstow, CA, USA

The I-40 Regrade Project is to re-grade the existing median cross slope within the clear recovery zone (CRZ) to 10:1 or flatter to reduce the severity and the number of run-off-the road accidents in the median on Interstate 40 from 1.4 miles east of Fort Cady Road (PM R25.0) to Crucero Road (PM R50.0) near

Barstow, in San Bernardino County. This project is multi-phased that covers both PA/ED and PS&E phase. Portia is responsible for the drainage analysis and design of over 25 culverts that would be extended to accommodate the proposed fill in the median. Other tasks include Caltrans coordination and stormwater coordination. Cost: $28.5M | Length of time spent on project: 08/2019 – Current

City of Anaheim, Katella Smart Street - Jean Street to Humor Street, CA, USA

Project Manager for a corridor improvement project in the City of Anaheim. Project elements include pavement rehabilitation, new storm drain trunk line, signing and striping, utility relocations, intersection improvements, traffic signal, ADA ramps, and bus turn-outs.

***SANBAG, PA/ED I-10 Express Lane Project, Project Report/Environmental Document, Montclair to Redlands, CA, USA**

The I-10 Express Lanes Alternative proposes to construct two express lanes in each direction from the Los Angeles County Line in Montclair to Ford Street in Redlands, a distance of 33-miles, along with additional auxiliary lanes at selected locations. The proposed project will consist of the widening of existing roadbeds and undercrossings, replacements for six overcrossings, the widening of 50 bridges, the realignment of on-/off-ramps, auxiliary lanes, and drainage improvements. The total project length is approximately 35 miles including 2 miles of transitional signage and striping west of the Los Angeles/San Bernardino County Line. Within these limits are three freeway-to-freeway

**Work performed at previous firm.*

Portia Gonzalez, PE, QSD/QSP - *continued*

Drainage Lead

interchanges (I-15, I-215, and I-210), 30 local interchanges, and more than 50 bridge structures that will be affected by this project. The scope of services to be provided includes the necessary tasks and activities required to complete the PA/ED process, including project management, engineering, HOV and Express Lanes alignment assessment, access/egress planning, traffic forecasts, an HOV report, a PR, Geometric Approval Drawings (GADs), fact sheets, and environmental technical studies.

Drainage Engineer responsible for the PA/ED Phase Drainage Report and Floodplain Report to support the construction of a 26-mile-long HOV lane along I-10. A conceptual drainage plan and hydraulic analysis were prepared to determine onsite and offsite drainage and water quality requirements. As part of this project, I-10 is proposed to be widened at the Santa Ana River crossing. A Preliminary Bridge Hydraulics report was performed to determine whether the proposed pier extensions will impact the river's 100-year design flows.

***Caltrans District 8 PM On-Call, San Bernardino, CA, USA**

Provided Project Management (PM) services for District 8 mainly in the I-15 Corridor.

***I-405 HOV Improvement Project (I-605 to SR-73) Design/Build, CA, USA**

I-405 Improvement Project proposed to construct two additional lanes in each direction between State Route 73 (SR-73) and Interstate 605 (I-605). The approximately 16-mile-long project corridor is primarily located in Orange County on I-405 and traverses the cities of Costa Mesa, Fountain Valley, Huntington Beach, Westminster, Garden Grove, Seal Beach, Los Alamitos, Long Beach, and the community of Rossmoor. Portia was Drainage Engineer responsible for preparing the Preliminary Drainage Report, Floodplain Reports, and Water Quality Studies (BMPs). Caltrans, in cooperation with OCTA, proposes to improve the freeway mainline and interchanges on I-405 for approximately 16 miles between Bristol Street and I-605. The Drainage Report identified several onsite and offsite drainage facilities that will be impacted by the project. Preliminary hydraulic evaluation was performed for major river crossings to determine impacts. Several permanent BMPs are proposed along the corridor to mitigate Caltrans water quality requirements.

***Metro Gold Line, Sierra Madre to Azusa, CA, USA**

Drainage and Stormwater Manager responsible for 12 miles of the Gold Line extension corridor improvement from Sierra Madre to Azusa. This project crosses the San Gabriel River where an Army Corps of engineers 408 Permit was obtained.

***California High-Speed Train, San Jose to Merced and Merced to Fresno Segment, CA, USA**

The California High-Speed Rail Authority has proposed to construct, operate, and maintain an electric-powered, steel-wheel-on-steel-rail high-speed train (HST) system to link California cities, the Central Valley, Sacramento, and the Bay Area. The HST system will be approximately 800 miles long and capable of operating at speeds of 220 mph on mostly dedicated, fully grade-separated tracks with state-of-the-art safety, signaling, and automated train control systems. Parsons is providing engineering and planning services for the San Jose to Merced section, which includes developing preliminary engineering, planning, and environmental data; preparing a project-specific Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) document; and providing right-of-way preservation and acquisition services. The EIR/EIS will entail engineering and environmental impact analyses for the HST line and facilities, station development, and connections with other modes of transportation. The EIR/EIS process will include involvement from the public; interested groups; and local, state, and federal agencies with approval or permit responsibilities. Lead drainage engineer for the delivery of the Hydrology and Hydraulics Studies, Stormwater Management Plan and Floodplain Evaluation Report. Tasks include hydraulic evaluation for numerous large river crossings, levees, floodplains, and irrigation canals. Floodplain impacts evaluation. Major drainage features studied include the San Joaquin River, Fresno River and Eastside Bypass.

**Work performed at previous firm.*

Portia Gonzalez, PE, QSD/QSP - *continued*

Drainage Lead

Drainage and Stormwater Manager for the California High-Speed Rail Authority (Authority) electric-powered high-speed rail (HSR) system in California. Provided design engineering and environmental services related to the new high-speed rail. Lead drainage engineer for the delivery of the Hydrology and Hydraulics Studies, Stormwater Management Plan and Floodplain Evaluation Report. Tasks include hydraulic evaluation for numerous large river crossings, levees, floodplains, and irrigation canals. Floodplain impacts evaluation. Major drainage features studied include the San Joaquin River, Fresno River and Eastside Bypass

***sbX Bus Rapid Transit, San Bernardino to Redlands, CA, USA**

Quality Assurance Manager to provide environmental clearance, plans, technical specifications and complete the project development (PD) phase of approximately 15.7 miles and 23 stations. Duties include review of all deliverables including roadway plans, station plans, architecture plans, drainage plans, utility relocation plans, traffic and signal plans. Enforced and ensured Quality Control and Quality Assurance policy prior to agency submittal.

***Exposition Light Rail Transit, Los Angeles, CA, USA**

Drainage Project Manager and Quality Assurance Manager for a design-build project that included an 8.6-mile double-track extension to the existing metro system. The construction entailed nine new passenger stations measuring 270 feet in length. Three of the passenger stations are on elevated structures crossing major arterials. Additionally, a 2,200-foot grade separation under the intersections at Exposition, Flower, and Figueroa streets was constructed to facilitate train operations. The traction power system consists of 750-voltage-direct-current (VDC) power from eight traction power substations, distributed to the trains by a low-profile overhead contact system (OCS). Duties include coordination of contractor change orders and drainage design peer review.

***High Desert Corridor, Palmdale to Apple Valley, CA, USA**

Drainage Manager responsible for the Preliminary Hydrology and Hydraulics Report to support the evaluation of a 63-mile long transportation facility. The project evaluated several alignment alternatives, including a tollway, rail transit, bikeway and green energy facilities. Drainage analyses include hydrology study of the Antelope Valley and Mojave River watersheds within Los Angeles County and San Bernardino County. The project area is located in an alluvial fan with several major rivers and streams that traverse the proposed corridor. Hydraulic analyses include over 100 culvert crossings and numerous infiltration basins to address hydromodification and water quality.

***City of Fontana, I-15/Duncan Canyon Road, Fontana, CA, USA**

The City of Fontana proposes a new interchange to provide an additional access point to I-15. The project includes environmental studies and preliminary engineering for several interchange design alternatives. Portia was Drainage Manager responsible the hydrology and hydraulic studies for on- and off-site areas, Stormwater Data Report, preliminary engineering of a major flood control crossing.

***City of Moreno Valley, SR-60/Moreno Beach Drive and SR-60/Nason Street, Moreno Valley, CA, USA**

The City of Moreno Valley proposes to improve the Moreno Beach Drive and Nason Street interchange. The PS&E project included, realigning ramps, adding auxiliary lanes, new traffic signal, new bridges, retaining walls, sound walls, ramp metering, landscaping, irrigation, local street improvements, drainage improvements and utility relocations. Drainage Engineer responsible for the final design plans, hydrology and hydraulic calculations, specifications, and estimate.

***RCTD, Ramon Road Improvement Project, Thousand Palms, CA, USA**

Lead Drainage Engineer responsible for the off-site and on-site hydrology and hydraulics analysis to improve Ramon Road.

***RCTD, Avenue 52 Railroad Grade Separation, Coachella, CA, USA**

**Work performed at previous firm.*

Portia Gonzalez, PE, QSD/QSP - *continued*

Drainage Lead

The project was to grade separate the at-grade crossing of Avenue 52 with Highway 111 and UPRR and improve Avenue 52 to an urban arterial highway. Lead drainage engineer responsible for the hydrology and hydraulics analysis and PS&E. The project includes design of inlets, storm drains, bridge deck drains, and detention basins.

***Caltrans, I-15/SR-74/Central Avenue Interchange, City of Lake Elsinore, CA, USA**

Drainage Engineer responsible for the PA/ED Phase Drainage Report and Water Quality Assessment.

***RCTD, Avenue 56 Airport Blvd/Railroad Grade Separation, Thermal, CA, USA**

The project was to grade separate the at-grade crossing of Avenue 56 with Highway 111 and UPRR and improve Avenue 56 to an urban arterial highway. Lead drainage engineer responsible for the hydrology and hydraulics analysis and PS&E. The project includes design of inlets, storm drains, bridge deck drains, and detention basins.

***Riverside County Flood Control District, Line K-1, City of Moreno Valley, CA, USA**

Line K-1 is located along Ironwood Avenue and consists of a pipeline constructed upstream of the SR-60/ Moreno Beach Drive interchange which will divert flow away from the interchange and convey it to the Nason Basin located in the northeast quadrant of the Nason Street interchange. At the upstream end of the pipeline, a diversion structure is proposed, comprising two large catch basins that intercept and convey flow to a 1482’ long 90” RCP transitioning to a 90’ long 7’ x 7’ RCB designated as the K-1 Line by the Riverside County Flood Control and Water Conservation District. Line K-1 will outlet to a natural drainage flow path designated as Line K by the County. At the confluence of Line K and Line K-1, a rip rap pad will be constructed to avoid potential downstream erosion of the natural drainage flow path. The conveyance system designated as Line K ultimately conveys the flow to the downstream Nason Basin for detention of peak storm flows. Line K under Ironwood Avenue consists of a 72” CMP which will be modified as part of this project.

Portia managed the drainage team that delivered the PS&E for this Moreno Line K-1.

***City of Perris, D Street, SR74 to 3rd Street, Perris, CA, USA**

Project Manager for the street calming project of D Street. The project includes lane reduction, street parking, pavement overlay, drainage analysis, signal modification and ADA improvements.

