

Prepared for the
City of Lake Elsinore



PROPOSAL

to provide

**Construction Management Services, and
Construction Surveying**

for

**Main Street Interchange Improvements Project
City Project No. Z10017**



September 21, 2020



Construction Management Services, and Construction Surveying for the: Main Street Interchange Improvement Project City Project No. Z10017

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September 21, 2020

TRANSMITTAL LETTER

Attn: Remon Habib, P.E.
City Engineer
City of Lake Elsinore
130 Main Street
Lake Elsinore, CA 92530

**Subject: Construction Management & Inspection Services for Main Street Interchange Improvements Project
City Project No. Z10017.**

Dear Mr. Habib:

FCG Consultants, Inc. (FCG) is pleased to commit our services to the City of Lake Elsinore (City) to provide full construction management and inspection services for the Main Street Interchange Improvement Project which includes Constructability Review, Construction Contract Bid and Award, Preconstruction Services, Construction Engineering and Inspection, and Project Closeout. FCG will perform all work described in the Scope of Services to relieve the City from and deliver the project on time and on budget. FCG is a firm with extensive Caltrans and Federally Funded projects experience and extremely knowledgeable with similar projects as many of our staff have worked on several projects on Caltrans Right-of-Way as previous employees of Caltrans, other government agencies, designers, and construction contractors. The FCG team is highly committed to providing the highest level of service in the most cost-effective manner possible. We will provide the City with the most experienced and motivated team that will produce the highest quality work and will become part of the City team in every aspect.

FCG is a woman-owned California corporation and certified Disadvantaged Business Enterprise (DBE) and Small Business Enterprise (SBE) focused on providing client-driven solutions to assist clients in successfully delivering infrastructure projects. Founded in 2009, FCG is headquartered in Yorba Linda, California, with a staff of 13 fully dedicated personnel providing construction engineering, construction inspection, and construction management to clients throughout California. The firm specializes in project and construction management and inspection for various types of public works clients utilizing assorted standards such as Caltrans and Greenbook. FCG staff are highly experienced with inspection of roadway improvements, drainage systems, utilities, ADA ramps, asphalt concrete (AC), portland cement concrete (PCC) pavement, drainage, side panels and raised medians, traffic signal and electrical, landscape, SWPPP, and safety. FCG will perform construction management, inspection, labor compliance, utility coordination, and project close-out services.

FCG Consultants, Inc.

Contact: Maha Fakhouri, President & CEO, (714) 312-0317, maha.fakhouri@fcgconsultants.com

Address: 22885 Savi Ranch Parkway, Suite G, Yorba Linda, CA 92887

Mr. A.B. Fakhouri, PE, QSP, is our proposed Project Manager/Resident Engineer and will be assigned for the duration of the project. He is a **former Resident Engineer of Caltrans District 7 with more than 25 years of Project Management, Design, and Construction experience on transportation infrastructure and public works projects.** He gained his experience working for Caltrans, county departments of transportation, transportation authorities, and local cities. He is highly experienced ensuring conformance with the Caltrans Construction Manual, Caltrans Local Procedures Assistance Manual, and Greenbook standards.

We have included RTEA, Inc., ZTC Group, Geo-Mat, HES, and Case Land Surveying to provide additional construction inspection and technical support. The qualifications of our subconsultants are provided in the Sub-Consultants section of this proposal.

The information contained in this submittal is true and correct. This proposal will remain valid for a period of no less than 180 days from the date of the submittal.

If you have any questions, or require additional information, please do not hesitate to contact me. I appreciate the opportunity to submit this proposal and look forward to working with the City of Lake Elsinore. Please contact me at (714) 312-0317 or mfakhouri@fcgconsultants.com with any questions you may have.

Sincerely,

Maha Fakhouri
President & CEO

RTEA, Inc. (RTEA)

Contact: Regina Talamantez, PE, Resident Engineer, (909) 763-3194, reginat@rtengineering.net

Address: 202 E. Airport Drive, Ste. 140 San Bernardino, CA 92408

RTEA is a Hispanic, woman-owned civil engineering firm providing program management, construction management, design, design review, environmental, public outreach, and community relations services. RTEA has effectively partnered with state and federal regulatory agencies to deliver successful projects, well-managed budgets, and superior services to thoroughly satisfied stakeholders and clients. RTEA specializes in transportation infrastructure projects including highways, roadways, bridges, and grade separations.

ZT Consulting Group Inc. (ZTC)

Contact: Farzad Tasbihgoo, PE, CQA, CWI, PCI III, Senior Quality Engineer, (626) 714-7181, farzad@ztcgrp.com

Address: 1041 E. Green Street #204 Pasadena, CA 91106

ZT Consulting Group Inc. (ZTC) is a certified Small Business (SB) with State of California Department of General Services. ZTC specialize in providing QA source inspection, forensic engineering, and structural health monitoring services for public projects. The majority of their staff has served and completed numerous public projects within the State of California over the past decade. ZTC's expertise is in Construction Quality Management Plan (QMP and SIQMP) development and implementation, Source Inspection, Facility Audits, and Quality Assurance/Verification/Surveillance (QA/QV/QS).

GeoMat Testing Laboratories, Inc. (GeoMat)

Contact: Haytham Nabils, PE, Project Manager, (951) 688-5400, haytham@geomatlabs.com

Address: 9980 Indiana Avenue, Suite 14, Riverside, CA 92503

GeoMat offers comprehensive geotechnical/asphalt/concrete/soil consulting, inspection, and material testing services during construction. Their services are applied in planning, design, and construction of municipal and public works throughout Southern California. GeoMat has broad geotechnical and materials testing experience throughout Southern California. GeoMat's service includes geotechnical investigations and geotechnical observations and compaction testing during grading and infrastructure construction/trench backfill, and transportation projects and construction / observations and monitoring/inspection during pavement rehabilitation and new construction.

Case Land Surveying

Contact: Matthew Bartz, Survey Manager, Direct: 714.628.8948, email: CLSI@CaseLandSurveying.com

Address: 614 N. Eckhoff Street, Orange, CA 92867

Case Land Surveying, Inc. is a professional land surveying and mapping firm. Serving the greater Southern California area, Case Land Surveying firm has established a reputation for solid professionalism, technical excellence, innovative solutions and most importantly, an unwavering commitment to service. During their extensive years of service, Case Land has undertaken a broad range of commercial, residential and industrial projects in both the public and private sector. Case Land Surveying will perform field construction surveying, staking, and reset survey monuments. Case Land Surveying is commonly used by construction contractors and they are highly knowledgeable in their field and very well respected in the industry.

Hernandez Environmental Services (HES)

Contact: Juan Hernandez, Principle Biologist, Direct: (951) 579-1657, juan@hernandezenvironmental.com

Address: 17037 Lakeshore Drive, Lake Elsinore, CA 92530

Hernandez Environmental Services is a California certified micro business engaged in the provision of environmental planning, biological studies, and regulatory permitting services. Our firm's focus is to offer our expertise in environmental, biological, and regulatory compliance services while meeting client scheduling and budget constraints. Hernandez Environmental Services provides a wide range of services, including California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) compliance document, jurisdictional delineations, biological studies, biological monitoring during construction, mitigation and monitoring plans, and resource agency permitting and compliance services.

PROJECT UNDERSTANDING

The City is requesting proposal for Construction Management, Inspection, Materials Testing, and Surveying Services on the I-15/Main Street Interchange Improvements projects to widen Main Street, Southbound and Northbound On Ramps and Off Ramps, and tie into Camino Del Norte. These proposed projects are designed to enhance public safety, improve traffic flow, and reduce congestion on the interchange and allow for better control to access the freeway and Main Street.

The FCG Team has worked on several projects with similar features and understand how most construction contractors will schedule and perform the work. We prepared a construction schedule we believe the Contractor will build project similarly (see Exhibit 1). We believe the Contractor can overlap stands and this project can be done in 10 months as follows:

Stage 1: February 2021 – August 2021

The major work activities in this stage include, but not limited to, construction on Main Street, construction of Retaining Walls, and construction of drainage. Major activities in Stage 1 include but not limited to:

1. Installation of Traffic Control Devices and Signs.
2. Implementation of SWPPP and installing BMP's.
3. I-15 Northbound On Ramp: Clear and grub, earthwork, prepare subgrade, subbase, and HMA pavement.
4. I-15 Northbound at On Ramp: Grind and overlay RHMA-G.
5. I-15 Northbound Traffic Signals:
 - a. Install traffic signals including conduits, interconnect, pull boxes, loops, foundations, poles, mast arms, etc.
 - b. Install controller cabinets, backup batteries, controllers.

This phase is very critical because it includes long lead items to be ordered early on in the project.

6. I-15 Southbound On Ramp: Grind and overlay RHMA-G.
7. I-15 Northbound Signage and Electrical Improvements: Install ramp meters, controller assembly, sign, and flashing beacon.
8. I-15 Northbound Off Ramp: Install K-Rail.
9. I-15 Southbound Off Ramp: Clear and grub, earthwork, prepare subgrade, subbase, and RHMA-G pavement.
10. Irrigation and Landscape: Installation of irrigation lines, controllers, and landscape electrical.
11. I-15 Southbound Ramps Traffic Signal and Lighting: Install pole foundations, poles, mast arms, controller cabinets, controllers, backup batteries, conduit, interconnect, pull boxes, loops, etc.

This phase is very critical because it includes long lead items to be ordered early on in the project.

12. I-15 Northbound Retaining Wall Type 1 Case 2 Mod.: Install ground anchor, install Architectural Finish, and slope paving.
13. Install Storm Drainage Systems: Install Storm Drainage Systems 1, 3, 2, 4, 5, 6, 7, 8, and 10 (in that order).
14. I-15 Southbound Retaining Wall Type 1 Class 2 Mod.: Install ground anchor, install Architectural Finish, and slope paving.

Stage 2, Phase 1: April 2021 – July 2021

The major work activities in this stage includes, but not limited to, construction on I-15, construction of Maintenance Vehicle Pullouts, CHP Enforcement Area, and Final Pavement. Major activities in Stage 1 include but not limited to:

1. I-15 Northbound On Ramp: Construct Maintenance Vehicle Pullout.
2. I-15 Northbound On Ramp: Construct CHP Enforcement Area.

Stage 2, Phase 2: June 2021 – October 2021

The major work activities in this stage includes, but not limited to, construction on I-15, grading, pavement, striping, remove construction area signs, install final signage, remove temporary BMP's, punch list, final walkthrough, and project acceptance:

1. I-15 Northbound On Ramp: Final grading, prepare subgrade, install subbase, and install HMA pavement.
2. I-15 Southbound Off Ramp: Grind and overlay RHMA-G.
3. I-15 and Main Street: Remove all K-Rail.
4. I-15 and Main Street: Remove any temporary striping and install final striping and delineation.
5. I-15 and Main Street: Remove construction area signs and install permanent signage.
6. I-15 and Main Street: Adjust utility covers if needed.
7. Perform final walkthrough with Caltrans and City.
8. Review and approve As-Builts.
9. Prepare all Caltrans Forms for sign off by various functional units through Oversight Resident Engineer.
10. Complete and file all project documents in binders.
11. Perform final project files review and accept project.

Specific Issues & Project Approach

The FCG Team has worked on several Highway and Federally Funded Projects with very similar components and features and fully understand how such projects will be constructed by most contractors. Primarily, Contractors will schedule the work based on various reasons but mainly on, but not limited to: availability of materials, duration of activities, allowable work hours, allowable closures of facilities such as lanes and driveways, availability of workers, and schedule of subcontractors.