***City of Wildomar, Bundy Canyon Road, I-15 to Oak Circle Drive, Wildomar, CA, USA**

The City of Wildomar proposes to improve the Bundy Canyon Road with an additional lane and curb and gutter. Drainage Lead responsible for the hydrology and hydraulic analysis that includes large off-site tributary areas and new water quality basins.

***SR55 (I-5 to I-405), CA, USA**

***I-10 Improvement Project, CA, USA**

***I-10/Jackson Interchange Improvement, CA, USA**

***I-405 Sepulveda Pass, CA, USA**

***TCA Drainage Task Orders, CA, USA**

***Perkinsville/SR 78 Intersection Project, CA, USA**

***I-405 Widening (I-605 to SR-55), CA, USA**

***Gerald Desmond Bridge, CA, USA**

***Centennial Corridor Project, CA, USA**

***SR-91/East Street Interchange Project, CA, USA**

**Work performed at previous firm.*

Portia Gonzalez, PE, QSD/QSP - *continued*

Drainage Lead

***City of San Juan Capistrano, Del Obispo Road Improvement, San Juan Capistrano, CA, USA**

***Katella Smart Street, Anaheim, CA, USA**

***City of Laguna Beach Master Storm Drain Plan, Laguna Beach, CA, USA**

***City of Chino Hills Master Storm Drain Plan, Chino Hills, CA, USA**

***Agua Fria River and Gila Rivers Analysis of Sand and Gravel Operations, USA**

***Zone A Floodplain Delineation for Lower Centennial Wash, USA**

***SR101L/Thunderbird Ave Widening Drainage Design, AZ, USA**

***SR101L/Olive Ave Widening Drainage Design, AZ, USA**

***Arizona DOT, Task Order, AZ, USA**

***City of Phoenix, Task Order, AZ, USA**

**Work performed at previous firm.*



Christine Brown, PE

Roadway

Professional Registrations

- Professional Engineer (Civil): CA 92510

Education + Training

- B.S., Civil Engineering, California State Polytechnic University

Languages Spoken

- English

Christine Brown has more than 7 years of civil engineering experience servicing as deputy project manager, task lead, and project engineer for various public improvement projects throughout California.

Her specialties include geometric design and corridor modeling of trail, roadway, and transit corridors including grading, drainage, and wet utilities; intersection improvements including ADA curb ramps and access paths; Complete Streets projects; Safe Routes to Schools projects; and traffic analysis. She is proficient in AutoCAD/Civil 3D, Microstation, MicroStation/InRoads, InfraWorks, SketchUp, PTV Vissim, and MS Project.

Project Experience

SBCTA, SR-210 /Waterman Interchange Project, San Bernardino, CA

Christine is serving as the Assistant Project Manager for the Design Engineering Evaluation Report / Environmental Document, and Plans, Specifications, and Estimate phases of the SR210 / Waterman Interchange Project, and is leading the design team which includes roadway and structural engineering, traffic analysis, drainage, environmental, geotechnical, surveying, and utility coordination. The purpose of the project is to improve traffic operations and local circulation at the SR210 / Waterman Avenue interchange. The eastbound on-ramp will be widened from one lane to two lanes; additionally, the intersection of Waterman Avenue and East 30th Street will be restriped to allow for two left-turn lanes in the northbound direction, while the intersection of Waterman Avenue and the eastbound ramps will be widened to allow for two left-turn lanes in the southbound direction. This project requires approval from Caltrans District 8 Oversight.

County of San Bernardino, Phelan Road Widening Project, San Bernardino, CA

Christine is serving as the QA/QC Lead for the Project Approval and Environmental Document phase of the Phelan Road Widening project. The purpose of the project is to widen 12.1 miles of Phelan Road from 2 lanes to 4 lanes with a painted median to accommodate for the increased population and resulting traffic in the region. The project will also re-align Phelan Road at State Route 138 to eliminate the existing skewed intersection which will ultimately be approved through Caltrans District 8 Oversight.

SBCTA, I-215 Bi-County Landscaping PA&ED and PS&E, San Bernardino County, CA

SBCTA is proposing landscape improvements to I-215 in order to provide a cohesive corridor between the counties of San Bernardino and Riverside. The project will require significant coordination with all stakeholders including Caltrans

Christine Brown, PE, QSD - *continued*

Roadway

District 8, and the cities of Colton, San Bernardino, and Grand Terrace in order to obtain approval of the landscape design and environmental document. As project engineer, Christine is responsible for assisting with the design and plan production, as well as the preparation and approval of the Project Report.

City of Temecula, Santa Gertrudis Creek Phase II, Margarita Under-Crossing, Temecula, CA

The City of Temecula is proposing to construct an undercrossing for pedestrian / bicycle use along the Santa Gertrudis Creek trail at Margarita Road. The undercrossing will provide continuous, safe passage under Margarita Road, connecting schools and residential areas. Christine is assisting with the development and ongoing management of the project schedule along with liaising between the various team members and subconsultants. As Roadway / Trail Task Lead, Christine is also responsible for the design of the undercrossing including geometric layout, grading, drainage, bicycle lane improvements, and ADA modifications. Christine will also be developing the construction cost estimate and technical specifications for the project.

City of Chino, Pine Avenue Extension to State Route 71, Chino, CA

Christine is serving as Roadway Task Lead for the Pine Avenue Widening Project at the SR71 / Pine Avenue interchange in the cities of Chino and Chino Hills. The project includes widening the northbound and southbound off-ramps to increase the ramp capacities, install a traffic signal at the SR71 northbound off-ramp to Pine Avenue, and restripe the overcrossing between the SR-71 northbound and southbound off ramps in the cities of Chino and Chino Hills.

City of Seal Beach, Seal Beach Boulevard & I-405 Pavement Rehabilitation, Seal Beach, CA

The City of Seal Beach is proposing a pavement rehabilitation project at the intersection of Seal Beach Boulevard and I-405 EB Ramps / North Gate Road. The project will include pavement rehabilitation for the entire intersection and extending approximately 440 linear feet to the south. As Assistant Project Manager, Christine is responsible for ensuring the project remains on schedule and both identifying and mitigating any potential delays. Christine is also responsible for coordination efforts with the entire team, including teaming partners, and stakeholders (including Caltrans District 12). Finally, Christine is responsible for ensuring the quality and timing of each deliverable, including the Preliminary Environmental Study (PES) and CE /CE, the geotechnical report, the topographic survey, right-of-way certification, utility research, PS&E documents, and any permits required for construction.

City of Downey, Lakewood Boulevard and Imperial Highway Intersection Improvements, Downey, CA

The City of Downey is looking to improve traffic circulation and mobility within the I-605 Freeway corridor by minimizing congestion through added capacity and improved operation of the Lakewood Boulevard and Imperial Highway intersection. As project engineer, Christine is responsible for the design of the roadway widening and civil improvements including the geometric layout, grading, drainage, ADA curb ramp upgrades, and private property improvements. Christine is also assisting with the development of the technical specifications and cost estimate.

Caltrans District 8, Project Management Support Services, San Bernardino, CA

EXP is providing consultation, research, professional and technical services required for Program / Project Management Services on an "as-needed" basis to support Caltrans, Division of Program / Project Management (PPM), District 8. As part of the PPM team, Christine assists with providing services to Caltrans including, but not limited to, integration management; scope management; time management; cost management; quality management; resource management; communication management; risk management; project scheduling; project coordination; PM developments and project resource estimating services.

***SBCTA, West Valley Connector Corridor - Pomona to Fontana, CA**

The West Valley Connector is a bus rapid transit (BRT) project that proposes limited stops, providing speed and quality improvements to the public transit system within the corridor. Among the numerous benefits, BRT provides premium transit

**Work performed at previous firm.*

Christine Brown, PE, QSD - *continued*

Roadway

with 10-15 minute service, Transit Signal Priority (TSP), dedicated lanes, enhanced stations and integration with other bus routes. The project seeks to improve mobility in the San Bernardino Valley with an enhanced, state-of-the-art BRT system to address the growing traffic congestion and the one million people that will be added to the area by 2030. As part of the design team, Christine assisted with the refinement and evaluation of 14 build alternatives, including development of proposed bus routes and station location as well as identification of key impacts to rights-of-way, structures, utilities, and other existing infrastructure.

***SBCTA, Upland Transit-Oriented Development - Upland, CA**

SBCTA, in conjunction with SCRRA and the City of Upland, proposed a Transit-Oriented Development (TOD) around the Upland Metrolink Station. The goal was to provide the opportunity to shift trips from automobiles to transit and serve as a catalyst for economic development and community improvements. As part of the transit design team, Christine was responsible for preliminary design of railway, station, and parking lot improvements as well as identifying potential utility impacts and coordinating with the respective utility owners. Christine also evaluated various alternatives for pedestrian access to the new station platforms from both the downtown Upland area and proposed developments.

***City of Los Angeles, Soto Street Widening (LABOE), Los Angeles, CA**

The City of Los Angeles is looking to widen Soto Street from two lanes to four, from Multnomah Street north to Mission Road to relieve traffic congestion and improve safety by implementing a retaining wall to help keep hillside debris off the roadway. The project will tie into the Soto Street / Mission Road bridge removal and street improvement project to the north, and the Soto Street / Valley Boulevard bridge widening project to the south. It will include a wider sidewalk along with Class IV bicycle lanes and will greatly improve vehicular and bicycle mobility throughout the corridor. Christine served as the Deputy Project Manager and was responsible for managing the design schedule and sub-consultants, along with serving as the main point-of-contact with LA BOE. Christine also served as the Roadway Task Lead / Project Designer and was responsible for the discipline design budget as well as the final design of the roadway widening and civil improvements including the geometric layout, grading, drainage, and intersection improvements.

***City of Los Angeles, Century Boulevard, Jordan Downs Redevelopment, Los Angeles, CA**

The City of Los Angeles proposed the extension of Century Boulevard from Grape Street to Alameda Street for a distance of approximately 2,600 feet as part of the Jordan Downs Redevelopment Project. Century Boulevard was underdeveloped in this area and required preparation of new street improvement plan and profile drawings, sewer plans, water plans, street light plans, traffic signal plans, signing and striping plans, storm drain improvement plans, planting and irrigation plans, dry utility plans, and incorporation of “green” elements and structures. As part of the roadway design team, Christine was responsible for portions of the design of the roadway extension, intersections, ADA curb ramps, drainage, and wet utilities along with direct coordination between the City, LA DWP, and the State Resources Control Water Board.

***City of Lancaster, 5th Street East Corridor Improvements - Lancaster, CA**

The City of Lancaster proposed intersection and roadway improvements of the 5th Street East corridor between Avenue H-8 and Avenue J-4. The improvements included curb bulb-outs, ADA curb ramps, pedestrian refuge islands, Class II bicycle lanes, drainage improvements, traffic signal modifications, and signing and striping plans. As part of the roadway design team, Christine was responsible for the design of intersection improvements including curb bulb-outs, ADA curb ramps, and drainage design.