Construction activities and schedule will be primarily based on who the Construction Contractor is and how they schedule the work and what work they will be able to do as a prime and what work will be contracted out to a sub-contract. For example, if the Prime Contractor has to subcontract out all asphalt removal and paving, there is a chance the paving subcontractor will schedule the work to be done for all locations at once, or if possible, spread the work in different phases. The following items represent some of the major work items as shown on the project plans for the project:

1. **I-15 Southbound and Northbound Off Ramps.**
2. **I-15 Southbound and Northbound On Ramps.**
3. **Eastbound and Westbound Widening to Main Street.**
4. **Pavement Improvements on Camino Del Norte.**

Specific Issues

- **Stage Construction and Traffic Management**

Construction may be sequential and traffic will be restricted to one lane in each direction on Main Street while construction is undertaken for several operations, including but not limited to, construction of the retaining walls and pavement, so traffic will be switched back and forth, etc. In addition, construction of the I-15/Railroad Canyon Interchange Project may be going on simultaneously and that will need lots of coordination because no two consecutive On Ramps or Off Ramps will be allowed to be closed at the same time by Caltrans. Both Contractors will have to coordinate freeway closures and detours together when there are conflicts. There are some issues to be considered and resolved during construction and the FCG Team will look forward to assisting with solutions that will help avoid any extra cost or claims.



- **Camino Del Norte**

Per sheet L-1, calls a 0.15' grind and overlay of HMA-A on Camino Del Norte. From our understanding Camino Del Norte was recently paved as part of the City's Capital Improvements Plan. In addition, Per page X-1, the typical cross section calls for a 0.15' grind and overlay of RHMA-G that may be eliminated from the contract which represents a substantial savings to the City.

- **Drainage**

Sheet 1 of General Plan and Drainage plan sheet DP1, Storm drain #3 maybe in conflict with the south retaining wall type 7B footing; elevation of that existing inlet and outlet must be surveyed to determine potential conflict prior to bidding the project to eliminate additional cost and claims. The FCG team will utilize our sub to perform this work prior to bid.

- **Public Outreach**

Its our understanding that community impact and outreach is of outmost importance for the City, especially due to the fact that this project will commence while the I-15/Railroad Canyon Interchange Project is under construction and having both projects under construction will definitely cause inconvenience to the public. Our community outreach program is designed to keep the public informed during all stages of the project, upcoming closures, and any traffic impacting daily commute for ease of travel.

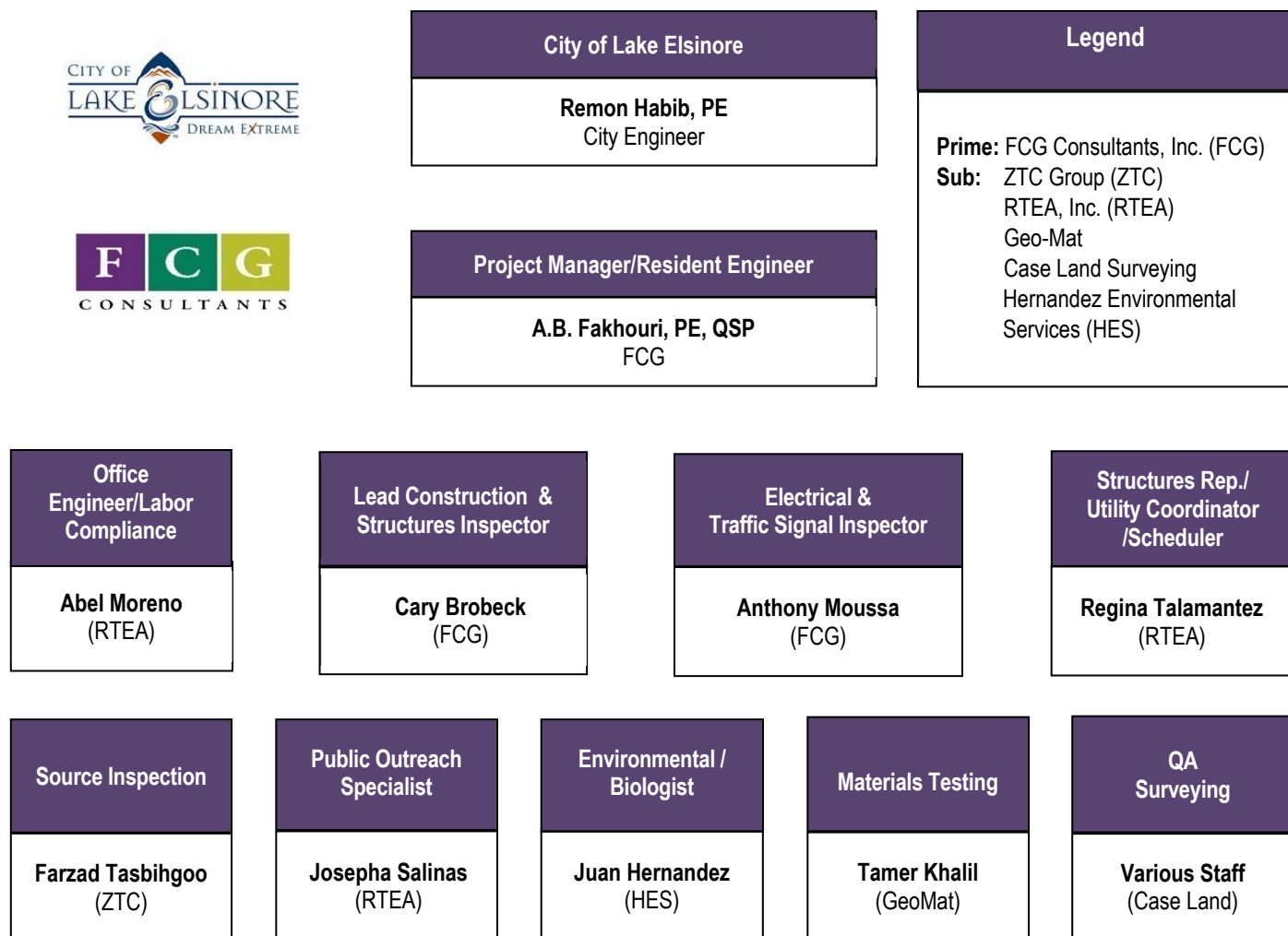
- **Signals & Electrical Work**

The electrical work on this project consists of installing traffic signals, traffic loops, video detection, and pedestrian push button modifications. It is very important for the Contractor to submit all submittals pertaining to long lead electrical items such as poles in order to schedule source inspection to ensure timely deliver to the project as poles take up to 24 weeks for delivery.

TASK A – PERFORMANCE REQUIREMENTS

CONSTRUCTION MANAGEMENT TEAM

FCG has assembled a team of experienced construction management professionals that will successfully deliver this project on time and within budget. The organizational chart below shows our project team and the lines of communication between team members.



Client Testimonials

"I would like to start by saying, to Mr. Fakhouri's credit; the project was completed on time and within budget. Throughout our working relationship, Mr. Fakhouri has demonstrated good engineering knowledge, judgement, and skills combined with practical application in his problem solving and partnering... In closing, Mr. Fakhouri was fair yet firm when dealing with the contractor."

- **Arsanious Hanna, PE, City of Irwindale.**

"I had the pleasure of working with Mr. Fakhouri and FCG this year on the SR-605/Live Oak Improvements and Ramp Widening Project (\$2 million). This project was administered by the Caltrans District 8 Ontario Field Construction Office... His willingness and the ability to work with Caltrans and his adaption to changes as needed were vital to a successful project. He is an individual who is willing to go the extra mile."

- **Hai Hong, Caltrans District 7**

RELEVANT EXPERIENCE

FCG offers the City a team of qualified professionals experienced in all aspects of public works construction. Projects that showcase our construction management and inspection experience and knowledge of various standards are highlighted below:

I-605/Live Oak Avenue Ramp Widening Irwindale, CA			
Client	City of Irwindale	Contact	Arsanious Hanna, PE – City Engineer/Building Official
	16102 Arrow Highway Irwindale, CA 91706		(562) 477-5747 ahanna@irwindaleca.gov
Project Description This Federally Funded Project consisted of reconstruction of the 1-605 northbound off-ramp at Live Oak Avenue and installation of a traffic signal at the intersection. In addition, the direct ramp to eastbound Live Oak Avenue was widened to provide dual right lanes at Live Oak Avenue. The project included cold milling the existing asphalt pavement, removal and replacement of road bases in the deteriorated areas, resurfacing with conventional asphalt, and re-striping and adjusting utility manholes within the project limits.			
Scope of Services FCG performed construction management and inspection services per Caltrans LAPM and Caltrans Construction Manual . Work included traffic control, removals, concrete and asphalt paving, curb and gutter, ADA ramps, sidewalk, street lighting, traffic signals, Edison service connections, drainage, landscape, and striping. Duties included management and inspection of work, office engineering, conducting meetings, reviewing submittals and RFIs, CCOs, daily diaries and quantities, photos, and coordinating materials testing and lane closures.			
Dates	11/2018 – 04/2020	Cost	\$2 Million
Staff	A.B. Fakhouri, Project Manager; Jaime Engler, Resident Engineer; Anthony Moussa, Inspector; Tony Alfakhouri, Inspector; Leon Fuentes, Electrical Inspector; Samar Alfakhouri, Office Engineer; Sam Elachkar, Scheduler		



Firestone Boulevard Over San Gabriel River Bridge Replacement Project Norwalk, CA			
Client	City of Norwalk	Contact	Mazen Dabboussi, PE – Transportation Engineer
	12700 Norwalk Boulevard Norwalk, CA 90650		(323) 497-1315 mazen.a.dabboussi@dot.ca.gov
Project Description This Federally Funded Project consisted of replacement of the existing Firestone Boulevard Bridge in its entirety with a new bridge which meets current standards.			
Scope of Services FCG performed construction management and inspection services per Caltrans LAPM . Construction management and inspection services were performed for demolition and replacement of the bridge, HMA, slurry seal, sidewalk, curb and gutter, electrical, fiber optic, traffic control, water/sewer line, striping, SWPPP, and safety. Inspection duties included inspection of traffic control, signage, striping, PCC and AC paving, electrical, traffic signals, minor concrete, safety, SWPPP, and striping. Office duties included, but were not limited to, preparing and maintaining project files, creating and updating logs, reviewing and approving submittals and RFI's, negotiating change orders and processing estimate, and verifying payroll.			
Dates	05/2014 - 02/2016	Cost	\$12 Million
Staff	A.B. Fakhouri, Project Manager/Resident Engineer; Jaime Engler, Construction Inspector/Office Engineer; Cary Brobeck; Inspector Leon Fuentes, Electrical Inspector, Samar Alfakhouri, Office Engineer; Sam Elachkar, Scheduler		



I-99/Woollomes Avenue Interchange and Ramp Reconstruction Project, Caltrans District 6, Central California – Bakersfield, CA			
Client	Kern County	Contact	Pedro Nunez – Project Manager, City of Delano
	1015 Eleventh Avenue Delano, CA 93216		(661) 800-1648 pnunez@cityofdelano.org
Project Description This project consisted of demolition and reconstruction of portion of the existing box girder bridge and replacement with a box girder bridge over the I-99 in the city of Delano along with local street improvements. Project included stage construction to widen Northbound and Southbound On Ramps and Off ramps along with many other improvements such as grading, paving, drainage, grading, retaining walls, and more.			
			
Scope of Services FCG performed construction management and inspection services per Caltrans Constr. Manual. Duties included, but were not limited, to managing the construction project, managing inspection and office engineering, coordinating utilities, coordinating closures, coordinating with Caltrans for field inspection, reviewing and approving all submittals, RFIs, schedules, claims, contract change orders, mix designs, shop drawings, field inspection, coordinating with materials testing, and quantities.			
Dates	06/2012 – 3/2013	Cost	\$5 Million
Staff	A.B. Fakhouri, Resident Engineer.		

NB Jamboree Boulevard Widening Over SR-73, City of Newport/Caltrans District 12, Newport Beach, CA			
Client	City of Newport Beach	Contact	Mike Sinacori, PE – Deputy City Engineer
	100 Civic Center Dr. Newport Beach, CA 92660		(949) 795-8948 msinacori@newportbeachca.gov
Project Description This \$5 million project consisted of grading, roadway excavation and backfill, JPCP pavement, HMA pavement, LCB, PCC, MBGR, drainage, electrical, traffic control, and structural concrete. Other work included striping of white, yellow, thermoplastic, reflective markers, seal joints, and loops. Most of the construction was completed at night to minimize inconvenience to motorists, though there was some work during the day.			
			
Scope of Services FCG performed construction management and inspection services per Caltrans LAPM and Caltrans Construction Manual. Duties included, but were not limited, to managing the construction project, managing inspection and office engineering, coordinating utilities, coordinating closures, coordinating with Caltrans for field inspection, reviewing and approving all submittals, RFIs, schedules, claims, contract change orders, mix designs, shop drawings, field inspection, coordinating with materials testing, and quantities			
Dates	03/2011 – 06/2012	Cost	\$3.0 Million
Staff	A.B. Fakhouri, Resident Engineer.		

PROJECT UNDERSTANDING, SCOPE & APPROACH

SR-58 Hinkley 4-Lane Expressway Phase 2, Caltrans District 8, San Bernardino, CA, Caltrans Contract No. 08A2461

Client	San Bernardino County	Contact	Ihab Boulos, PE – Resident Engineer, Caltrans D8
	464 W 4 th Street San Bernardino, CA 92401		(951) 232-7582 ihab.boulos@dot.ca.gov

Project Description

This \$180 million project included the realignment and widening of SR-58 to a four-lane expressway from post miles R22.2 to R31.1 in San Bernardino. Work included two major bridges, retaining walls, median barrier, slope paving, roadway realignment, JPCP paving, AC paving, drainage, traffic control, SWPPP, safety, labor compliance, and public outreach. All work was performed in accordance with Caltrans Standards, the Caltrans Construction Manual, FHWA Guidelines, Local Assistance Procedures Manual, and Greenbook Standards.



Scope of Services

FCG performed construction management and inspection services per **Caltrans Constr. Manual**. Duties included, but were not limited, to managing the construction project, managing inspection and office engineering, coordinating utilities, coordinating closures, coordinating with Caltrans for field inspection, reviewing and approving all submittals, RFIs, schedules, claims, contract change orders, mix designs, shop drawings, field inspection, coordinating with materials testing, and quantities.

Dates	06/2014 – 12/2015	Cost	\$180 Million
Staff	A.B. Fakhouri, Project Manager/QA Manager, Tony Alfakhouri, Construction Inspector; Jaime Engler, Construction Inspector.		

I-5/Carmenita Boulevard Reconstruction Project, Caltrans District 7, Los Angeles County, Caltrans Contract No. 07A3262

Client	Los Angeles County	Contact	Peter Lee, PE – Resident Engineer, Caltrans D7
	100 S Main St Los Angeles, CA 90012		(626) 905-1710 peter.m.lee@dot.ca.gov

Project Description

This project consisted of demolition and reconstruction of the existing box girder bridge and replacement with a box girder bridge over the I-5 in the cities of Norwalk and Santa Fe Springs. The new bridge crossed over UPRR railroad tracks and a local frontage road that required two years of utility coordination and relocation. The project was awarded the California Transportation Foundation Freeway Project of the Year in 2017.



Scope of Services

FCG performed construction management and inspection services per **Caltrans Constr. Manual**. Duties included, but were not limited, to managing the construction project, managing inspection and office engineering, coordinating utilities, coordinating closures, coordinating with Caltrans for field inspection, reviewing and approving all submittals, RFIs, schedules, claims, contract change orders, mix designs, shop drawings, field inspection, coordinating with materials testing, and quantities.

Dates	02/2016 – 12/2018	Cost	\$130 Million
Staff	A.B. Fakhouri, Project Manager/Resident Engineer, Tony Alfakhouri, Inspector, Electrical Inspector; Timmy To, Electrical Inspector.		

Camino Del Norte Street Improvements Z10030 Lake Elsinore, Ca			
Client	City of Lake Elsinore	Contact	Remon Habib, PE – City Engineer
	130 S Main Street Lake Elsinore, CA 92530		(951) 674-3124 Rhabib@lake-elsinore.org
Project Description The project scope is the development of roughly 5,000 LF of new improvement on Camino Del Norte and extending to Canyon Estates Drive to the East roughly 550 LF and Franklin Street to the South of roughly 650 LF and roughly 200 LF on Canyon View Drive and approximately 100 LF onto Sagecrest. This improvement entails the installation of a two-way road, fully equipped with Storm Drains curb and gutter, sidewalks and street Asphalt pavement section.			
Scope of Services GEOMAT TESTING LABORATORIES provided geotechnical, materials testing and special inspections services per City of Lake Elsinore standards, Caltrans Construction Manual. Work included canyon cleanout excavation for culvert installation, mass rough grading, installation of 16 storm drain crossings, headwall concrete structures construction, traffic control, removals, concrete and asphalt paving, curb and gutter, ADA ramps, sidewalk, street lighting, traffic signals, Edison service connections, drainage, landscape, and striping. Duties included management and inspection of various items of work, office engineering, conducting meetings, reviewing ongoing issues and providing on the spot solutions to prevent delays in progress.			
Dates	6/2019 – 04/2020	Cost	\$3.5 Million
Staff	Haytham Nabils PE, Project Manager; Tamer Khalil, Lab Manager; Art Martinez EIT;		

Burrtec Facility in Yucca Valley San Bernardino County, CA			
Client	Burrtec Facility in Yucca Valley	Contact	Gary Koontz
	Burrtec Waste & Recycling Services 41575 Eclectic Street Palm Desert, CA, 92260		gkoontz@burrtec.com
Project Description The proposed project would relocate the existing facility and all operations to the subject project site. Project development includes a truck terminal for Burrtec Waste and Recycling Services' collection fleet and an approximately 16,200 square foot solid waste transfer station. Additional improvements include landscape frontages on Indio Avenue and Sunnyslope Drive, a maintenance shop, a fueling station, an operations facility, in-ground truck scales, a stormwater detention basin, and associate parking.			
Scope of Services HES performed preconstruction nesting bird surveys that included the entire Yucca Valley Burrtec Waste Transfer Facility project site and a 250-foot buffer around the perimeter of the site. Biologists performed walking transects up to 100 feet apart for 100 percent coverage of the site. HES biologists informed the project manager of active nests and implemented a 250-foot buffer around the nests until the birds left the nest. Reports updating the client of the status of the nests were submitted until it was determined the nests were inactive. HES had a biological monitor present on site to observe all construction activities that involved clearing and grubbing to ensure no take occurred on any state and federal listed plant and animal species.			
Dates	7/2020 – 08/2020	Cost	\$4,983
Staff	Juan J. Hernandez, Principal Biologist; Shawn Gatchel-Hernandez, Principal Regulatory Specialist; Hallie Hernandez, Associate Biologist; Elizabeth Gonzalez, Associate Biologist; Cruz Hernandez, Biological Aide		

I-15 & Limonite Avenue Interchange Irwindale, CA			
Client	County of Riverside Transportation Department (RCTD)	Contact	Hector Davila, PM
	2950 Washington St. Riverside, CA 92504		(951) 955-6778 HeDavila@rivco.org
Project Description The project replaced the Limonite Avenue OC, widened the roadway from four lanes to six lanes, and reconstructed the ramps to provide a partial clover leaf (Type L-7). Loop ramps were constructed in the southeast and northwest quadrants. On and off ramp gore points were extended, for the allowance of longer acceleration and deceleration capacities.			
Scope of Services ZT Consulting Group, Inc. (ZTC), prepared and implemented the project Source Inspection quality Management (SIQMP) as it was required by the Co-op between RCTD and Caltrans. ZTC staff managed the material control cycle, performed source inspection on key structural items, such as overhead sign structures (OHSS), precast box culverts, electrical poles, structural fasteners, welded hooped, headed bars, bearing pads, and many more. In addition, ZTC staff supported RCTD with electrical components source inspection. ZTC work on this project was audited and accepted by Caltrans Oversight engineers.			
Dates	08/2018 – 10/2019	Cost	\$48 Million
Staff	Farzad Tasbihgoo – SMR, Andrew Soria – QA Inspector, Dan Chang – QA Inspector		
Fairway Drive Grade Separation & Lemon SR-60 On/Off Ramp Project, CA			
Client	Alameda Corridor – East	Contact	Mark Christoffels, Chief Engineer SGVCOG
	4900 Rivergrade Road, Suite 120 Irwindale, CA 91706		(562) 572-7438 mchristoffels@sgvcog.org
Project Description The project included construction of partial interchange, a WB on-ramp, and EB on-and off-ramps from Lemon Avenue. It permanently removed the existing EB off - and on-ramps at Brea Canyon Road. An auxiliary lane from the EB on-ramp to the connector to SB SR-57 was also constructed. The existing sound wall along EB SR-60 west of Lemon Avenue was removed and a new sound wall was installed along the edge of the pavement of the EB off - and on-ramps. A new traffic signal was constructed along Lemon Avenue at the new EB ramps. Traffic signal modifications were made at the Golden Springs Drive/Lemon Avenue intersection and at the Golden Springs Drive/Existing EB ramp intersection near the Market World shopping center.			
Scope of Services RTEA performed construction management and inspection services per Caltrans LAPM and Caltrans Construction Manual. Work included providing construction management services as Resident Engineer which includes, management of CM staff, management of contract administration and construction of UPRR grade separation underpass project and installation of new SR-60 On/Off Ramps on Lemon Avenue. Responsibilities include reviewing the baseline schedule, review monthly schedule updates, analyze change orders and conduct time impact analyses, provide support services in claims avoidance and mitigations. Coordination, right of way support and stakeholder management.			
Dates	11/2016 –05/2019	Cost	\$90 Million
Staff	Regina Talamantez, PE, Resident Engineer/Structure Representative		

TASK B – PRECONSTRUCTION SUPPORT SERVICES

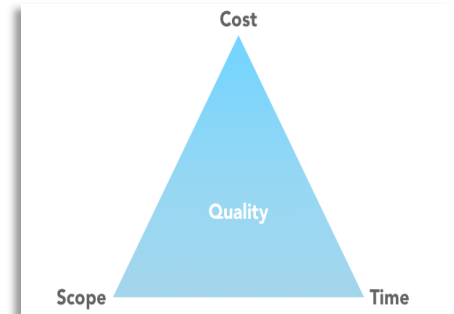
Our Project Manager/Resident Engineer (PM/RE), A.B. Fakhouri, will begin working on the Project immediately and will develop the tasks to be accomplished, assisting in bid review, project scheduling, and with the City's concurrence, assigning staff duties to the appropriate members. The FCG team will perform all work necessary from contract award to project closeout as follows:

a. Establish and execute Project Limits and Constraints -

Cost: The FCG team will work with the City to deliver the most cost-effective project with the most well-developed scope. The team will provide the City with various options to consider maximizing scope with a balanced budget.

Time (schedule): The FCG team understands all projects have a deadline for delivery. We will work on a plan to reduce the project's time with a balanced cost and scope.

Scope: Since project plans are incomplete and the specifications are not fully defined, the FCG team will work with the City to produce a sound set of each based on the diversified experience of the proposed team. The team is comprised of highly experienced Construction and Design Engineers, Inspectors, and support staff to provide the City the highest level of experience.



- b. Perform Plan Check - The FCG team will ensure all design conforms with the current edition of Specifications and updated design policies, contract plans are prepared in accordance with the most current editions of applicable manuals and other documentation, current standard Detail Sheets, and current standard Plans are incorporated into the contract plans where applicable.
- c. Perform Constructability Review and Plan Check - The FCG team will review plans and special provisions for errors and constructability issues, report those findings to the City, and will coordinate with the City team to eliminate such issues.
- d. Establish a Project Overall Budget - The FCG team will review the Contractors' bids and provide comments and recommendations to the City to ensure proper expenditure of funds to control Project costs.
- e. Setup and conduct a Pre-Construction Meeting - Once the NTP is produced, FCG team will coordinate the preconstruction meeting by preparing a list of attendees, including, but not limited to, the Contractor, Designer, City of Lake Elsinore, Caltrans, and utility companies.