**Work performed at previous firm.*



Anh Case, PE, CCM

Construction Management

Professional Registrations

- Professional Engineer, Civil, 64709, CA
- CMAA CCM #5798
- OSHA 30

Education + Training

- MS, Civil Engineering, University of California, Irvine, 2003
- BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, 1999

Affiliations + Memberships

- CMAA Southern CA
  - Events & Awards Chair 2019-2021
- WTS Orange County
  - Treasurer 2018-present
  - Mentoring Committee 2016-present
- ASCE Orange County
  - Membership Chair 2000-2018

Languages Spoken

- English
- Cantonese (Chinese)

Anh Case has 24 years of structural and civil engineering experience in the areas of bridges and commercial buildings. Her experience includes construction management, quality assurance/quality control (QA/QC) inspection, planning, scheduling, structural design, quantity takeoffs, cost estimates, plan preparation, and client correspondence. Anh has held positions ranging from bridge design engineer, construction inspector to structures representative, as well as resident engineer. She has worked on various transportation projects, including the I-405 Improvement Project, Borden Bridge Road Improvements, SR 101/Springville Interchange, SR 178/Fairfax Interchange, Metro Exposition Transit Corridor, SR 22 High Occupancy Vehicle (HOV) Widening Design-Build project and the Ocean Boulevard/Terminal Island Freeway Interchange. Anh has worked with a variety of agencies, including California Department of Transportation (Caltrans), Orange County Transportation Authority (OCTA), Port of Long Beach (POLB), Metrolink, and various city agencies including Los Angeles, Bakersfield, Camarillo, San Marcos and Seal Beach.

Anh is experienced in the design and construction of simple-span and multi-span bridges, retaining walls, mechanically stabilized earth (MSE) walls, and retrofit of existing bridges in accordance with Caltrans and American Association of State Highway and Transportation Officials (AASHTO) codes. She also has experience with highway construction inspection requiring compliance with Caltrans' procedures, standard plans, and specifications. Anh is very familiar with the Caltrans electronic lane closure system (LCS) and is well versed with the Manual of Uniform Traffic Control Devices (MUTCD), California Supplement. She is also knowledgeable in the required frequencies and procedures of materials testing in accordance with the Caltrans Construction Manual and the California Test Method. Anh also understands environmental considerations, including storm water pollution prevention plan compliance.

Software proficiency: MS Office Suite (Excel, Word, PowerPoint, SharePoint, OneNote), Bluebeam, Adobe Acrobat, Procore

Anh Case, PE, CCM – *continued*

Construction Management

Project Experience

Inland Valley Development Agency (IVDA), Mountain View Avenue Roadway Improvements Project, San Bernardino, CA, $12.2M

Structures Representative. Inland Valley Development Agency (IVDA) is the lead agency for the Mountain View Avenue Roadway Improvements Project. This $12.2M project will replace the two-lane bridge at Mission Creek with four lanes, widen Mountain View from the Mission Creek Bridge to the Santa Ana Bridge, provide new curb, gutter and sidewalk to the west side of Mountain View, construct roadway and traffic signals improvements at Victoria and San Bernardino Avenues, realign the access roads to the SCE Mountain View Generating Station, realign and strengthen the walls of Mission Creek and resurface Mountain View Avenue from the Santa Ana River to Mission Creek. The Project will also provide storm drain, water, gas line, and private improvements along Mountain View Avenue. EXP is providing Construction Inspection and Structures Representative Services.

Anh is responsible for reviewing plans such as Girder Erection Plan, Contractor Schedule for Structures related activities and structures grades for substructure and super structure elements.

Other Role / Scope of Services Provided include:

- Management and administration of construction contract activities.
- Providing cost, schedule, and document control services.
- Assist in Changes and Claims resolution
- Providing project progress reports and attend meetings.
- Structures Inspection Services
- Bridge deck 4-scales and grades
- Monitoring construction contractor safety compliance and labor code compliance.
- Monitoring construction contractor maintenance and record drawing obligations.
- Coordination with the adjacent Redlands Passenger Rail Project.

Dates on project: July 2020 – August 2021

***Orange County Transportation Authority (OCTA), I-405 Improvement Project, Orange County, CA, USA, $600M**

Structures Segment Lead. Orange County Transportation Authority (OCTA) in cooperation with The California Department of Transportation (Caltrans) is widening the San Diego Freeway (I-405) between State Route 73 (SR-73) and Interstate 605 (I-605). The project will improve 16 miles of I-405 between the SR-73 freeway in Costa Mesa and I-605 near the L.A. County line. The project includes adding one general purpose lane in each direction between Euclid Street and I-605 and making improvements to freeway entrances, exits and bridges. In addition, the project will add the 405 Express Lanes, incorporating the existing carpool lanes and a new lane in each direction between SR-73 and I-605. The project is within 4 City agencies including Seal Beach, Huntington Beach, Westminster and Costa Mesa and includes improvements to 32 utilities and 22 bridges along the corridor. Improvements to the 22 bridges include widenings, rehabilitation, replacements and stage construction.

Anh was the Segment 3 Structures Lead. She was responsible for the oversight of the Caltrans Quality Verification Structures Team in Segment 3. She also manages inspection staff, reviews a variety of submittals such as shoring, falsework, excavation plans, bridge demo plans and concrete mix designs. Anh also review the Quality Management Plans and various construction work plans.

Dates on project: May 2017 - January 2019

**Work performed at previous firm.*

Anh Case, PE, CCM – *continued*

Construction Management

***City of San Marcos, Borden Bridge Road Construction Management, San Marcos, CA , $5M**

Resident Engineer/Structures Representative. Anh provided construction management services for the Borden Road Bridge, a gap-closure bridge that spans the San Marcos Creek on Borden Road from Twin Oaks Valley Road to Woodward Street. The project included a two-span precast, prestressed T-bulb girder bridge. The bridge was constructed on two types of cast-in-drilled-hole (CIDH) piles and includes two 12-foot traffic lanes in each direction, a five-foot shoulder/bike lane in each direction, a 10-foot wide equestrian/multi-use trail, and a five-foot sidewalk. Roadway improvements included bridge approaches, drainage, landscaping, and irrigation improvements.

Anh reviewed and coordinated comments from all reviewers for working drawings such as falsework plans, column guying plans, prestress and precast shop plans, rebar shop plans, and pile drivability study. She ensured that the pile driving activity was monitored continuously and the pile driving records were logged and documented for the CIDH piles. She provided the abutment grades, column grades, camber, soffit grades, and top of deck grades using the bridge deck grades (four-scale). Anh also ensured that embankment surcharge loads were built and monitored per the contract specifications. She was also responsible for addressing requests for information (RFIs) pertaining to the bridge. She led preactivity meetings to address milestone activities such as pile drilling, falsework erection and removal, superstructure concrete pours, and prestressing of the girders. Anh worked closely with the City of San Marcos' material technicians to ensure accurate testing and material acceptance for items used on the project. Other responsibilities included coordinating with utility entities (Vallecitos Water District and San Diego Gas and Electric) through the bridge structure. She provided daily reports, weekly structural newsletters, and weekly statements of working days and photos to ensure accurate documentation of the project. She also provided quantity sheets and reviewed and negotiated pay estimates with the contractor monthly. She reviewed and negotiated contract change orders (CCOs) and ensured the contractor's compliance with plans, specifications, and other contract documents to produce quality structures while maintaining a safe environment. At the completion of the project, Anh provided closeout items such as certification of materials, disposition of records, and as-built information.

Dates on project: October 2011 - November 2013.

***Filippin Engineering & City of Camarillo, Springville Interchange/US 101 Interchange Construction Management, Camarillo, CA , $28M**

Assistant Resident Engineer/Structures Representative. The project constructed a new diamond interchange with the Springville Drive overcrossing across US 101. Roadway improvements included four new ramps and bridge approaches, as well as associated drainage, landscaping, and irrigation improvements. The overcrossing was a two-span, cast-in-place, prestressed box girder bridge with abutments and columns on pile cap and cast-in-steel-shell (CISS) piles.

Anh reviewed and coordinated comments from all reviewers for working drawings such as falsework plans, column guying plans, pre-stress shop plans, rebar shop plans, structural sign shop plans and pile drivability study. She ensured that the pile driving activity was monitored continuously and the pile driving records were logged and documented for the CISS piles. She provided the abutment grades, column grades, camber, soffit grades, and top of deck grades using the bridge deck grades (four-scale). Anh also ensured that embankment surcharge loads were built and monitored per the contract specifications. She was also responsible for addressing requests for information (RFIs) pertaining to the bridge. She led preactivity meetings to address milestone activities such as placement of shoring boxes, pile driving, falsework erection and removal, superstructure concrete pours and prestressing of the bridge. Anh worked closely with the Caltrans' Oversight and Materials Engineering and Testing Services (METS) to ensure accurate testing and material acceptance for items used on the project. Other responsibilities included

**Work performed at previous firm.*

Anh Case, PE, CCM – *continued*

Construction Management

coordinating with four different utility entities (Southern California Edison, Verizon, Time Warner Cable, and City of Camarillo sewer) through the bridge structure. She provided daily reports, weekly structural newsletters, and weekly statements of working days and photos to ensure accurate documentation of the project. Anh also led and coordinated partial and full closures on the SR 101 during the shoring box installation, falsework erection, and removal. She also provided quantity sheets and reviewed and negotiated pay estimates with the contractor on a monthly basis. She reviewed and negotiated contract change orders (CCOs) and ensured the contractor's compliance with plans, specifications, and other contract documents to produce quality structures while maintaining a safe environment. At the completion of the project, Anh provided closeout items such as certification of materials, disposition of records, as-built information, and a Report of Completion of Structures.

Dates on project: May 2010 – May 2012.

**Work performed at previous firm.*

Ryan Luong, PE, QSD/QSP

Drainage

Professional Registrations

- Professional Engineer (Civil): CA
- Qualified SWPPP Developer (QSD)
- Construction General Permit Qualified SWPPP Practitioner (QSP)

Education + Training

- B.S. Civil Engineering, California State Polytechnic University, Pomona, CA, 1998

Ryan Luong is a California Licensed Civil Engineer with more than 20 years of professional civil engineering experience in planning, design, supervision, project management, and construction management of roadway, highway, rail transit, airport and waterworks infrastructure projects. He has working knowledge of all phases of the projects from conceptual engineering, preliminary design to detailed engineering design and construction contract preparation; Experience with design-build transportation projects in California, Colorado, Indiana and Oregon. His design experience includes roadway/highway design, grading, drainage, hydrology, hydraulic modelling, utility, street improvements, storm drains, sanitary sewers. He is proficient in computer-aided design and drafting software (Microstation, Power Inroads), hydrology and hydraulics analysis software (HEC-RAS, WSPG, StormCAD).

He has worked with Caltrans (Districts 7, 8, 11 and 12), SBCTA, RCTC, OCTA, SANDAG and LA Metro, among others.

Project Experience.

City of Ontario, San Antonio Storm Drain, Ontario and Chino, CA

Senior Project Engineer. The San Antonio Storm Drain is part of the City's high priority project that will convey flows from a tributary area of approximately 2,500 acres. The project is approximately 2 miles in length with 3 major storm drain laterals. The proposed system ranges from 60" upstream at Philips St. to a 9'x7.5' RCB downstream that will discharge to the Sultana-Cypress Channel. Ryan is responsible for the delivery of the PS&E including hydrology study, hydraulic study, and storm drain plans.

SBCTA and City of San Bernardino, SR 210 at Waterman Avenue Interchange Project, San Bernardino, CA

Senior Project Engineer. The Project will improve traffic operations and local circulation at the SR 210/Waterman Avenue intersection with East 30th Street and the eastbound SR 210 entrance ramp. The eastbound on-ramp will be widened to two lanes and will include a retaining wall. The bridge will be striped to provide dual northbound and southbound left-turn lanes at the intersection.