TASK C – BID PROCESS

The FCG team will prepare the construction bid procurements, including bid evaluation, contract documents, Federal and State requirements, Plans and Special Provisions, and permit requirements. We will perform all work as per the Local Assistance Procedure Manual as follows:

- **Construction Bid Documents:** The FCG team will review bids for compliance with contract documents, including scope to avoid unbalanced bid items and to prepare tabulations of bids. The Resident Engineer (RE) will advise the City's Project Manager, with regard to issuing the NTP based on review of apparent low bidder price and schedule. This allows for the Contractor to obtain appropriate permits.
- **Construction Contract Award:** The RE will review all bids and will make a recommendation to the City to award to the lowest apparent responsive bidder. Additionally, we will develop a payment excel file, verify the Contractor's references, licenses, insurances, and coordinate with the Contractor for award.
- **Notice to Proceed and Move-In Period -** Once the construction contract is approved, we will discuss Project move-in period and start of construction with the Contractor. Once this discussion is complete, we will recommend to the City issuance of the Notice to Proceed and establishment of the date of the first chargeable working day. This is recommended to maintain the Project schedule and provide the Contractor ample time to obtain permits and submit all necessary submittals prior to start of construction. A 20-day move-in period is recommended because it allows sufficient time to review submittals, especially for long lead items such as signal and lighting poles and equipment.

TASK D – PROJECT ADMINISTRATION

Well managed construction projects emphasize partnering, mutual respect between the Contractor and CM team, and effective resolution of issues in the field to ensure on-time and within budget completion without claims. Construction management is essentially project management for the construction phase. As such, the six essential elements of effective project management still apply, and they include:



Deliverables

Standard deliverables for construction management services typically provided by FCG include:

- ✓ Administer the contract – comprehensive construction management services.
- ✓ Assist City in the review and preparation of final bid documents.
- ✓ Assist City with performing a thorough constructability/biddability review.
- ✓ Assist with Caltrans (CT) Local Assistance audit process.
- ✓ Assist City with the bid documents, advertising, pre-bid conference, bid opening, evaluation, and award.
- ✓ Conduct the pre-construction meeting.
- ✓ Coordinate utility relocation before starting construction (not applicable to this project).
- ✓ Provide construction inspection and management activities and coordination with other stakeholders.
- ✓ Prepare and maintain construction documentation as required by City using Caltrans-LAPM (Chapters 15, 16 & 17) using the Uniform Filing System.
- ✓ Assist City to resolve change order issues.
- ✓ Provide public outreach services in support of City's Public Information Officer and outreach team.
- ✓ Provide project expenditure report to City's Project Manager per funding requirements.
- ✓ Manage pre-construction activities beginning with the execution of the contract and coordination with City staff.
- ✓ Review the master construction schedule and monitor and update the construction schedule.
- ✓ Conduct weekly construction meetings with Contractor, City, and other involved parties.
- ✓ Coordinate closeout and as-built plans.
- ✓ Prepare daily and weekly construction inspection reports using the City/Caltrans standard forms.
- ✓ Monitor Contractor's Labor Compliance / Safety programs (assist City's Labor Compliance consultant for this project).
- ✓ Ensure all work conforms to the project construction specifications, City and County codes, 2018 Greenbook Standard Specifications for Public Works Construction and 2018 Caltrans Standards and Specifications.
- ✓ Verify SWPPP compliance.
- ✓ Review Requests for Information (RFI) and provide recommendations to City's Project Manager.
- ✓ Process and review submittals, RFIs, weekly statement of workdays, change orders, punch-list items, and as-built plans.
- ✓ Monitor traffic control working closely with City's Traffic Engineer using Caltrans Standard Plans, California Manual on Uniform Traffic Control Devices (MUTCD), and Work Area Traffic Control Handbook (WATCH).
- ✓ Quantity calculations/take-off, field measurement, and verification in support of Monthly Progress Payments.

Construction Engineering

The FCG team will manage and administer the project through Mr. A.B. Fakhouri. He is highly experienced with similar projects, has successfully delivered services on several similar federally funded projects, and is a licensed Civil Engineer in the State of California.

The FCG team will perform Construction Engineering, Inspection, and Office Engineering per the LAPM and Caltrans Construction Manual and will enforce the Project Plans, Specifications, and Caltrans and Greenbook Standards as follows:

1. Management

- Review and coordinate approval of shop drawings by the design consultant as needed.
- Log, track, and process submittals, Requests for Information (RFI's), Requests for Changes (RFCs), Contract Change Orders (CCOs), field directives, Notices of Potential Claim (NOPCs), Non-Conformance Reports (NCRs), review and approve traffic control plan.
- Provide City with the contractor's Red marked as-built plans at Project completion.

- Monitor materials documentation and testing results, as well as enforce corrections.
- Review and approve contractor's safety program.
- Review all requests for clarification and provide to Engineer of Record for clarification.
- Review required construction survey including lines and grades, construction staking, cut sheets, etc.
- Process all Project documentation per City and Caltrans requirements for standard format.
- Maintain Project files per Caltrans requirements.
- The RE shall service the Project and visit the site as needed for the duration of the project.
- Deliver services in accordance with the plans and specifications.
- Manage and coordinate all aspects of the project, inclusive of services identified in the RFP.
- Conduct a pre-construction meeting and biweekly construction meetings or as deemed necessary by the project manager with the contractor, and City. Prepare and distribute meeting agendas minutes and progress reports.
- Coordinate with City staff, multiple contractors when applicable, agencies, and Project stakeholders.
- Prepare weekly Statements of Working Days and other reports that may be required by the City.
- Review submittals and determine consistency with the plans and specifications.
- Participate in field meetings and document issues, findings, directions, changes, etc., and develop solutions.
- Participate in public outreach activities.
- Other improvements/activities as deemed necessary by the consultant to implement the improvements on the Project.
- Prepare all progress reports required by the Local Assistance Procedures Manual and FHWA guidelines.

2. Meetings

- Conduct a pre-construction meeting and prepare agenda and minutes. Prior to the meeting, review PS&E and agendaize potential issues.
- Conduct a utilities coordination meeting with all utilities and representatives to discuss issues and conflicts.
- Conduct and lead construction progress meetings as scheduled by all parties and prepare minutes for the City's approval.
- Conduct field visits and meetings to discuss issues in the field with involved parties including, but not limited to, City Staff, Designer(s) of Record, Contractor, Subcontractors, Inspectors, and whoever else required to be present.

3. Labor Compliance

The Consultant will be expected to perform labor compliance in accordance with the Caltrans Local Assistance Procedure Manual (LAPM). The proposal shall provide a detailed scope of work that clearly demonstrates the Consultant understands the requirements of performing labor compliance in accordance with the LAPM.

4. Document Control

FCG staff will develop, implement, and manage the project filing system for all project documents that is consistent with the FHWA and Caltrans filing system. The FCG team will document communications with all stakeholders as well by printing all emails and filing them. The Filing System will be setup based on the 63 Filing Categories outlined in the Caltrans LAPM and Caltrans Construction Manual in two formats at minimum; hard copies in binders and web-based cloud system such as Dropbox or SharePoint. Our Project Manager/Resident Engineer Mr. Fakhouri is a former Caltrans Resident Engineer and he is extremely knowledgeable and highly experienced with the Caltrans Filing System. Mr. Fakhouri has participated in several project reviews by Caltrans and FHWA and has been highly praised by Mr. Pasebani at Caltrans for such work.

TASK E – CONSTRUCTION COORDINATION

- Generate and provide list to RE stating all Utility Owners to be invited to Pre-Con Meeting. – Utility Owners, Local Fire Department, Waste Management.
- Review & Coordinate all Utility Owners scope of work at the construction conference and review for conflicts phasing, staging of work. (who's doing traffic control, coordination with GC), encroachment permits.
- Maintain Utility Matrix – relocations, easements, rights, etc.
- Coordinate relocations.
- Review/provide comments to utility owner relocation plans.
- Manage Encroachment Permits.

TASK F – CONSTRUCTION INSPECTION

The Construction Inspector will be performing the following:

Construction Inspection Tasks
1. Become familiar with and review plans, specifications, construction-related documents, traffic control plans, construction schedules, construction sequences, and other agency permit requirements.
2. Photograph, log, and pre-work video prior, during, and after construction.
3. Attend pre-construction meetings and present special concerns, if any.
4. Interpret plans, specifications, and regulations and ensure the Contractor is following their contract. Provide inspections to ensure the Project is constructed accordingly.
5. Direct and notify construction Contractor about non-compliance and correct issues upon discovery.
6. Maintain daily diaries, photographs, and video (as needed) reflecting site and weather conditions, traffic control measures, labor, equipment and materials, quantity of work, and major incidents/safety violations.
7. Review construction progress schedules regularly. Verify schedules coincide with Project milestones, identify deviations, and ensure corrective actions are taken to bring projects back on schedule.
8. Provide complete measurements and calculations for progress payments and make recommendations for payments.
9. Review soil compaction and materials testing certifications of compliance.
10. Ensure the Contractor does not install materials without approved material testing certifications. Any failed tests shall be reported, and the Contractor directed to take corrective action.
11. Monitor Contractor's utility coordination to minimize utility conflict delays and potential need for relocations.
12. Attend progress meetings to communicate, coordinate, and resolve any jobsite issues or problems that may arise. Prepare and submit to Contractor a "Weekly Statement of Calendar Working Days" report.
13. Conduct field construction employee interviews to comply with the Federal, CDBG, Equal Employment Opportunity Law, and Davis Bacon Act.
14. Coordinate access to adjacent businesses and residents during construction with the Contractor. Coordinate mitigation of construction impacts with the Contractor, City, and other agencies.
15. Provide inspection of traffic control, channelization, and all other traffic-related work.
16. Ensure conformance with plans, specifications, applicable laws and codes.
17. Observe construction safety, public safety, and convenience, and report issues to the City and Contractor.
18. Monitor compliance with the City's National Pollutant Discharge Elimination System (NPDES) Permits and requirements, as well as all other local, state, and federal laws and regulations.
19. Inspect for compliance with the Project SWPPP Program including monitoring QSP and/or QSD duties as outlined in California State Water Resources Control Board, Storm Water General Permit and contract.
20. Monitor compliance with the City's Construction Demolition and Recycling Ordinance.
21. Maintain data for change orders and record information regarding time of dispute, time of notification by the Contractor, and action taken by the Inspector.
22. Ensure the Contractor submits certified payroll reports with monthly progress payment requests. Review reports for compliance with federal and state prevailing wage regulations.
23. Prepare and transmit to the Contractor all Project-related correspondence. All correspondence sent to and received from the Contractor shall be copied and transmitted to City.
24. Coordinate the preparation and submittal of as-built plans to the City upon project completion.
25. Prepare preliminary and final punch-list and follow through until completion.

TASK G – PROJECT SUPPORT CONSTRUCTION SURVEYING

- The surveyor will verify contractor's surveyor staking and layout to ensure compliance with State's requirements in terms of preservation and/or reestablishment of survey monuments, including recordation requirements.
- The surveyor will set centerline ties for existing centerline monument found with no existing ties, if any.
- The surveyor will replace centerline ties disturbed by construction, as needed.
- The surveyor will reset centerline monuments and provide the City with updated set of centerline tie notes along with as built.
- The surveyor will verify contractor's surveyor work to ensure compliance with all required construction survey requirements including, but not limited to, setting lines and grades, construction staking, preparation of cut sheets, etc.
- The surveyor will prepare and file any documentation required for recordation with the local Recorder's Office.
- The surveyor will perform any other survey activates as deemed necessary by the City or Consultant to ensure construction of Project is following the PS&E.

MATERIALS TESTING

Materials Sampling & Testing

Our team will work in collaboration with other members of the project team to achieve your project objectives. One of the key elements in meeting the project needs is assigning staff with requisite qualifications and experience in performing Geotechnical observation and material testing services as follows:

- Material testing shall conform to all Caltrans Standards, the LAPM and the Quality Assurance Program (QAP).
- Review and approve ARHM, AC mix designs.
- Review and approve PCC mix design. Consult with City for approval of PCC mix for the Project.
- Provide all material source inspection, sampling and testing as required by the LAPM and the QAP.
- Provide requested miscellaneous consultation during the Project, including discussion with the contractor to emphasize proper treatment of concrete. Provide all compaction tests per plan, specifications, and regulations per LAPM and the QAP. Provide nuclear compaction testing and provide geotechnical soil testing as necessary.
- Provide coordination for traffic controller testing and other traffic signal equipment as needed.

Quality Assurance Plan

Sampling and fabrication of concrete cylinders will be performed in accordance with the Quality Assurance Plan (QAP) and the Caltrans Construction Manual, Chapter 6. We will have one Caltrans certified tester at the batch plant and two in the field. One tester will measure temperature and perform Kelly Ball, unit weight and air content tests. The other tester will sample and test materials then compare results.

PUBLIC OUTREACH

FCG's staff has visited the Project location at different times of the day to better understand the area conditions and traffic patterns. Understanding existing conditions before construction begins is critical to the public outreach plan to save money and assist with potential early completion of the Project. There are several businesses and residents near the Project that will need to be communicated with continually, as well as internal target audiences, to include the City, Caltrans, emergency responders and local media. It is critical for us to keep stakeholders aware of what is going on. Our team understands a community who feels their concerns are being heard and who feels they are adequately communicated with will ultimately trust the agency building the Project.

The FCG team is experienced with providing public outreach to clients that requires various methods of outreach including but not limited to a Facebook page, City website link, flyers, and bilingual staff.



ENVIRONMENTAL MONITORING

The following are the biological environmental commitments for the Main Street Interchange Improvement Project, in the City of Lake Elsinore, Riverside County, California. These environmental commitments were obtained and are referenced on page 82 of the City of Lake Elsinore Public Works Department Special Provisions for Construction on State Highway in Lake Elsinore in Riverside County Street and Ramp Widening at I-15/Main Street Interchange.

The project is within or near habitat for the following regulated species:

- Coastal California Gnatcatcher
- Burrowing Owl
- Nesting Birds

To avoid any potential impact to these species, HES will implement the following measures:

1. A pre-construction survey within 3 days prior to ground disturbance is mandatory in suitable habitat areas for burrowing owl.
2. If feasible, project construction and all vegetation removal, including coastal sage scrub, should be completed outside of the general bird breeding season, that is inclusive of the coastal California gnatcatcher (February 15 – August 31). In the event that vegetation removal cannot be conducted outside of the coastal California gnatcatcher breeding season, focused surveys will be conducted by a qualified biologist three days prior to vegetation removal activities. Should nesting birds be found, an exclusionary buffer will be established by a qualified biologist. The buffer may be up to 500 feet in diameter. This buffer will be clearly marked in the field by construction personnel under guidance of the qualified biologist, and construction or clearing will not be conducted within this zone until the qualified biologist determines that the young have fledged, or the nest is no longer active. If nesting birds are found within the Main Street Bridge structure, exclusionary devices and nest prevention methods, designed to prevent birds from utilizing the bridge, will be determined and implemented by a qualified biologist. Exclusionary devices must be installed prior to the initiation of nesting season (February 15), and before any bridge demolition and other bridge construction activities begin. The biologist will determine high-visibility fence placement as needed.
3. If nesting birds are found within the Main Street Bridge structure, exclusionary devices and nest prevention methods, designed to prevent birds from utilizing the bridge, will be determined and implemented by a qualified biologist. Exclusionary devices must be installed prior to the initiation of nesting season (February 15), and before any bridge demolition and other bridge construction activities begin. The biologist will determine high-visibility fence placement as needed.
4. Nesting bird habitat within the project limits will be resurveyed during bird breeding season if there is a lapse in construction activities longer than seven days.

SOURCE INSPECTION

ZT Consulting Group (ZTC) and FCG Consultants (FCG) have assembled a team of experienced Structural Material Representative (SMR), experienced QA Source Inspectors, and accredited laboratories to develop and implement a Source Inspection Quality Management Plan (SIQMP). ZTC & FCG will develop the project Source Inspection Quality Management Plan (SIQMP) consisting of several components, where each component is addressed by different entity involved in the project. Project SIQMP will include a 3-category material tier-list for the project bid items and their subcomponents based on consequence of failure, from high risk of failure down to low risk of failure. ZTC will perform a comprehensive QA source inspection for the materials with higher risk of failures. For the lower tier materials, a combination of Contractor QC inspection reports and field QA verification will be utilized. This tier system and approach is similar to Caltrans METS tier priority system and QA practices. Materials that are required source inspection on this project are ground anchors, sub-horizontal ground anchors, and electrical components (poles, fasteners, cabinets, and APSs). ZTC will provide certified QA source inspectors, including AWS CWI steel inspectors, ASNT Level II non-destructive testing (NDT) structural steel inspectors, and other qualified source inspectors as needed. Additionally, the source inspection team will work closely with the construction management team and CITY to utilize effectively all of the available resources for QA source inspection, sampling, and testing. ZTC has an on-call contract with several out-of-state QA companies. ZTC will utilize certified local QA resources within the vicinity of out-of-state fabricators in order to maximize project resources for QA source inspection. ZTC will file all the source inspection records electronically and will provide a copy of the records to Construction. A final material certification in accordance with the project specifications and the approved SIQMP will be provided to FCG and CITY.

TASK H – COST AND SCHEDULE

- Review construction schedule submitted by the contractor. Review subsequent revised construction schedules due to delays, time extensions, change orders, additional work, etc., within one week of submittal.
- Prepare change orders within 48 hours in the standard City format as well as in accordance with all applicable Federal and State funding requirements.
- Maintain a current monthly accounting of construction costs to complete the project, including approved change orders for city's review and approval.
- Review payment requests in a timely manner, make payment recommendations, and submit the progress payment request to City for processing.
- Prepare reimbursement requests to Caltrans and Metro.

TASK I – CONTRACT CHANGE ORDERS AND CLAIMS

The FCG team will assist the City in controlling the costs of the Project and the factors that may escalate Project costs. Upon submittal, Contractor's change requests will be reviewed for merit. We will hold the Contractors to providing the facilities in the scope of work bid, without generating unnecessary changes to increase the Project cost. The FCG team's PM|RE will work with the City's Project Manager to establish levels of financial authority from the Project Manager up the chain of command to provide guidelines for change authorization. FCG will approve as agreed-upon by the City.

Cost Estimating: All change orders will be estimated independently of the Contractor's proposed cost prior to approval by our PM|RE, and submittal for approval to the City. We will comply with the Caltrans Construction Manual and Local Assistance Procedures Manual. The FCG team is comprised of highly qualified scheduling and claims avoidance experts that will analyze and produce schedules from the perspective of an owner and a Contractor. Our experts will ensure the Contractor is complying with the requirements. Our approach includes, but is not limited to, weekly analysis of schedules, Inspector's daily diaries, meeting minutes, and Project files to provide the City notice of any potential delays.

Claims Avoidance and Mitigation: The FCG team's renowned claims division and our claims experts have a proven track record with Caltrans and other public agencies on similar projects. We will monitor all site records of events, labor, materials and equipment for potential claims or delay issues. This data will be essential when analyzing a Contractor's claim. Our team will address every issue that will contain all relevant RFI's, change orders, correspondence, pictures, Inspector's dairies, cost analysis and schedule analysis. Our objective will be to minimize misunderstandings by providing clear and concise analysis of all major Project issues.

TASK J – SAFETY

Safety has the highest priority on any jobsite and the FCG team takes it very seriously. The contractors usually submit an Injury and Illness Prevention Program (IIPP) at the start of the project. This will be combined with City's Safety procedures and the Cal-OSHA Construction Safety Orders to be the Project Safety Program. This then serves as the basis for our evaluation of the contractor's safety practices. The inspectors will attend Contractor's safety meetings and the CM team will also hold its own safety meetings regularly. Safety is the job of everybody.

TASK K – PROJECT CLOSEOUT

The FCG team will provide the appropriate level of inspections to ensure all punch-list work is completed, safety issues are resolved, final acceptance of the contract is granted, and all necessary paperwork and reports are completed to the standards of the City. The FCG team will assist the City with completing all closeout forms per Chapter 17 of the Caltrans Local Assistance Procedures Manual, provide the City with hard and electronic copies of the project files, and all materials records after acceptance as follows:

- Coordinate a final walk-through, prepare punch list, certify completion of the Project and recommend acceptance.
- Transmit Record Drawings (As-Builts) from the engineer of record to the City.
- Finalize record drawings/As-Builts, contract bid items, claims, change orders and punch list items.
- Prepare all final reports, including report of completion for acceptance of the Project.
- Finalize and deliver all construction files to the City for archives.
- Provide electronic copy of all reports and construction files to City.
- Complete documentation required by Caltrans, LA Metro and the City.

Our Resident Engineer, Mr. Fakhouri, is a former Caltrans Resident Engineer, and worked on several Caltrans and Federally Funded Projects and will ensure full compliance to requirements to deliver this project.

As-Built Plans

The FCG team will maintain as-built plans on an on-going basis throughout the duration of the Project. Red-lined plans will show all changes made to the contract plans, will present name of change approver, and CCO number. We will also ensure Contractor is tracking as-builts, and at the end of the Project, our construction management team will combine information into one set of drawings.

Federal Review

The FCG team has participated in several federal reviews with Caltrans and the Local Assistance Office and presented the project documents impressively every time. The PM|RE is a former employee of Caltrans in Los Angeles and is very experienced with documentation of construction projects per the Local Assistance Procedures Manual. Mr. Fakhouri will ensure all project files are maintained per the LAPM in project folders and in electronic form. Mr. Fakhouri will represent the City throughout the entire project, from pre-construction, during construction and through post-construction.

TASK L – EQUIPMENT AND MATERIALS TO BE PROVIDED BY OFFEROR

The FCG team (Prime and Subs) will have the following equipment onsite at all times:

Inspectors:

- Trucks.
- Smart Phones.
- Laptop with Power Invertor.
- Tablet with Internet Connection.
- Small Printer.
- Smart Level, Tape Measure, Hand Level, Surveyor Ruler, and Marking Paint.
- All necessary PPE.

Soils Technician:

- Trucks.
- Smart Phones.
- Laptop with Power Invertor.
- Tablet with Internet Connection.
- Small Printer.
- All Testing apparatus and tools to perform all required testing per the Quality Assurance Plan and Construction Manual.

Surveyors:

- Trucks.
- Smart Phones.
- Laptop with Power Invertor.
- Tablet with Internet Connection.
- Small Printer.
- All survey tools to perform construction staking and layout per the plans and special provisions.

TASK M – MATERIALS TO BE FURNISHED BY THE CITY

The FCG team (Prime and Subs) shall receive the following items from the City:

- Copies of Project construction documents including plans, special provisions, reports, City's designers prepared resident engineer files, and contracts.
- Copies of previously secured permits and Project authorizations.