Ryan Luong, PE, QSD/QSP - *continued*

Drainage

***City of Ontario / Grove Avenue Interchange and Grove Avenue Widening**

The City of Ontario, in cooperation with the California Department of Transportation (Caltrans), proposed to improve the existing Interstate 10 (I-10) / Grove Avenue Interchange in the City of Ontario, California. The proposed improvements included a new interchange at Grove Avenue and widening of the Grove Avenue corridor from Fourth Street to Airport Drive. Tasks included hydraulic evaluation for major channel crossing, floodplain evaluation, hydrology and hydraulic analyses and preparation of drainage reports.

***SANBAG, PA/ED I-10 Express Lane Project, Project Report/Environmental Document, Montclair to Redlands, CA, USA**

The I-10 Express Lanes Alternative proposes to construct two express lanes in each direction from the Los Angeles County Line in Montclair to Ford Street in Redlands, 33-miles, along with additional auxiliary lanes at selected locations. The proposed project will consist of the widening of existing roadbeds and undercrossings, replacements for six overcrossings, the widening of 50 bridges, the realignment of on-/off-ramps, auxiliary lanes, and drainage improvements. The total project length is approximately 35 miles including 2 miles of transitional signage and striping west of the Los Angeles/San Bernardino County Line. Within these limits are three freeway-to-freeway interchanges (I-15, I-215, and I-210), 30 local interchanges, and more than 50 bridge structures that will be affected by this project. The scope of services to be provided includes the necessary tasks and activities required to complete the PA/ED process, including project management, engineering, HOV and Express Lanes alignment assessment, access/egress planning, traffic forecasts, an HOV report, a PR, Geometric Approval Drawings (GADs), fact sheets, and environmental technical studies.

***OCTA, I-405 HOV Improvement Project (I-605 to SR-73) Design/Build, CA, USA**

I-405 Improvement Project proposed to construct two additional lanes in each direction between State Route 73 (SR-73) and Interstate 605 (I-605). The approximately 16-mile-long project corridor is primarily located in Orange County on I-405 and traverses the cities of Costa Mesa, Fountain Valley, Huntington Beach, Westminster, Garden Grove, Seal Beach, Los Alamitos, Long Beach, and the community of Rossmoor. Ryan was Drainage Engineer responsible for preparing the Preliminary Drainage Report, Floodplain Reports, and Water Quality Studies (BMPs). Caltrans, in cooperation with OCTA, proposes to improve the freeway mainline and interchanges on I-405 for approximately 16 miles between Bristol Street and I-605. The Drainage Report identified several onsite and offsite drainage facilities that will be impacted by the project. Preliminary hydraulic evaluation was performed for major river crossings to determine impacts. Several permanent BMPs are proposed along the corridor to mitigate Caltrans water quality requirements.

***Prado Auxiliary Dike Flood Wall Project**

US Army Corps of Engineers proposed 2005 to build Prado Auxiliary Dike Flood Wall in the City of Corona, California for flood protection purposes. Tasks included preparation of project feasibility report.

***South Bay Expressway, State Route 125 Toll Road Design-Build Project**

The South Bay Expressway, a 9.3-mile tolled extension of SR-125 in San Diego County, CA, was developed in 2003 under a long-term public-private (P3) concession by California Transportation Ventures. The project was built in conjunction with the construction of the publicly funded 3.2-mile link to the existing freeway network at the northern end. Tasks included project hydrology and hydraulic calculations, drainage design and preparation of project drainage plans.

**Work performed at previous firm.*

Ryan Luong, PE, QSD/QSP - *continued*

Drainage

***L.A. Metro, Metro Gold Line Foothill LRT Segment 1 Design-Build**

The project proposed to build 13.7 miles of light rail line and 13 stations in 2000. The project would connect Union Station in Downtown Los Angeles and Pasadena. Tasks included drainage design and at-grade crossing roadway design.

***The Metropolitan Transit Development Board (MTDB), Mission Valley East LRT Extension**

MTDB proposed to build a 5.9-mile Mission Valley East Light Rail Transit (LRT) extension of its Blue Line in 1999. The project extended the existing system from its current termini east of Interstate 15 to the City of La Mesa, where it would connect to the existing Orange Line near Baltimore Drive. The line served four new stations at Grantville, San Diego State University (SDSU), Alvarado Medical Center and 70th Street, as well as two existing stations at Mission San Diego and Grossmont Center. The proposed project included elevated, at-grade, and tunnel portions and provide two park and ride lots and a new access road between Waring Road and the Grantville Station. Tasks included river hydraulic modeling, drainage design and roadway design.

***California Department of Transportation, Palo Comado Canyon Road/US 101 Interchange Final Design, City of Agoura Hills, CA**

The interchange was deficient with regard to safety and capacity. The project included bridge widening, street improvements, new on- and off-ramp configuration and modification, landscaping, aesthetics, and street lighting. Ryan provided final design's hydrology and hydraulic analyses, drainage design, and a stormwater data report.

***Port of Long Beach, POLB Pier E Intermodal Yard Design, Long Beach, California, United States. 7/2015-9/2017.**

The new 12-track, on-dock intermodal facility is part of POLB's Middle Harbor Terminal development project to combine Piers E and F into a 350-acre mega terminal known as Middle Harbor Terminal. The project features included electrified wide-span rail-mounted gantry cranes and provisions for crane and rail yard automation. The scope included final design of concrete beam crane rail foundation, track alignment, grading, drainage, in-ground compressed air, track control, and worker protection systems and support buildings. A simulation modeling of the rail yard operations was performed to evaluate design features.

**Work performed at previous firm.*



Mitsuru Tanaka, PE, PTOE, PTP

Traffic Design

Professional Registrations

- Professional Engineer
  - DC #PE922223,
  - VA #0402053361,
  - MD #51273,
  - DE #26195,
  - WV #24605,
  - GA #PE046761,
  - FL #PE91047,
  - IL #062073065,
  - WI #48379-6,
  - OH #88596,
  - OR #66717PE
- Professional Traffic Operations Engineer (PTOE) #1024
- Professional Transportation Planner (PTP) #271

Education + Training

- M.S., Civil Engineering, University of Delaware, 1998
- B.S., Civil Engineering, Hokkaido University, Japan, 1994Affiliations + Memberships

Select Project Awards

- Project Title, Award Title, Organization, Year
- i.e. High Road over Long Run Creek, Honor Award, ACEC-IL, 2009

Mitsuru Tanaka has over 23 years of experience in transportation planning and traffic engineering projects for various state transportation agencies including Caltrans, DDOT, VDOT, MdSHA, MdTA, MTA, DelDOT, PennDOT, NJDOT, GDOT, and FHWA. His areas of expertise include travel demand forecasting, capacity/level of service analysis, traffic safety analysis, traffic impact analysis, traffic signal design, ITS design, signing and pavement marking design, roadway lighting design, and developing Transportation Management Plan (TMP), Maintenance of Traffic (MOT) plans and detour plans. He has been deeply familiar with Highway Capacity Manual (HCM), Manual on Uniform Traffic Control Devices (MUTCD), Highway Safety Manual (HSM), the AASHTO Greenbook, ITE Traffic Engineering Handbook, ITE Trip Generation Manual, ANSI/IESNA RP-8-00, and local and state guidelines for traffic engineering designs and studies. Mitsuru has experience with the following software packages: Synchro/SimTraffic, VISSIM, Highway Capacity Software (HCS), SIDRA, CORSIM, CUBE Voyager, MicroStation, AutoCAD, Visual, and AGI32. Mitsuru has managed more than several small to mid-sized traffic engineering study and design projects for enhancing multi-modal transportation safety and operations in his career.

Project Experience

City of Chino, State Route 71/Pine Avenue Interchange, Chino, CA

Senior Traffic Engineer responsible for designing electrical plans at a diamond-shaped freeway interchange. The project included widening the existing off-ramps and traffic signal and electrical system designs at the interchange. There are two traffic signals to be designed and one of them is a new traffic signal for accommodating the expected traffic volume increase due to the roadway extension into the City of Chino. A traffic study including the signal warrant analysis was conducted in advance of developing the electrical plans for justifying the new signal, determining the optimized signal phase and timing, and analyzing the existing and future traffic operations at the interchange. The electrical plans included the modification designs of the existing ramp metering system and highway lighting system as well as the existing and new traffic signal systems at the interchange. In addition, VISSIM traffic simulation models were developed for several scenarios including adjacent two interchanges along SR71 for assessing the traffic impacts to the surrounding area.

Mitsuru Tanaka, PE, PTOE, PTP - *continued*

Traffic Design

City of Santa Clara, Pedestrian Signal Design and ADA Improvement, Santa Clara, CA

Lead Traffic Engineer responsible for the traffic signal modification designs for this ADA Improvement project. The project is for improving sidewalks and roadway geometry ADA ramp access within the City's right-of-way. The pedestrian push buttons are to be relocated at seven intersections along a major highway corridor in accordance with the California MUTCD due to the new ADA curb ramp improvements. Some intersections also included installing street lighting upgrades for securing enhanced pedestrian safety at night. Two of the signals are located at the intersections with the Santa Clara Valley Transportation Authority Light Rail corridor and coordination with the Light Rail signal system is considered in the signal design as having the pedestrian safety to the top priority.

City of Jurupa Valley, Pacific Avenue Pedestrian and Bicycle Improvements, Jurupa Valley, CA

Senior Traffic Engineer. Mitsuru is a senior traffic engineer responsible for developing Signing and Striping Plans in accordance with the City's guidelines and Caltrans Standard and Specifications. The project is to design street improvement with curb, gutter, sidewalk, driveway approach, drainage and street intersection treatments within its 0.8-mile project limit. The improvement plan is to convert the existing street to two-lane road with the center turn lane as accommodating the bikes on the shared lanes. The Rectangular Rapid-Flashing Beacons (RRFB) were recommended to install at the crosswalk across the existing school. The associated quantities and cost estimates are also prepared for the bidding documents.

City of Chino, Euclid Avenue Restriping Project, Chino, CA

Senior Traffic Engineer. Mitsuru is a senior traffic engineer responsible for developing Traffic Control Plans (TCP) including stage construction and traffic handling plans and motorist information plans. The project area is approximately 0.6-mile stretch of a State Highway Route with signalized intersections at both ends. The traffic impact was studied for the lane configuration changes and detoured traffic during the construction phases. Permanent Signing and Striping Plans were developed as well as the Traffic Control Plans. Associated quantities of signing, striping, and traffic control devices were prepared as well.

Caltrans District 8, Fontana Maintenance Facility, Fontana, CA

Senior Traffic Engineer. Mitsuru was a senior traffic engineer responsible for developing Transportation Management Plan (TMP) for the design-build project. The project was for construction of three major buildings for the Caltrans maintenance facility including the roadway improvements in front of the facility. The roadway improvement work was approximately 1,000 feet including installation of curb and gutter, sidewalk, storm drain, and utilities. Traffic Control Plans were developed for the roadway improvements and included in the TMP. The TMP was developed along the Caltrans Transportation Management Plan Guidelines.

***Delaware Statewide Traffic Impact Study Review Project, Statewide, DE**

Project Engineer responsible for reviewing the TIS for completeness and accuracy, re-analyzing all capacity analyses with Highway Capacity Software (HCS) or SYNCHRO, evaluating signal warrant analyses, determining the development's compliance with local and state comprehensive plans, and writing a review letter recommending approval or rejection of the development and a list of recommended improvements that should be required for the developer. Analysis included approximately 50 single-lane roundabouts using HCS, SIDRA, and the NCHRP Report 03-65 Methodology. All TIS reviews were to be completed within a quick (18 working-day) turnaround to comply with DelDOT's review schedule. Over seven years of the contract time period, approximately 230 Traffic Impact Studies (TIS) were assigned under this contract. Mr. Tanaka was assigned to be stationed at DelDOT's Planning Section for two years.

**Work performed at previous firm.*

Mitsuru Tanaka, PE, PTOE, PTP - *continued*

Traffic Design

***NJ Statewide Traffic Signal Optimization – Southern Region, NJ Route 30 Corridor, Atlantic County, NJ**

Lead Traffic Engineer responsible for optimizing traffic signal timings, phases, splits, offsets and cycle lengths along the existing major corridor. Clearance intervals were also recalculated and evaluated for the traffic safety purpose. The project area included approximately 4.5-mile arterial stretch with 12 signalized intersections in southern New Jersey. The corridor was modeled in Synchro/SimTraffic software. The existing models were calibrated in SimTraffic based on the field travel times observed by Tru-Traffic software with GPS. Signals were optimized with Synchro and TruTraffic and 5 different timing plans were prepared for different times of the days for implementation.

Traffic Calming Study: Camp Grandview (Pickens County Traffic Engineering IDIQ), Jasper, GA

Senior Traffic Engineer responsible for QA/QC the traffic calming study report. This study was for reviewing the applicability of speed tables as a traffic calming measure. The data collection for the study included the vehicle running speed, pedestrian activity, the existing roadway's geometry, signage, striping and clear zones. Several traffic calming measures were reviewed and considered including various speed tables, raised pedestrian crosswalks, and speed cushions. The study recommended placing the calming measure including raised pedestrian crosswalks the

at several key locations for the vehicles to slow down safely as considering their spacings and maintaining the major crosswalk locations in the mid-block of the study area.

***Route 7 Corridor Improvement Project, From Jarret Valley to Reston Parkway, Fairfax County, VA**

Lead traffic engineer responsible for the evaluation of alternative intersection designs for the second phase of the design which includes Displaced Left/Continuous Flow, Green-T, Restricted Crossing Median U-Turn, Median U-turn and roundabout intersections for safely accommodating the vehicles, bikes, and pedestrians all together along the corridor. VISSIM and Synchro are being used in the evaluation and development of the alternatives. VISSIM software was used to evaluate existing conditions and selected design alternatives for the future conditions. Synchro software was utilized for signal optimization for the signals along the 7-mile corridor and was also used for reinforcing the VISSIM evaluation results.

***Hilton Parkway Corridor Safety Study, Baltimore, MD**

Project Manager responsible for evaluating the existing safety traffic conditions along Hilton Parkway located in West Baltimore. Approximately 1.1-mile length of the winding parkway was studied with field observation and traffic accident analysis from past five years. The studied parkway segment had two lanes on each direction and a barriered median between the opposite directions. Guide rails has been installed at some length of the studied segment and the street lighting has been installed throughout the study segment. Through the safety study, it was found that there were relatively high number of accidents on wet-surface conditions and at the night. The final recommendation included drainage improvement for the areas with underground water leaks, installing Raised Pavement Markers (PRM), streetlight improvements, and frequent restriping for improving the traffic safety along the corridor.

***US13 Business and Naylor Street Intersection Study, Salisbury, MD**

Project Manager responsible for safety and traffic efficiency improvement at the intersection of US13 Business and Naylor Street. The study was for MDOT SHA District 1 and it included observing traffic counts, signal operations, traffic control device conditions, street lighting conditions, sidewalks and ADA compliance devices at and around the intersection. Crash analysis was also conducted for assessing the intersection safety with the traffic accident data for the past three years at the intersection. Crosswalks replacement, signal interval change, pedestrian signal head installation, audible ADA compliance push button installation, ADA ramp installation, sidewalk repairs, and installing additional warning signs were recommended at the end of the report with the estimated construction cost for each improvement.

**Work performed at previous firm.*



Gabriel Rodriguez, PE

Roadway

Professional Registrations

- Professional Engineer (Civil): CA

Education + Training

- B.S., Civil Engineering, California Polytechnic State University at Pomona, 2001

Software Proficiency

- MS Office (Word, Excel)
- MS Project
- Bluebeam.

Gabriel Rodriguez has more than 24 years of civil engineering experience in the design and management of transportation and public infrastructure projects. His project experience includes street improvements, state system improvements, storm drain facilities, sanitary sewer and water distribution infrastructure, storm water management and analysis, and dry utility coordination. He has executed projects from preliminary engineering and alternative analysis through final design and construction management.

Gabriel brings experience with a number of agencies, including LA Metro, Orange County Public Works, SBCTA, Riverside County Transportation Department, Riverside Transit Agency, as well as local agencies such as the Cities of Palmdale, Irvine, Fontana and Colton.

Project Experience

***City of Hesperia, Ranchero Road Corridor Improvements, Hesperia, CA**

Gabriel served as project manager for the Ranchero Road Corridor Improvement project for the City of Hesperia. The proposed improvements will provide capacity for future growth on the east side of the city as well improved access to a new interchange at Interstate 15. The project includes the design of approximately 5 miles of road improvements, two major multi-barrel culvert crossing extensions as well as the approval of a Construction and Maintenance agreement for an at-grade UPRR crossing. Gabriel led the design team that is working with the City of Hesperia, County of San Bernardino, the local water purveyor, and UPRR to facilitate approval of the final plans, specifications and estimate (PS&E).

***City of Coachella, Avenue 52 and Grapefruit Grade Separation, Coachella, CA**

Gabriel served as project manager for the Avenue 52 and Grapefruit Boulevard Grade Separation project in the city of Coachella. The project will grade separate Avenue 52 and the Union Pacific Rail Road (UPRR) line which will provide better access between the west and east sides of the city, as well as more efficient mobility for emergency vehicles. Funding for this project included $10M of TCIF funding which was required to be allocated by the end of 2013. Gabriel led the coordination effort with Caltrans Local Assistance and Riverside County Transportation Commission (RCTC) to gain California Transportation Commission (CTC) and E-76 approval. Mr. Rodriguez also led the design team, which finalized the plans, specifications and estimate and secured agreements with UPRR, Coachella Valley Water District, Imperial Irrigation District, and Verizon/MCI.

***Caltrans District 7 Engineering On-Call, Los Angeles, CA**

Gabriel served as project manager for the Engineering On-Call Contract for Caltrans District 7. A significant portion of the on-call effort was dedicated to the

Gabriel Rodriguez, PE - *continued*

Roadway

High Desert Corridor of which Gabriel managed an engineering team that provided preliminary high speed rail and grade separation design as a component of the proposed highway corridor between the cities of Victorville and Palmdale. The design effort which included rail, roadway, drainage, and traffic was in support of Caltrans who was the lead for the highway design for the Project Approval and Environmental Document phase. The rail component of the High Desert Corridor termination point in the City of Palmdale is proposed to share the future California High Speed Rail station, which required close coordination with the California High Speed Rail Authority and the City of Palmdale.

***City of Palmdale, Rancho Vista Grade Separation, Palmdale, CA**

Gabriel served as project manager in the early stage of the Rancho Vista Grade Separation project and was responsible for leading the project design team which included roadway, structures, traffic, survey, and geotechnical. The project, located in the city of Palmdale, will provide an overhead grade separation structure on Rancho Vista Boulevard, which will span Sierra Highway as well as existing and future UPRR, Metro, and California High Speed Rail mainline tracks. The project proposes to construct a new eight-lane grade separation structure to improve safety and traffic movement at the rail road crossing as well as 4.5 miles of local roadway improvements to provide connectivity and access to existing parcels adjacent to the project.

***City of Irvine, Jamboree Road Widening, Irvine, CA**

Gabriel served as project manager for the Jamboree Road Widening project and was responsible for leading the project design team which included roadway, traffic, utility coordination, landscape, survey, environmental, and geotechnical. The project, located in the city of Irvine, proposed to expand Jamboree Road from an 8-lane arterial to a 10-lane arterial for approximately 1.5 miles between Barranca Parkway and the north side of I-405. The design and environmental effort included preliminary engineering, alternative analysis, environmental report, project study, and final plans, specifications and estimates.

Phelan Road Widening Project, for County of San Bernardino, San Bernardino County, CA

Gabriel is serving as the project manager for the Phelan Road Widening project and is leading the design team which includes roadway and structural engineering, drainage, environmental, geotechnical, surveying, utility coordination and public outreach. The purpose of the project is to widen 12.1 miles of Phelan Road to accommodate for the increased population and resulting traffic in the region. The project design will include geometrics and vertical profiles for the widening from two lanes to five lanes, hydrology and hydraulic analysis of 26 culvert crossings, bridge improvements at Sheep Creek, traffic and traffic signal design, utility relocations, and environmental planning and permitting. The project will also require coordination with stakeholders including Caltrans District 8, Union Pacific Railroad, the California Public Utilities Commission, regulatory permitting agencies, and the City of Hesperia.

Lakewood Boulevard and Imperial Highway Intersection Improvement Project, for City of Downey, Downey, CA

Gabriel is serving as project manager for the Lakewood Boulevard and Imperial Highway Intersection Improvement project and is responsible for leading the project design team to develop the roadway and storm drain improvement plans. The project located in the City of Downey, proposes to add dual left turn pockets in both directions on Imperial Highway to improve the traffic level of service of the intersection. The project design includes the roadway geometry and vertical profile for the widening of Imperial Highway, PCC improvements, storm drain lateral design, water appurtenance relocations, and private property improvements. The project will also require approval by Los Angeles County for the relocation of the County owned catch basin at the southwest corner of the intersection.

**Work performed at previous firm.*

Syed Raza, PE

Proposed Role: Project Manager



SPECIALTY EXPERIENCE

- Roadway design
- Intersection design
- Traffic design
- Traffic handling
- Construction staging
- Stakeholder coordination

SCOPE TECHNICAL AREA EXPERTISE

- Project management
- Program management
- Highway design
- Pavement delineation design Detour design
- Agency coordination

41

YEARS OF EXPERIENCE

Syed has over 41 years of executive, management and technical experience in the areas of transportation/traffic engineering and program/project management. During his career, he has led many multi-functional teams and successfully delivered high-profile, state of the art complex transportation projects. Syed was responsible for program management, technical oversight and review of all capital projects at Caltrans District 8 and oversaw the delivery of over 300 in-house and locally funded projects valued at over $15 billion. His proactive program management approach, communication and problem-solving skills, ability to build consensus and strong leadership skills has helped District 8 successfully deliver its projects on time and within budget. Syed was also instrumental in assisting RTPAs, counties and cities deliver their portfolio of projects on the State Highway System.

PROFESSIONAL REGISTRATIONS

- Professional Engineer (Civil): CA 53579

EDUCATION + TRAINING

- M.Sc., Civil Engineering, Texas A&M University, College Station, Texas, 1991
- B.S., Civil Engineering, NED Engineering University, Karachi

AFFILIATIONS + MEMBERSHIPS

- Member, Professional Engineer: CA

**Work performed at previous firm.*

PROJECT EXPERIENCE

City of Chino State Route 71/Pine Avenue Interchange, Chino, CA

Served as the Design Lead for EXP for the preparation of Project Approval & Environmental Document (PA&ED) and Plans, Specifications and Estimate (PS&E) phases of the project. The scope of work for the project includes widening both off-ramps, installing a new traffic signal, modifying existing signal and ADA curb ramps.