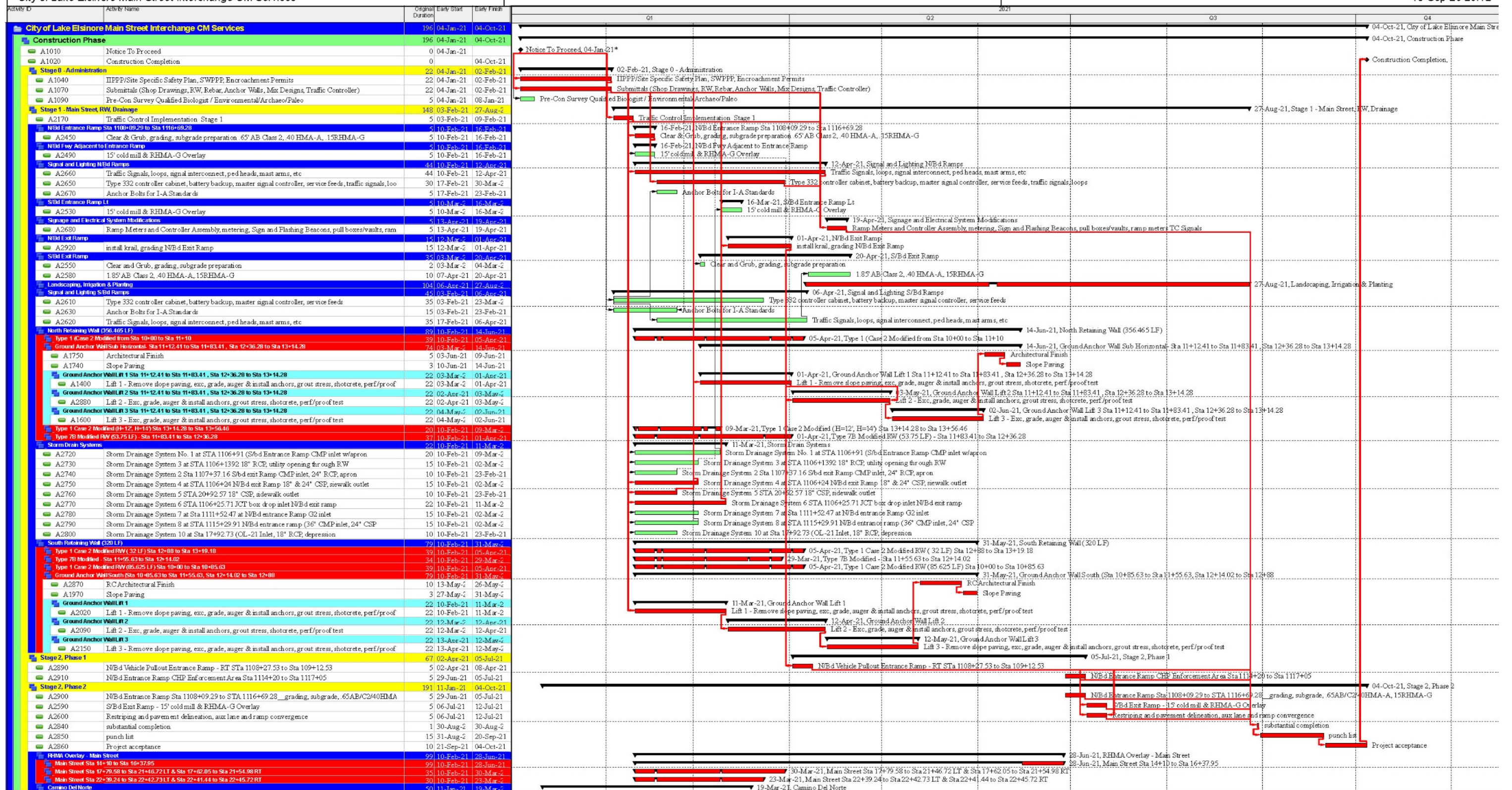
Fee Proposal

Our Fee Proposal has been submitted in a separate sealed envelope and includes all tasks required to perform the work with a maximum not-to-exceed fee for each task and a grand total not-to-exceed fee.

Exhibit 1: Proposed Project Schedule

City of Lake Elsinore Main Street Interchange CM Services

19-Sep-20 20:12



■ Actual Level of Effort ■ Remaining Work ◆ Milestone
■ Actual Work ■ Critical Remaining Work — summary

APPENDIX A

RESUMES



A.B. FAKHOURI, PE, QSP

Project Manager/Resident Engineer



EDUCATION

MS, Civil Engineering, California State University, Long Beach

BS, Civil Engineering, California State University, Long Beach

REGISTRATION|CERTIFICATION

- CA, Civil Engineer, No. C60844
- CA, QSP, No. 26605

Mr. Fakhouri is a Registered Professional Engineer licensed in the State of California, and a former Resident Engineer of Caltrans District 7, Los Angeles, CA. He has worked on various interchange projects of similar nature that included bridge demolition and widening, interchange widening, relocation of utilities, electrical, 55-hour closures, and more. As a Project Manager, duties included, but were not limited to, interfacing with clients, managing and training personnel, managing subconsultants, performing construction management, and construction inspection. As a Resident Engineer, duties included identifying problems and recommending solutions, ensuring compliance with safety requirements and contract provisions, preparing calculations, reports, and correspondence, reviewing submittals and RFI's, change orders, conducting meetings, coordination, overseeing inspection, ensuring compliance to safety, SWPPP and labor laws. **Mr. Fakhouri is knowledgeable in all Caltrans policies, procedures, and has the ability to satisfy the client with high-performance, high-quality staff at a moment's notice.**

RELEVANT EXPERIENCE

I-605/Live Oak Avenue Ramp Widening & Improvements Project – City of Irwindale, CA

Project Manager/Resident Engineer: Project consisted of a ramp widening and various improvements within Caltrans and City right-of-way. Work included traffic control, removals, concrete and asphalt paving, curb and gutter, ADA ramps, sidewalk, street lighting, traffic signals, Edison service connections, drainage, landscaping, and striping. Duties included construction management and inspection of various work items; overseeing field interviews and conducting field reviews of certified payroll; office engineering; conducting meetings; reviewing submittals and Requests for Information (RFIs), Construction Change Orders (CCOs), daily diaries and quantities, and daily photos; coordinating materials testing and lane closures; performing document control; and reviewing contractor as-builts. **Project Cost: \$2M. Project Duration: 11/2018 – 07/2019.**

Foster Road Side Panel Replacement Project –City of Norwalk, CA

Project Manager|Resident Engineer: Project consisted of various improvements including reconstruction of side panels, curb and gutter, ADA ramps, sidewalk, lighting, traffic signal, Edison service connections and drops, HMA pavement, traffic control, and striping. Duties included, but were not limited to, construction management and inspection of various items of work, office engineering, conducting meetings, review submittals and RFI's, CCO's, daily diaries and quantities, daily photos, coordinating materials testing, quality assurance, coordinating lane closures, filing documents, and as-builts. **Project Cost: \$1.8M. Duration: 02/2018 – 08/2018.**

AC Overlay on Gabbert Rd, Poindexter Avenue, Spring Road and Princeton Avenue - City of Moorpark, Moorpark, CA

Project Manager|Resident Engineer: Federally-funded project consisted of major roads grind and overlay asphalt paving, curb ramps, materials testing, surveying and electrical. Duties included, but were not limited to, construction management and inspection of various items of work, office engineering, conducting meetings, review submittals and RFI's, CCO's, daily diaries and quantities, daily photos, coordinating materials testing, quality assurance, coordinating lane closures, filing documents, and as-builts. **Project Cost: \$500K. Duration: 11/2017 – 02/2018.**

Beverly Boulevard Traffic Safety and Lighting Improvements Project - City of Whittier, CA

Project Manager|Resident Engineer: Federally-Funded project consisted of construction of raised median and PCC pavement. Duties included, but were not limited to, construction management and inspection of various items of work, office engineering, conducting meetings, review submittals and RFI's, CCO's, daily diaries and quantities, daily photos, coordinating materials testing, coordinating lane closures, filing documents, and as-builts. **Project Cost: \$2.2M. Duration: 11/2016 – 05/2017.**

Alondra Boulevard Roadway Improvements - City of Norwalk, Norwalk, CA

Project Manager|Resident Engineer: Federally-Funded project consisted of widening and rehabilitation of Alondra Boulevard from Pioneer to Shoemaker. Duties included, but were not limited to, inspection of traffic control, signage, drainage, electrical, traffic, sidewalks, curb and gutter, striping, SWPPP, and safety. Duties also included monitoring and construction of electrical work, temporary and permanent lighting, relocation and installation of permanent fiber optic lines, temporary and permanent ramp metering and signalization. **Project Cost: \$1.5M. Duration: 06/2015 – 12/2016.**



Firestone Boulevard Bridge Replacement Over San Gabriel River - Caltrans District 7, Norwalk|Downey, CA

Project Manager|Resident Engineer: Project consisted of construction of a pre-cast concrete bridge widening on Firestone Boulevard over the San Gabriel River. Duties included, but were not limited to, full construction engineering and management and inspection of traffic control, striping, bridge demolition, bridge construction, drainage, electrical, safety, and SWPPP. Duties also included office procedures, construction inspection and field verification, production daily diaries and photos, monitoring contractor progress and producing pay estimate quantities, performing safety inspections, SWPPP inspections, reviewing and preparing change orders, conducting employee interviews and responding to correspondence, reviewing RFI's and submittals, reviewing CPM Schedule updates, responding to claims, and filing project documents. **Project Cost: \$24M. Duration: 05/2014 – 03/2016.**

Jamboree Bridge Widening/SR-73, City of Newport Beach/Caltrans D12

Project Manager and Resident Engineer: Project consisted of construction of a pre-stressed concrete bridge widening on Jamboree Road Ave over SR-73 in Newport Beach, Tie-back Wall, Movable Barrier, new signalized intersections, utilities relocation and new construction, drainage and waterline construction, and relocation. The work included staff supervision, coordination with utility and maintaining the project budget. Work also included but not limited to advertizing and awarding a construction contract, full contract administration, field inspection, and review and approve submittals, RFI's and CCO's. This project included Public Relations issues in terms of maintaining access to all residents, business owners, and pedestrians. **Project Cost: \$3.5M. 3/2011 – 6/2012.**

Woollomes Ave Interchange Improvements, City of Delano

Project Manager and Resident Engineer: Project consisted of construction of a pre-stressed concrete bridge widening on Woollomes Ave over SR-99 in Delano, a new detour and a cul-de-sac, new signalized intersections, utilities relocation and new construction, drainage and sewer construction, and relocation. The work included staff supervision, coordination with utility and railroad companies and maintaining the project budget. Work also included but not limited to advertising and awarding a construction contract, full contract administration, field inspection, and review and approve submittals, RFI's and CCO's. **Project Cost: \$5M. Duration: 6/2012 – 3/2013.**

Ramona Ave Grade Separation over UPRR - City of Montclair, Montclair, CA

Project Manager|Resident Engineer: Project consisted of construction of a pre-stressed concrete bridge on Ramona Avenue over the Union Pacific Rail Road tracks, a new detour and a cul-de-sac, new signalized intersections, utilities relocation and new construction, drainage and sewer construction, and relocation. The work included staff supervision, coordination with utility and railroad companies and maintaining the project budget. Work also included advertising and awarding construction contract, full contract administration, field inspection, and review and approval of submittals, RFI's and CCO's. This project included a great deal of Public Relations issues in terms of maintaining access for all residents, business owners, and pedestrians. **Project Cost: \$3.5M. Duration: 06/2008 – 12/2009.**

I-15|El Cerrito Interchange - City of Corona, Corona, CA

Project Manager|Resident Engineer: The project includes widening to four lanes between the southbound off ramp and the northbound on ramp with Caltrans right of way. Responsible for the construction management and supervision of inspection for engineering services including contract administration, construction management and inspection services. Coordination with the City of Corona, Caltrans, designer, SCE, CHP, local Enforcement and Traffic Management Center for Caltrans, as well as the local water company. Work also included coordination of surveying and materials testing. **Project Cost: \$5M. Duration: 01/2005 – 12/2006.**

Del Amo Boulevard Bridge Overcrossing at I-405 - City of Carson, Carson, CA

Project Manager|Resident Engineer: The project included approximately 760-meters of new roadway and bridge improvements, varying between 26.1 and 31.9 meters wide. The new roadway spans the I-405, Dominguez Channel and Macco Channel to accommodate six travel lanes, a concrete median island, left turn lanes, curb and gutter, sidewalks, retaining wall, northbound weigh-station on ramp modification, drainage improvements, ACC and PC paving, drainage, railroad and utility relocation. Responsible for construction contract administration, preparing and checking designs, plans, specifications and estimates, inspecting and testing, collecting office and field data, and preparing reports with recommendations on a wide variety of civil engineering matters. The work entailed review of all submittals, CCO's, RFI's and change of scope. Also responsible for field inspection and office procedures. Assisted structures personnel with coordinating work, resolving issues and writing CCO's and correspondence. **Project Cost: \$38M. Duration: 02/2003 – 08/2003.**