San Bernardino County, Phelan Road Widening, San Bernardino County, CA

Syed is serving as Roadway Design Lead. EXP is providing preliminary engineering and environmental consulting services for the Phelan Road Widening Project. Phelan Road is currently a two-lane road that serves the communities of Phelan and Hesperia and is often a thoroughfare and diversion route for those experiencing closures or traffic congestion on nearby Interstate 15 (I-15). The project proposes to widen approximately 12.1 miles of Phelan Road from two (2) lanes to a five (5) lane major highway designation with the center serving as one (1) continuous left turn lane.

Ca;trans District 8 Project Management On-Call

EXP was selected as the prime consultant by Caltrans District 8 to provide Project Management support services for capital projects. Prepared detailed project schedules and cost estimates. Ensured all necessary regulatory permits were obtained. Prepared project status reports, cooperative agreements and amendments. Prepared and reviewed technical reports, plans, specifications and estimate for completeness and accuracy. Ensured that projects were delivered on time, within budget, approved scope of work and met performance objectives. Prepared complex technical engineering reports for management review and approval. Prepared allocation request for California Transportation Commission (CTC) approval including Programing Change Requests and Supplemental Fund Request. Prepared and submitted grant applications for various federal and state funding programs.

***Caltrans District 8 Capital Program, San Bernardino + Riverside Counties, CA**

Served as the Deputy District Director for Program Project Management overseeing Capital Improvement Program from. The CIP Program funded over 750 positions in the Division of Construction, Design, Environmental, Right of Way and Project Management with a budget of over $100 million in personal services and operating expense. Was responsible for securing funding for major and minor capital improvement projects from the State Highway Operation Protection Program (SHOPP) and State Transportation Improvement Program. Worked closely with RTPAs to secure state, local and federal funds and help deliver their capital improvement projects.

Robert D. Vasquez, PLS | DEA, Survey Manager



BRIEF EXPERIENCE BIO

Bob has 35 years of experience in the field of land surveying. He has served many positions from managing projects, field crews, office support teams, and from 3D laser scanning to developing a new service for subsurface 3D utility mapping. Bob's experience in the public sector, coupled with his broad range of experience with DEA, adds to his overall knowledge of understanding of various rail, airport, highway, land development, flood control, water, and some unique projects. His project management experience includes managing and negotiating various contract/task orders, public and private clients, using various standards and requirements. Bob is knowledgeable in the preparation of subdivision, rights-of-way and record of survey maps, jurisdictional boundary changes, land adjustments, legal description documents and exhibits, right-of-way engineering, construction surveying, QC surveying, 3D laser scanning, topographic field, and boundary survey mapping.

CURRICULUM VITAE

Education
Certificate, Surveying and Mapping, Rancho Santiago College
Project and Business Management Courses, University of California Riverside
Management Leadership Academy, National University

Registration
Professional Land Surveyor, California (7300), 1996

Professional Affiliations
California Land Surveyors Association (CLSA)
League of California Surveying Organizations (LCSO)

Years with DEA
15

Years with Other Firms
20

RELEVANT PROJECTS

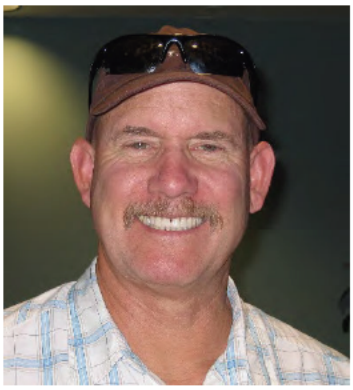
On-Call Surveying Services, for Orange County Public Works/Geomatics, California
As project manager, Bob is under contract with the County of Orange to provide on-call land surveying services. The services being provided consist of, but are not limited to, topographic surveying, control surveys, design surveys, field-to-finish mapping, construction surveys, boundary surveys, GPS surveying, 3D laser scanning, right-of-way engineering and mapping, title searches, ALTA surveys, and special studies.

County of San Bernardino On-Call Land Surveying Services, San Bernardino, California
DEA is providing the County of San Bernardino on-call services for Capital Improvement Projects (CIP). The scope of services includes both civil engineering and surveying. Projects include street and trails construction/design, traffic signal design, signing and striping, water quality management, sanitary sewer design/waterlines, surveying and mapping, geotechnical, grading, street design, storm drain design, potholing, aerial photography, landscape design, and community outreach as needed. Services also include coordination with other public agencies and utility companies. Bob is serving as Survey Project Manager.

As-Needed Engineering and Construction Surveying Services, Temecula, California
Bob has served as project manager and survey lead on this agreement with the City of Temecula to provide surveying services on various projects. Some of the services requested include researching of existing survey data; locating existing monuments; performing boundary and control surveys; preparing legal descriptions and plat maps for right-of-way acquisition; performing aerial mapping and topographic surveys; establishing and verifying horizontal and vertical control; locating existing facilities; performing field surveys for design purposes; and performing construction surveying.

On Call Surveying and Right-of-Way Engineering Services, Various Contracts, for Caltrans, California Statewide
Bob has served as project manager or task leader on six prime on-call contracts to provide on-call land surveying services for a variety of Caltrans projects in California for Districts 6, 7 and 8. Services on these contracts have included construction, cadastral, boundary, topographic, GPS and geodetic surveying, right-of-way engineering, records of survey, special studies, field-to-finish mapping and HDS surveys. He has also served as survey manager or task lead as survey subconsultant on numerous Caltrans on-call construction management teams providing construction surveying services. Districts served included 7, 8, 11, 12 and 59.

Jerry C. Woodrow, PLS, CFedS | DEA, Project Surveyor



BRIEF EXPERIENCE BIO

Jerry is an associate, senior project surveyor and PLS party chief with DEA and has 46 years of experience in the survey field. A California professional land surveyor and Certified Federal Surveyor, he has worked on a variety of projects including large transportation, bridge, rail, pipeline, and land development projects. He is experienced in all aspects of land surveying including construction, boundary, topographic, aerial control, 3D laser scanning, ALTA, and GPS surveying. He is also adept in computing and analyzing survey field data to Caltrans standards.

CURRICULUM VITAE

Education
Surveying and Engineering Classes, 1976, San Bernardino Valley College

Registration
Professional Land Surveyor, California (6714), 1992, 2022
Certified Federal Surveyor, California (1138), 2007

Years with DEA
20

Years with Other Firms
26

RELEVANT PROJECTS

On-Call Surveying Services, for Orange County Public Works/Geomatics, California
Jerry is serving as PLS party chief and project surveyor under contract with the county of Orange to provide on-call land surveying services. The services being provided on this contract consist of, but are not limited to, topographic surveying, control surveys, design surveys, field-to-finish mapping, construction surveys, boundary surveys, GPS surveying, 3D laser scanning, right-of-way engineering and mapping, title searches, ALTA surveys, and special studies.

On Call Surveying and Right-of-way Engineering Services, Various Contracts, for Caltrans, California
Jerry has served as party chief or project surveyor on 11 prime contracts to provide on-call land surveying services for a variety of Caltrans projects in California in Districts 5, 6, 7, 8 and 9. Services included construction, cadastral, boundary, topographic, GPS and geodetic surveying, right-of-way engineering, records of survey, special studies, field-to-finish mapping, and laser scanning surveys. Jerry has also served as party chief or project surveyor on numerous on-call construction management contracts as the survey subconsultant of the team. Districts have included 7, 8, 11, 12 & 59.

West Valley Connector Project, San Bernardino County, California
The West Valley Connector Project is a 25-mile-long bus rapid transit (BRT) project that proposes limited stops, providing speed and quality

improvements to the public transit system within the corridor. The project seeks to improve mobility in the San Bernardino Valley with an enhanced, state-of-the-art BRT system to address the growing traffic congestion and the one million people that will be added to the area by 2030. Working as a subconsultant, DEA provided topographic mapping and surveying and land surveying services in support of the widenings and improvements along the corridor using DEA's mobile mapping system. Jerry served as project surveyor on this project.

Subsurface Utility Locating and Mapping, San Bernardino County Transportation Authority, Redlands, California

DEA provided above and below ground utility locating and mapping services. In collaboration with SBCTA for its Redlands Passenger Rail Project, AECOM was tasked with providing construction management services during the early utility relocation phase of the construction project. Having experienced many challenges with unknown underground utilities on past projects, DEA was requested to provide underground utility mapping. DEA surveyors also established survey control, above-ground supplemental surveys and final deliverables including final utility reports with mapping and exhibits of as-built utilities and found existing subsurface utilities. Jerry served as a project surveyor on this project**.**



APPENDIX B
FORMS

VENDOR APPLICATION FORM
FOR
RFP No. 23-13 ON-CALL PUBLIC WORKS/ENGINEERING STAFF SUPPORT SERVICES

TYPE OF APPLICANT: ☐ NEW ☒ CURRENT VENDOR

Legal Contractual Name of Corporation: Z&K Consultants, Inc

Contact Person for Agreement: Crystal Fraire

Title: President E-Mail Address: cfraire@zandkconsultants.com

Business Telephone: 951-310-7470 Business Fax: _____

Corporate Mailing Address: 17130 Van Buren Blvd #122

City, State and Zip Code: Riverside, CA 92504

Contact Person for Proposals: Brittany Duhn

Title: Senior Project Manager E-Mail Address: bduhn@zandkconsultants.com

Business Telephone: 714-788-9965 Business Fax: _____

Is your business: (check one)

☐ NON PROFIT CORPORATION ☒ FOR PROFIT CORPORATION

Is your business: (check one)

☒ CORPORATION ☐ LIMITED LIABILITY PARTNERSHIP

☐ INDIVIDUAL ☐ SOLE PROPRIETORSHIP

☐ PARTNERSHIP ☐ UNINCORPORATED ASSOCIATION

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

Names	Title	Phone
Crystal Fraire	President	951-310-7470
Zack Faqih	Vice President	949-637-5040
Jasmine Pate	Secretary	951-317-3706

Federal Tax Identification Number: [redacted]

City of Costa Mesa Business License Number: 0000029416

(If none, you must obtain a Costa Mesa Business License upon award of contract.)

City of Costa Mesa Business License Expiration Date: _____

EX PARTE COMMUNICATIONS CERTIFICATION

Please indicate by signing below one of the following two statements. **Only sign one statement.**

I certify that Proposer and Proposer's representatives have not had any communication with a City Councilmember concerning informal **RFP No. 23-13 ON-CALL PUBLIC WORKS/ENGINEERING STAFF SUPPORT SERVICES** at any time after **March 22, 2023.**

Crystal Fraire

Signature Date: 4/6/23

Crystal Fraire

Print

OR

I certify that Proposer or Proposer's representatives have communicated after **March 22, 2023** with a City Councilmember concerning informal **RFP No. 23-13 ON-CALL PUBLIC WORKS/ENGINEERING STAFF SUPPORT SERVICES.** A copy of all such communications is attached to this form for public distribution.