RELEVANT EXPERIENCE

Project Manager/Resident Engineer: As a Project Manager and Resident Engineer, duties include, but are not limited to, ensuring all deliverables satisfy the acceptance tests and criteria set forth in provisions and specifications; supervising, training, and directing the field and office personnel; conducting interviews and assigning qualified personnel to complete work as required; maintaining project files for project control; organizing, facilitating, and attending meetings; implementing and maintaining quality control and quality assurance procedures to manage conflicts and issues; ensuring safety compliance; producing monthly invoices and reports in a timely manner; and ensuring accuracy and completion of invoices before billing clients. Mr. Fakhouri has extensive experience working with various clients especially Caltrans; as a Project Manager on various On-Call Construction Management and Inspection Contracts or as Resident Engineer on State or Federally Funded contracts on State Highways or City and County projects that utilize the Caltrans Local Assistance Procedures Manual, Caltrans Standard Plans and Specifications, Caltrans Construction Manual, and Green Book. Below is a list of projects Mr. Fakhouri has worked on as a Project Manager and or Resident Engineer for various clients:

Agency	Project	Role	Start/End Dates
Construction Management and Inspection			
City of Irwindale/Caltrans D7	Irwindale Park Improvements Project, Phase III	PM/RE	4/2020 – 7/2020
City of Burbank/Caltrans D7	Burbank Channel Bikeway Project	PM/RE	8/2019 – 7/2020
City of Irwindale/Caltrans D7	I-605/Live Oak Ave Ramp Widening – Federal Funds	PM/RE	11/2018 – 02/2020
City of Norwalk/Caltrans D7	Foster Road Side Panel Replacement – Federal Funds	PM/RE	12/2017 – 02/2019
City of Corona/County of Riverside	Storm Drain Line 52 Replacement Project – Local Funds	PM/RE	04/2016 – 06/2018
City of Moorpark/Caltrans D7	Various Locations of AC Overlay Project – Federal Funds	PM/RE	11/2017 – 02/2018
City of Whittier/Caltrans D7	Beverly Boulevard Traffic Safety Project – Federal Funds	PM/RE	10/2016 – 04/2017
City of Norwalk/Caltrans D7	Alondra Boulevard Street Improvements – Federal Funds	PM/RE	07/2015 – 05/2016
Norwalk/Downey/Caltrans D7	Firestone Blvd. Bridge Replacement – Federal Funds	PM/RE	05/2014 – 11/2015
City of Delano/Caltrans D6	SR-99/Woollomes Interchange Project – Federal Funds	PM/RE	06/2012 – 07/2013
Newport Beach/Caltrans D12	SR-73/Jamboree Bridge Widening – Federal Funds	PM/RE	03/2011 – 05/2012
Various Cities: Whittier, La Mirada, Culver City, Burbank, Glendale, & Moorpark.	On-Call CM/Inspection Contracts – State & Fed. Funds	PM/RE	01/2013 – Ongoing
Various Counties: Los Angeles, San Bernardino, Orange, & San Diego	4 On-Call CM/Inspection Contracts – State & Fed. Funds	PM/RE	01/2013 – Ongoing
Various Ports: SD, LA, & Long Beach	3 On-Call CM/Inspection Contracts– State & Fed. Funds	PM	01/2013 – Ongoing
Caltrans District 59 - Structures	3 On-Call CM/Inspection Contracts – State & Fed. Funds	PM	01/2013 – Ongoing
Caltrans District 7 – Los Angeles	3 On-Call CM/Inspection Contracts – State & Fed. Funds	PM/RE	01/2013 – Ongoing
Caltrans District 8 – SBD/Riverside	4 On-Call CM/Inspection Contracts – State & Fed. Funds	PM/RE	01/2013 – Ongoing
City of Delano	Woollomes Avenue Interchange–Federal Funds	PM/RE	05/2012 – 12/2015
City of Newport Beach	Jamboree Bridge Widening / SR-73 – Federal Funds	PM/RE	03/2011 – 05/2012



REGINA TALAMANTEZ, PE, QSD
Structures Representative



Education / Training

B.S., Civil Engineering, Cal Poly
State University, SLO

Registrations / Certifications

- CA, Civil Engineer No. 59264
- CDRS DRB Training Institute
- CDRS Approved Mediator
- CDRS Approved Arbitrator
- CDRS Approved DRB Specialist
- CDRS Approved Expert Witness
- CalOSHA 30 hr.
- Railroad Worker Safety
- Primavera Exped./Const. Mgr.
- Primavera Scheduling P6

Ms. Talamantez is a licensed civil engineer in the state of California with over 29 years of experience in construction management managing high-profile heavy civil construction projects in transportation and public works. Of her 29 years, she has over 10 years working directly on highway bridge, freeway projects and public works projects for local CIP programs and over 18 years managing railroad at-grade crossing improvements, transit, railroad underpass, bridge overcrossing and trench grade separation projects. Most recently she has served as Utility Manager on Design Build Projects and has supported design firms with utility coordination and constructability reviews in the PAED and PS&E phases. Her diversity serves well for managing utility owners and third-party coordination. As a Structures Representative, duties included reviewing submittals; RFI's; shop drawings; and design calculations, ensuring compliance with safety requirements and contract provisions, preparing calculations, producing reports, and correspondence, assisting the Resident Engineer with negotiating and drafting change orders, conducting meetings, coordination, overseeing structures inspection work, and ensuring compliance to safety. **Ms. Talamantez is knowledgeable in all Caltrans policies, procedures, and has the ability to satisfy the client with high-performance, high-quality staff at a moment's notice.**

RELEVANT EXPERIENCE

ACE Construction Authority Construction Management services for Fairway Drive Grade Separation & Lemon SR-60 On/Off Ramp Projects - Industry & Diamond Bar, CA

Resident Engineer/Structures Rep: Regina was responsible for providing construction management services as Resident Engineer which includes, management of CM staff, management of contract administration and construction of UPRR grade separation underpass project and installation of new SR-60 On/Off Ramps on Lemon Avenue. Responsibilities include reviewing the baseline schedule, review monthly schedule updates, analyze change orders and conduct time impact analyses, provide support services in claims avoidance and mitigations. **Project Cost: \$90M.**

ACE Construction Authority Brea Canyon Road Grade Separation (\$67.4M) (UPRR/Metrolink/Amtrak), Cities of Industry & Diamond Bar, LA County

Resident Engineer/Structures Rep: This project generally consisted of construction of an underpass grade separation at the UPRR crossing at Brea Canyon Road. The major components of this work encompassed, a railroad (UPRR) bridge, retaining walls, pedestrian ramp structures, roadway improvements on Brea Canyon Road, Washington Street and Currier Road, a Metrolink access road, Industry Metrolink Station platform reconstruction and pedestrian ramps under live active mainlines and shoofly tracks, utility relocations, a pump station, landscaping and irrigation, drainage & sewer, and signalization & street lighting. The project also included a relocation of an MWD 36" O.C. Mainline feeder in Brea Canyon Road. Coordination with LACSD, LACDPW/LACFCD, RWD, WVWD, SCG, SCE, Time Warner & MCI/Verizon Wireless, both the City of Industry and City of Diamond Bar.. **Project Cost: \$68M.**

ACE Construction Authority Nogales Street Grade Separation Project (\$49.7M) (UPRR, Metrolink, Amtrak), Cities of Industry & West Covina, LA County, CA

Resident Engineer/Structures Rep: Regina was responsible for program management support and construction management support. She was instrumental in assembling the General Conditions for the agency and the technical specifications for the project. this grade separation consisted of: construction of two bridges - a railroad underpass at Nogales Street grade crossing & a bridge overcrossing for Valley Blvd.; grading and drainage construction; installation of sub-ballast for a single shoofly track; installation of steel pipe casings for utilities that cross the UPRR track; retaining walls and pedestrian stairwell; depressing of Nogales Street; a Loop Connector road; utility relocations; a pump station; detour roads; landscaping and irrigation; drainage and sewer; signalization and lighting for new intersections. Coordination and relocations of main waterlines for RWD & WVWD, jack and bore operations, fiber optic relocations through direction bore methods, increased storm drain capacity and constructed new drainage system, temporary bypass systems & pump station. **Project Cost: \$50M.**



CARY BROBECK

Lead Construction Inspector



EDUCATION

AA Construction Management, Citrus College, CA

CERTIFICATION

California Test Method: 125, 533, 539, 540, 541, and 557; ACI Grade I Certification No. 01188683

Mr. Brobeck has over 25 years of experience working for contractors and engineering firms to include roadways, highways, freeways, and bridges. He has worked as a construction inspector and superintendent for large construction companies specializing in various fields, including, but not limited to, highway widening and improvements, bridge widening and reconstruction as an iron worker and inspector. He has extensive experience in construction and inspection of steel and concrete structures varying from soil nail walls, retaining walls, CIDH piles, shoring, pile driving, structural components, and reinforcement. Mr. Brobeck is ACE and CT certified to sample fresh concrete and other materials. In addition, Mr. Brobeck has experience with inspection of roadway work including JPCP and HMA paving, drainage, earthwork, striping, traffic control, SWPPP, electrical, landscape, and safety.

RELEVANT EXPERIENCE

San Fernando Road Rehabilitation and Improvements Project, City of Glendale, CA

Construction Inspector: Project consisted of demolition and reconstruction of a precast concrete girder bridge over the San Gabriel River. Duties included but were not limited to, inspection of bridge and roadway, drainage, electrical, traffic, sidewalks, curb and gutter, striping, SWPPP, and safety. Duties also included monitoring and construction of electrical work, temporary and permanent lighting, relocation and installation of permanent fiber optic lines, temporary and permanent ramp metering and signalization. **Project Cost: \$8M.**

Foster Road Side Panel Improvements Project, City of Norwalk, CA

Construction Inspector: The Foster Road Side Panel Project will provide a safe walking and bike route to school as well as enhance safety along this corridor between Studebaker Road and Pioneer Boulevard in the city of Norwalk. Duties included but not limited to inspection of traffic control, striping, concrete removal and paving, slab replacement, shoulder backing, shoulder paving, drainage, clean-outs, safety, and SWPPP. **Project Cost: \$3.0M.**

Firestone Blvd. Bridge Replacement Over San Gabriel River, Caltrans D7, Cities of Norwalk/Downey, CA

Construction Inspector: Project consisted of demolition and reconstruction of a precast concrete girder bridge over the San Gabriel River. Duties included but were not limited to, inspection of bridge and roadway, drainage, electrical, traffic, sidewalks, curb and gutter, striping, SWPPP, and safety. Duties also included monitoring and construction of electrical work, temporary and permanent lighting, relocation and installation of permanent fiber optic lines, temporary and permanent ramp metering and signalization. **Project Cost: \$8M.**

Douglas GAP Grade Separation Project, City of El Segundo, CA

Construction Inspector: Project consisted of demolition and construction of a UPRR grade separation bridge, construction of new retaining walls, soil nail walls, and major roadway and utility improvements. Duties included inspection of structural demo, excavation, pile driving and installation, rebar placement, structural and minor concrete construction, utility relocation and construction, flatwork, electrical, landscape, SWPPP, and safety. **Project Cost: \$115M.**

Ramona Ave Grade Separation, SANBAG/City of Montclair, CA

Construction Inspector: project consisted of construction of a pre-stressed concrete bridge on Ramona Avenue over the Union Pacific Rail Road tracks, a new detour, new signalized intersections, utilities relocation and new construction, drainage and sewer construction, and relocation. Work included new bridge structures, retaining structures, MSE Walls, drainage structures PCC and HMA paving, street widening, metal beach guardrail, dry and wet utilities, curb and gutter, median reconstruction, traffic control, SWPPP, slope paving, irrigation, utilities, gas lines, water lines, sewer lines, electrical lines, electrical, and landscape. **Project Cost: \$9M.**

Various Capital Improvement Project, City of Fontana, CA

Construction Inspector: Various CIP projects including street rehabilitation and widening, water lines, sewer lines, parking lots, city parks, and more. Duties included, but were not limited to, inspection of bridge and roadway, drainage, electrical, traffic, sidewalks, curb and gutter, striping, SWPPP, and safety. Duties also included monitoring and construction of electrical work, temporary and permanent lighting, relocation and installation of permanent fiber optic lines, temporary and permanent ramp metering and signalization. **Project Cost: \$Various.**



ANTHONY MOUSSA

Electrical / Construction Inspector



EDUCATION

B.S. Electrical Engineering

REGISTRATION

Engineer in Training in progress

Mr. Moussa has more than 8 years of construction inspection. His construction experience includes inspection of traffic control, signage, striping, concrete/ADL removals, roadway excavation, trenching, storm drains, sewer lines, minor concrete, LCB, JPCP, HMA, and landscaping. Duties included construction inspection and Quality Control, producing daily reports and quantities calculations, producing progress photos, review and monitor schedule of work, ensure compliance with plans and specifications and certificates, review shop drawings, review and monitor change order work, assist with reviewing submittals and RFI's, attending meetings, filing documents in project records, ensure safety, reviewing as-builts, and preparing punch list.