Signature Date: _____

Print

DISQUALIFICATION QUESTIONNAIRE

The Contractor shall complete the following questionnaire:

Has the Contractor, any officer of the Contractor, or any employee of the Contractor who has proprietary interest in the Contractor, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or safety regulation?

Yes _____ **No** X

If the answer is yes, explain the circumstances in the following space.

DISCLOSURE OF GOVERNMENT POSITIONS

Each Proposer shall disclose below whether any owner or employee of Contractor currently hold positions as elected or appointed officials, directors, officers, or employees of a governmental entity or held such positions in the past twelve months. List below or state "None."

NONE

COMPANY PROFILE & REFERENCES

Company Legal Name:

Company Legal Status (corporation, partnership, sole proprietor etc.): C Corporation

Active licenses issued by the California State Contractor's License Board: N/A

Business Address: 17130 Van Buren Blvd #122, Riverside, CA 92504

Website Address: zandkconsultants.com

Telephone Number: 951-310-7470 Facsimile Number:

Email Address: cfraire@zandkconsultants.com

Length of time the firm has been in business: 15 years

Length of time at current location: 9 years

Is your firm a sole proprietorship doing business under a different name: ___Yes X___No

If yes, please indicate sole proprietor's name and the name you are doing business under:

Federal Taxpayer ID Number: 80-0359298

Regular Business Hours: 7:30AM - 5:00PM

Regular holidays and hours when business is closed: Federal Holidays

Contact person in reference to this solicitation:

Telephone Number: Crystal Fraire Facsimile Number:

Email Address: cfraire@zandkconsultants.com

Contact person for accounts payable:

Telephone Number: Crystal Fraire Facsimile Number:

Email Address: cfraire@zandkconsultants.com

Name of Project Manager:

Telephone Number: Brittany Duhn Facsimile Number:

Email Address: bduhn@zandkconsultants.com

COMPANY PROFILE & REFERENCES (Continued)

Submit the company names, addresses, telephone numbers, email, contact names, and brief contract descriptions of at least three clients, preferably other municipalities for whom comparable projects have been completed or submit letters from your references which include the requested information.

Company Name:
Contact Name: Maria Fraser, City Engineer (Formally City of Chino)
Contract Amount: $1,000,000
Email: mfraser@palmdesert.gov
Address: 73510 Fred Waring Drive, Palm Desert, CA, 92260
Brief Contract Description: On-Call Civil Engineering Services for Public Works CIP Projects

Company Name:
Telephone Number: (909) 334-3250
Contact Name: Amer Jakher, Public Works Director
Contract Amount: $1,000,000
Email: ajakher@cityofchino.org
Address: 13220 Central Avenue. Chino, CA
Brief Contract Description: On-Call Civil Engineering Services for Public Works CIP Projects

Company Name:
Telephone Number: (562)570-2324
Contact Name: Wendy Chen, Manager of Engineering
Contract Amount: $2,000,000
Email: Wendy.Chen@lbwater.org
Address: 1800 E. Wardlow Road, Long Beach, CA 90807
Brief Contract Description: On-Call Program and Project Management

Company Name:
Telephone Number:
Contact Name: Dennis Santos, Manager of Engineering
Contract Amount: $2,000,000
Email: Dennis.Santos@lbwater.org
Address: 1800 E. Wardlow Road, Long Beach, CA 90807
Brief Contract Description: On-Call Program and Project Management

Company Name:
Telephone Number:
Contact Name:
Contract Amount:
Email:
Address:
Brief Contract Description:

BIDDER/APPLICANT/CONTRACTOR CAMPAIGN CONTRIBUTION

DISCLOSURE FORM

Proposer/Consultant/Applicant is required to identify any campaign contribution or cumulative contributions greater than $249 to any city council member in the twelve months prior to submitting an application, proposal, statement of qualifications or bid requiring approval by the City Council.

Date	Name of Donor	Company/Business Affiliation	Name of Recipient	Amount

Except as described above, I/we have not made any campaign contribution in the amount of $250 or more to any Costa Mesa City Council Member in the twelve months preceding this Application/Proposal.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Crystal Traine

Bidder/Applicant/Proposer

4/6/2023

Date

EXHIBIT C

FEE SCHEDULE

April 6, 2023

Stephanie Urueta
City of Costa Mesa, Public Works Department
77 Fair Drive, 1st Floor, Costa Mesa, CA 92626

Subject: Request for Proposal (RFP No. 23-13) for On-Call Public Works/Engineering Staff Support Services

Dear Ms. Urueta,

Z&K Consultants based our proposal on the scope of work provided in the Request for Proposals. All prevailing wage requirements will be followed by the team and its subconsultants. All team members are in conformance with the State of California Labor compliance requirements. Below is a table with the hourly rate schedule. This offer shall remain firm for 90 days from the RFP close date. The payment terms shall be net thirty (30) days.

A – Z&K Consultants, Inc Hourly Rates:

- Senior Construction Manager/Project Manager.....$157
- Senior Project/Program Manager $148
- Construction Manager.....$152
- Senior Construction Inspector.....$135
- Construction Inspector $131
- Senior Highway & Bridge Designer/Structural Engineer.....$155
- Electrical/I&C Inspector $140
- SWPPP/Environmental Specialist $130
- Senior Traffic/Signal Engineer $136
- Public Relations/Community Outreach.....$135
- AutoCAD/Microstation Technician.....$110
- Civil/Land Development Designer $130
- Senior Land Surveyor.....$135
- Senior Landscape Architect $144
- Labor Compliance/Office Engineer $128

Hourly Rates are fully burdened, including all overhead and profit. All subconsultants will be bound to the final terms and conditions of the prime agreement. All subconsultant services are subject to a 10% markup.

ALL INSURANCE WILL BE IN FORCE AT TIME OF CONTRACT EXECUTION
ALL RATES WILL ESCALATE BY 3% PER ANNUM

Sincerely,



Crystal Fraire, PE |President
Z&K Consultants Inc.
17130 Van Buren Blvd. | Suite 122 | Riverside, CA 92504
951.310.7470 | cfraire@zandkconsultants.com

CITY OF COSTA MESA
ENGINEERING ON-CALL
MARCH 30, 2023

EXP HOURLY RATES

LABOR CLASSIFICATIONS	FULLY LOADED HOURLY RATE	
Project Manager	$	359.02
Sr. Principal Engineer	$	317.34
Sr. Project Engineer III	$	219.81
Sr. Principal Engineer II	$	196.26
Sr. Principal Engineer I	$	171.73
Project Engineer III	$	147.19
Project Engineer II	$	130.02
Project Engineer I	$	123.64
Design Engineer II	$	117.93
Design Engineer I	$	111.36
QC/QC Manager	$	317.34

Compensation for laboratory testing services will be based on rates in accordance with this fee schedule which includes test report(s) and engineering time. Costs of tests not on this schedule will be by quote and/or in accordance with our current hourly fee schedule. Our services will be performed in accordance with the General Conditions. This fee schedule is valid through December 31, 2023.

AGGREGATES
Moisture Content, ASTM D2216 ..... 20.00
Particle Size Analysis
- Coarse, ASTM C136, each 100.00
- Coarse and Fine, ASTM C136 & C137), each 180.00

Specific Gravity & Absorption
- Coarse Aggregate, ASTM C127 ..... 100.00
- Fine Aggregate, ASTM C128 ..... 100.00
- Unit Weight per Cubic Foot, ASTM C29 ..... 75.00
- Soundness, Sodium or Magnesium, ASTM C88, each 200.00
- Potential Alkali Reactivity, ASTM D289 ..... 300.00
- Freeze Thaw Soundness 175.00
- Los Angeles Abrasion, per class, ASTM C131, C535 ..... 220.00
- Sand Equivalent, ASTM D2419 ..... 110.00
- Lightweight Particles, ASTM C123, each 100.00
- Clay Lumps & Friable Particles, ASTM C142, each 120.00
- Stripping Test, ASTM D1664, each 85.00
- Organic Impurities, ASTM C40 ..... 100.00
- Durability ..... By Quote

CONCRETE TESTS
Laboratory Trial Batch, ASTM C192 ..... By Quote
Laboratory Mix Design, Historical Data ..... By Quote
Compression Test, 6”x12” Cylinder, ASTM C39, each 45.00
Lightweight Concrete
- Compression 45.00
- Unit Weight 45.00

Specimen Preparation, Trimming or Coring, each 60.00
Bond Strength, ASTM C321
- Prepared by Converse 150.00
- Prepared by Others 80.00

Core Compression Test, ASTM C12, each 80.00
Flexure Test, 6”x6” Beams, ASTM C78, each 110.00
Modulus of Elasticity, Static, ASTM C469, each 150.00
Length Change, ASTM C157, 3 bars, 5 readings each, up to 26 days 320.00
Splitting Tensile, 6”x12” Cylinders, each 80.00
Field Concrete Control (sampling, slump, temperature, cast 4 cylinders, molds, cylinder pick-up, within 10 miles of office, stand-by extra), ASTM/UBC, hourly rate schedule, or each cylinder 95.00
Field Concrete Control (same as above plus air content test), ASTM/UBC, each cylinder 95.00
Hold Cylinder 10.00
Cylinder Mold, sent to job site but not cast by Converse or returned to Converse 5.00

MASONRY (ASTM C140, E447, UBC STANDARD 24-22)
Moisture Content, as received, each 20.00
Absorption, each 50.00
Compression, each 55.00
Shrinkage, ASTM C426, each 100.00
Net Area and Volume, each 25.00
Masonry Blocks, per set of 9 ..... 450.00
Masonry Core Compression, each 55.00
Masonry Core Shear, each 55.00
Masonry Core Trimming, each 55.00
Compression Test, grouted prisms, 8”x8”x16”, each 120.00
Compression Test, grouted prisms, 12”x16”x16”, each 130.00
Compression Test
- 2”x4” Mortar Cylinder, each 45.00
- 3”x6” Grout Prisms, each 45.00
- 2” Cubes, ASTM C109, each 45.00

Cast by Others 45.00
Mortar or Grout Mix Designs ..... By Quote

FIREPROOFING TESTS
Oven Dry Density, per sample 70.00

MOISTURE EMISSION TEST
Moisture Emission Test Kit 80.00

ASPHALTIC CONCRETE
Stability, Flow, and Unit Weight, ASTM D6927 ..... 220.00
Marshall ASTM D1559, ASTM D2726 ..... 220.00
Measured Maximum Specific Gravity of Mix, ASTM D2041, Rice Method, each 95.00
Void Analysis of Cores or Marshall Specimens, Calculations Only, ASTM D3203, set of 2 or 3 ..... 60.00
Laboratory Mixing of Asphalt & Concrete, per sample 75.00
Complete Asphalt Concrete Mix Design
- Hveem or Marshall ..... By Quote

Extraction of Asphalt and Gradation, ASTM D2172, Method B, or California 310, including ash correction, each 220.00
Extraction of Rubberized Asphalt & Gradation, each 250.00
Specific Gravity, ASTM D2726 or ASTM D1188
- Uncoated 95.00
- Coated 105.00

Immersion-Compression 400.00
Particle Coating, ASTM D2489 ..... 60.00
Stripping, ASTM D1664 ..... 70.00
Moisture or Volatile Distillates in Paving Mixtures, or Materials Containing Petroleum Products or By-Products 220.00
Retained Strength, ASTM D1074/D1075, 6 specimens ..... By Quote
Retained Stability, Mil, Std, 520A, Method 104, 6 specimens ..... By Quote
CBR, ASTM D1883, including M/D Curve, 1 point 350.00
Asphalt Temperature 15.00

STRUCTURAL STEEL
Tensile Test #9 Bar or Smaller, each 60.00
Bend Test #9 Bar or Smaller, each 60.00
Tensile Test #10 Bar or Greater, each 280.00
Tensile Test #14 Bar, each 310.00
Rebar Coupler Tensile Test 100.00
Tensile Test, Welded #9 Bar or Smaller, each 100.00
Tensile Test, Welded #10 Bar or Greater, each 280.00
Tensile Test, Welded #14 Bar, each 310.00
Tensile Test, Mechanically Spliced, #9 Bar or Smaller, each 180.00
Tensile Test, Mechanically Spliced, #10 Bar or Greater, each 350.00

HIGH STRENGTH BOLT, NUT, AND WASHER TESTING
Wedge Tensile Test, A490 Bolts
- Under 100,000 lbs., each 65.00
- Over 100,000 lbs., each 75.00

Wedge Tensile Test, A325 Bolts
- Under 100,000 lbs., each 80.00

Tensile Test, Anchor Bolts, tested with displacement transducers, each 300.00
Nut Hardness, Proof & Cone Proof Load Test, each 50.00
Washer Hardness, each 50.00
A325 or A490, Bolt Hardness Only, each 50.00
Bolt A325 or A490 Wedge Tensile
- Under 100,000 lbs. & Hardness, each 90.00
- Over 100,000 lbs. & Hardness, each 150.00

Bolt, Nut & Washer, all tests per set with bolts
- Under 100,000 lbs. 300.00
- Over 100,000 lbs. 380.00

See *Schedule of Fees – Geotechnical Laboratory Testing* for soil testing. Hourly rates are available upon request. Field Laboratory rates are available upon request. Listed unit rates are based upon the assumption that samples will be delivered to our laboratory at no cost to Converse.

CONVERSE CONSULTANTS
Schedule of Fees – Geotechnical Laboratory Testing

Compensation for laboratory testing services will be made in accordance with this fee schedule which includes test report(s) and engineering time. Costs of tests not on this schedule will be by quote and/or in accordance with our current hourly fee schedule. The rates are based on non-contaminated soil. A surcharge will be charged for handling contaminated material, which will be determined based on the project.

IDENTIFICATION AND INDEX PROPERTIES TESTS

Visual Classification, ASTM D2488	20.00
Engineering Classification, ASTM D2487	25.00
Moisture Content and Dry (bulk) Density,	
ASTM D2216 and D2937	25.00
Moisture Content, ASTM D2216	20.00
Shrinkage Limit, ASTM D4943	85.00
Atterberg Limits, ASTM D4318	
Several points	150.00
One Point	50.00
Particle Size Analysis, ASTM D6913	
Fine Sieve, from +#200 to #4	100.00
Coarse and Fine Sieve, from #200 to 3 in	180.00
Hydrometer	120.00
Percent Passing #200 Sieve, ASTM D1140	80.00
Specific Gravity	
Fine, passing #4 sieve, ASTM D854	100.00
Coarse, retained on #4 sieve, ASTM C127	100.00
Sand Equivalent Test, ASTM D2419	120.00
Double Hydrometer Dispersion, ASTM D4221	150.00

COMPACTION AND BEARING STRENGTH

Standard Proctor Compaction, ASTM D698 or ASTM D1557	
Method A or B	200.00
Method C, 6” mold	210.00
California Impact Method, Caltrans 216	220.00
R-value, ASTM D2844 and CTM301	270.00
California Bearing Ratio (CBR), ASTM D1883	
1 Point	530.00
3 Points	750.00
Relative Density	
0.1 Cubic Foot Mold	200.00
0.5 Cubic Foot Mold	300.00

SHEAR STRENGTH

Torvane/Pocket Penetrometer	25.00
Direct Shear	
Quick Test	75.00
Consolidated, Drained, granular soil, ASTM D3080	220.00
Consolidated, Drained, fine grained soil, ASTM D3080	260.00
Consolidated, Undrained, fine grained soil	220.00
Residual Strength, per cycle	70.00
Remolded Specimens	70.00

STATIC UNIAXIAL AND TRIAXIAL STRENGTH TESTS (PER POINT)

Unconfined Compression, ASTM D2166	150.00
Unconsolidated, Undrained, ASTM D2850	160.00
Consolidated, Undrained, per point	700.00
Consolidated, Drained, per point	700.00
With Pore Pressure Measurement, per load	150.00
Remolded Specimen	90.00

CONSOLIDATION (ASTM2435) AND SWELL COLLAPSE (ASTM D4546) TESTS

8 Load Increments	250.00
Additional Load Increment	50.00
Time-Ratio, per load increment	90.00
Single Point, collapse test	90.00
Single Load Swell, ASTM D4546	
Ring Sample, Field Moisture	95.00
Ring Sample, Air Dried	95.00
Remolded Sample	70.00
Expansion Index Test, UBC 29-2/ASTM D4829	130.00

HYDRAULIC CONDUCTIVITY TESTS

Constant Head, ASTM D2434	250.00
Falling Head Flexible Wall, ASTM D5084	300.00
Triaxial Permeability, EPA 9100	350.00
Remolded Specimen	60.00

CHEMICAL TESTS

Corrosivity (pH, resistivity, sulfates, chlorides)	220.00
Organic Content, ASTM D2974	100.00

Conditions: Unit rates presented on this fee schedule are for routinely performed geotechnical laboratory tests. Numerous other earth material physical tests can be performed in our geotechnical laboratories, including rock core, soil cement and soil lime mixture tests. Tests not listed can be quoted upon request. This fee schedule is valid through December 31, 2023.

Prices are based on the assumption that samples are uncontaminated and do not contain heavy metals, acids, carcinogens and/or volatile organics which can be measured by an organic vapor analyzer or photoionization detector with a concentration greater than 50 parts-per-million (ppm). Quoted testing fees are based on the assumption that no protective clothing will be required to handle samples. If Level D protective clothing will be required during handling of samples (as defined in Federal CFR Part 1910.120), then a 40% increase in fees presented in this schedule will be applied. Level C protective clothing will be a 60% increase in fees. Converse will not handle samples that require either Level B or Level A protection in our geotechnical laboratories. Contaminated samples will be returned to the client. Uncontaminated samples will be disposed of 30 days after presentation of test results. The client must disclose the source of samples. Samples imported from out of state will be incinerated after testing in accordance with requirements of the United States Department of Agriculture. Soil samples obtained within the State of California currently designated quarantine areas will also be incinerated in accordance with the requirement of the State of California, Department of Food and Agriculture, Division of Plant Industry, Pest Exclusion. A $5.00 incineration fee will be added to each sample that is required to be incinerated in accordance with State and Federal law.

Test results requiring plots will be presented in a publishable format generated from computer programs. Otherwise, raw test numbers will be presented. A minimum laboratory fee of $50.00 will be charged to present and mail test results. Beyond the standard U.S. Mail delivery, specialized transmittal will be charged at additional cost (e.g., Federal Express, UPS, etc.). Geotechnical testing does not include engineering and/or geologic review and analysis. Typical turnaround for geotechnical laboratory testing is two weeks (or roughly ten working days). To expedite test turnaround to five working days, a 50% increase in the fees in this schedule will be applied. Many geotechnical tests require at least one week to perform in accordance with ASTM or other standard specifications. Fees presented in this schedule for relatively undisturbed direct shear, consolidation or expansion pressure tests are based on the assumption that 2.416-inch inside diameter brass ring samples will be provided to the geotechnical laboratory for testing. Remolded specimens will be compacted in standard 2.5-inch outside diameter brass rings for direct shear, consolidation and expansion pressure tests. All fees presented in this schedule are based on the assumption that the client will deliver samples to our laboratory at no additional cost to Converse.

Invoices will be issued monthly and are payable on receipt unless otherwise agreed upon. Interest of 1.5% per month (but not exceeding the maximum allowed by law) will be payable on any amount not paid within thirty days; payment thereafter to be applied first to accrued interest and then to the principle unpaid amount. The Client shall pay any attorneys' fees or other costs incurred in collecting any delinquent amounts.

CONVERSE CONSULTANTS
Prevailing Wage Schedule of Fees
Geotechnical Personnel

Introduction
It is the objective of Converse Consultants to provide its clients with quality professional and technical services and a continuing source of professional advice and opinions. Services will be performed in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. This fee schedule is valid through December 31, 2023.

Hourly Charges for Personnel
Staff assignments will depend on personnel availability, job complexity, project site location, and experience level required to satisfy the technical requirements of the project and to meet the prevailing standard of professional care.

Field Technical Services (hourly rate including vehicle and equipment)

Construction Inspector – ACI/ICC and/or AWS/CWI certified (concrete, post-tension, masonry, structural steel, fireproofing; includes concrete batch plant and local steel fabrication inspections)	$140
DSA Masonry Inspector	140
Non-Destructive Testing Inspector (ultrasonic, magnetic particle, dye penetrant, skidmore, pull testing, torque testing, Schmidt hammer, and pachometer)	145
Coring Technician	140
Soils Technician (soil, base, asphalt concrete, and moisture emission testing)	140
Sample Pick-Up	50

Professional Services (consultation for field and office, if requested)

Staff Professional	$140
Senior Staff Professional	150
Project Professional	160
Project Manager	170
Senior Professional	170
Principal Professional	225
Principal Consultant	235

Laboratory Testing

Laboratory Technician (see Geotechnical Laboratory Testing and Materials Testing Services fee schedules.)	Per Test
Laboratory Supervisor	$90

Office Support

Clerical/Word Processing	$85
Drafting	85
CAD Operator/Drafting Manager	90

Overtime and special shift rates for Field Services personnel are determined in accordance with Prevailing Wage law. Travel time to and from the job site will be charged at the hourly rates for the appropriate personnel.

Expenses
1. Exploration expenses (drilling, trenching, etc.) are charged at cost plus fifteen percent.
2. Travel and subsistence expenses (transportation, room and board, etc.) for individuals on projects requiring travel and/or living 50 miles away from the project site are charged at cost plus fifteen percent.
3. Automobile and truck expenses are charged at cost plus fifteen percent (rentals) or at the current IRS milage rate per mile for company-owned vehicles traveling between principal office and project.
4. Other out-of-pocket direct project expenses (aerial photos, long-distance telephone calls, permits, bonds, outside printing services, tests, etc.) are charged at cost plus fifteen percent.

Invoices
1. Invoices will be submitted to the Client on a monthly basis, and a final bill will be submitted upon completion of services.
2. Payment is due upon presentation of invoice and is past-due thirty days from invoice date. In the event Client fails to make any payment to Converse when due, Converse may immediately cease work hereunder until said payment, together with a service charge at the rate of eighteen percent per annum (but not exceeding the maximum allowed by law) from the due date, has been received. Further, Converse may at its sole option and discretion refuse to perform any further work irrespective of payment from Client in the event Client fails to pay Converse for services when said payments are due.
3. Client shall pay attorneys' fees or other costs incurred in collecting any delinquent amount.

General Conditions
The terms and provisions of the Converse General Conditions are incorporated into this fee schedule as though set forth in full. If a copy of the General Conditions does not accompany this fee schedule, Client should request a copy from this office.