RELEVANT EXPERIENCE

I-605/Live Oak Avenue Ramp Widening & Improvements Project – City of Irwindale, CA

Electrical / Construction Inspector: Project consisted of a ramp widening and various improvements within Caltrans and City right-of-way. Work included traffic control, removals, concrete and asphalt paving, curb and gutter, ADA ramps, sidewalk, street lighting, traffic signals, service connections, loops, controllers, video detection, ramp metering, drainage, , and striping. Duties included inspection of various items of work, office engineering, conducting meetings, reviewing submittals and RFIs, CCOs, daily diaries and quantities, daily photos, coordinating materials testing and lane closures, filing documents, and as-builts. **Project Cost: \$2M.**

Foster Road Side Panel Improvements Project, City of Norwalk, CA

Construction /Electrical Inspector: The Foster Road Side Panel Project will provide a safe walking and bike route to school as well as enhance safety along this corridor between Studebaker Road and Pioneer Boulevard in the city of Norwalk. Duties included but not limited to inspection of traffic control, striping, concrete traffic signals, loops, street lighting, median lighting, up-lights for trees, AC pavement, ADA ramps, sidewalks, driveways, landscape, hardscape, drainage, safety, and SWPPP. **Project Cost: \$3.0M.**

SR-210 and SR-110 Electrical Upgrades , (Caltrans District 7, Los Angeles, CA)

Electrical / Construction Inspector: Projects consisted of performing electrical upgrade as part of the rehabilitation work on both projects such as but not limited to ramp metering, temporary lighting, tunnel lighting, substation, sign lighting, light poles, pull boxes, conduit, CCTV, fiber optics, up-lighting for monuments and trees, and wiring. Duties included but not limited to monitoring and inspection of electrical work including temporary and permanent lighting, fiber optic lines, ramp metering and signalization, electrical conduits, pull boxes, conductors, concrete foundations, safety, and traffic control. **Project Cost: \$35M.**

Beverly Blvd. Traffic Safety and Lighting Improvements Project, City of Whittier, CA

Electrical / Construction Inspector Project consisted of improvements including raised median, paving, flatwork, landscape, irrigation, drainage, water and sewer lines, and more. Duties included but not limited to inspection of traffic control, signage, raised median, PCC pavement, Flatwork, pedestrian crossing, traffic signals, loops, street lighting, median lighting, video detection, bus shelters, relocate utilities, striping, Safety, and ensuring SWPPP compliance. Duties also included assisting the RE with office work and coordination in the field per Caltrans and Green Book Standards. **Project Cost: \$ 2.5M.**

Alondra Blvd. Roadway Improvements Project, City of Norwalk, CA

Electrical / Construction Inspector Project consisted of rehabilitation of Beverly Blvd. from Pioneer to Shoemaker; Work consisted of roadway excavation, HMA pavement, ADA ramps, sidewalk, curb and gutter, traffic signals, median lighting, loops, striping, and SWPPP. Duties included field inspection of construction work, coordinating with materials testing lab and field techs, producing daily dairies, producing monthly quantities, and coordination in the field per Caltrans and Green Book Standards. **Project Cost: \$ 3.5M.**

Firestone Boulevard Bridge Over the San Gabriel River Replacement Project, Cities of Norwalk, CA

Electrical / Construction Inspector Project consisted of demolition of existing concrete girder box bridge and replacement with pre-cast girder box, drainage, paving, utilities, traffic signals, median lighting and electrical, loops, landscape, and hardscape. Duties included but not limited to monitoring and inspection of street rehabilitation to grind and overlay with rubberized asphalt, PCC paving, striping and loop replacement, landscape, and electrical work. **Project Cost: \$ 12M.**



ABEL MORENO

Office Engineer



EDUCATION

BS, Civil Engineering, CSULB

CERTIFICATION

FEMA University Project
Specialty, 2008

Mr. Moreno has more than 5 years of experience in environmental engineering, mainly in soil and groundwater investigation and remediation projects and has worked the last year in public works CIP for the City of South Gate. Currently he is working in the construction industry as office engineer managing all project documents and provides strength of conformity with document and document controls policy and procedures in Caltrans LAPM and Construction Manual. His experience also includes labor compliance, document control, contract administration and meeting minutes.

RELEVANT EXPERIENCE

SANDAG Poinsettia Train Station, Carlsbad, CA

Office Engineer: This project includes renovation of the existing station with modifications to passenger platforms, installation of fencing, replacement of existing at grade rail crossings, grade separation and new railroad tracks. The platform will be raised and lengthened to accommodate longer trains and include stairways and ramp on both sides of the tracks to ADA conformance. The station will have new shelters, signage and updated lighting. His responsibilities include: management of document control, material records, test results, diaries, photo logs, RFIs Change orders, coordination of meetings and collaboration with NCTD, SANDAG, Caltrans, FHWA. **Project Cost: \$22M.**

SANDAG Encinitas Coastal Rail Trail Improvement Project, Solana Beach, CA

Office Engineer: This project includes an extension of the Coastal Rail Trail which includes the installation of new bikeway and pedestrian trail in the city of Encinitas. The Coastal Rail Trail is a 44-mile system of planned bike facilities between the cities of Oceanside and San Diego. The restoration is on 10-miles of this trail. Abel was responsible for the setup and management of the recordkeeping system and daily contract administration. His responsibilities include: management of document control, material records, test results, diaries, photo logs, RFIs Change orders, coordination of meetings and collaboration with NCTD, SANDAG, Caltrans, FHWA. **Project Cost: \$4.5M.**

AC Overlay on Various Streets - City of Moorpark and Caltrans District 7, Moorpark, CA

Office Engineer: This **Federally-Funded** project consisted of major roads grind and overlay asphalt paving, curb ramps, materials testing, surveying and electrical. Duties included, but were not limited to, preparing and maintaining project files; performing document control; creating and updating correspondence logs; preparing and updating submittal logs; maintaining submittals logs, RFI logs, CCO logs, and testing logs; preparing progress reports; assisting the Resident Engineer with reviewing CCO and pay estimate requests; collecting inspector reports and quantities; and verifying the contractor's certified payroll. **Project Cost: \$500K..**

Firestone Blvd Bridge Widening over Los Angeles River, South Gate, CA

Office Engineer/Labor Compliance: Mr. Moreno serves as an office engineer on the City of South Gate's Firestone Blvd Bridge over the Los Angeles River. The project includes traffic control in phased construction, bridge widening, pile foundation, roadway widening, asphalt concrete, PCC, SWPPP, landscape, irrigation, traffic signal modifications, traffic striping and sidewalk. Mr. Moreno's duties include document control, coordination, meeting minutes, contract administration, and labor compliance interviews. **Project Cost: \$8M.**

City of Highland/Redlands Corridor Bike Route Project - PS&E

Utility Coordinator: Mr. Moreno serves as a utility coordinator for the Highland Redlands Corridor (bike) project. This project provides connectivity between Highland and Redlands across the Santa Ana River. Abel is conducting utility research, conduct field walk downs, and will be establishing a utility matrix of the utilities within the project limits. He is working close with AT&T, SCG, SCE, Charter, Time Warner for possible protect-in-place or necessary relocations for improvements. **Project Cost: \$2M.**



JUAN HERNANDEZ

Senior Biologist / Regulatory Specialist



EDUCATION

B.A., Biology, California State University, Humboldt

REGISTRATION

CDFW Environmental Scientist
Regulatory Specialist

Mr. Hernandez has more than 26 years of experience in biology, regulatory permitting, environmental review, project management, and five years in business administration. Mr. Hernandez worked for the California Department of Fish and Wildlife as a marine biologist and environmental scientist and several private environmental consulting firms before establishing Hernandez Environmental Services in early 2014. He has managed a broad spectrum of development and mine reclamation projects assisting clients in obtaining necessary environmental and regulatory compliance approvals from city, county, state, and federal agencies. As an employee with the California Department of Fish and Game, Mr. Hernandez was responsible for administering and implementing the Streambed Alteration Agreement Program for western San Bernardino and Riverside counties. He was in charge of issuing 1602 permits for projects that would have substantial impacts on State riparian resources. Mr. Hernandez gained valuable experience as a wetland delineator, and developed a unique understanding of the regulatory permitting process. Mr. Hernandez manages projects through the planning and regulatory permitting process. Mr. Hernandez performs biological assessments, jurisdictional delineations, compliance with the Western Riverside County Multiple Species Habitat Conservation Plan, managed sub consultants in air quality, traffic, noise, geotechnical, and cultural studies, and secured new contracts.

RELEVANT EXPERIENCE

Brown Field Airport Runway Rehabilitation Project, Burrowing Owl Surveys, Biological Monitoring, and Regulatory Compliance, San Diego, CA

The Brown Field Airport Runway Rehabilitation Project consisted of the rehabilitation of the westernmost and easternmost portions of Runway 8L/26R. HES conducted 30-Day, 3-Day, and 24-Hour Surveillance Surveys for burrowing owl prior to the commencement of construction activities. HES also coordinated with CDFW and City staff on biological construction monitoring requirements. HES attended pre-construction meetings, advised City staff and construction personnel on the presence of biological resources within the project areas, and prepared Pre-construction Monitoring and Monitoring Reports for the project. **Project Cost: \$6 Million.**

Rose Canyon Truck Sewer Joint Repair Project, Biological Resources Study; Jurisdictional Delineation; Regulatory Strategy, San Diego, CA

The Rose Canyon Trunk Sewer Joint Repair Project proposes to repair approximately 4.5 miles of the 4.7-mile long trunk sewer. HES prepared a Biological Resources Study and Jurisdictional/Wetland Delineation for the Rose Canyon Trunk Sewer Joint Repair Project. Advised City of San Diego Public Works Department staff on the potential requirements for the USACE Section 404 Permit, CDFW Section 1602 Streambed Alteration Agreement, and RWQCB Section 401 Water Quality Certification permitting process. **Project Cost: \$10 Million.**

Sewer Group Job 787 Emergency Point Repair Project, Biological Monitoring and Nesting Bird Surveys, San Diego, CA

The Sewer Group Job 787 consisted of the emergency replacement of a broken pipeline encasement located within an unnamed drainage. HES conducted Biological Monitoring and Nesting Bird Surveys for the Sewer Group 787 Emergency Point Repair Project. HES also attended pre-construction meetings, advised City staff and construction personnel on the presence of biological resources within the project area and requirements of the MMRP, and prepared Pre-construction Monitoring and Final Monitoring Reports for the Project. **Project Cost: \$2 Million.**

Sewer and Water Group Job 694, Biological Monitoring and Nesting Bird Surveys San Diego, CA

Sewer and Water Group Job 694 consisted of the replacement of several sections of existing sewer mains; installation of new sewer main; rehabilitation of existing sewer main; and installation of curb ramps, pavement resurfacing, and all other incidental work and appurtenances. HES conducted Biological Monitoring and Nesting Bird Surveys for the Sewer and Water Group Job 694 in compliance with the MMRP prepared for the Project. **Project Cost: \$2 Million.**



CONSULTANTS

JOSEFA SALINAS

Public Outreach Specialist



EDUCATION

BA, Political Science &
Psychology, University of
Michigan

CERTIFICATION

President of the LA Public
Library Commission
U.S. President's Volunteer
Service Award

Josefa Salinas has worked in the community and public relations industry for over 24 years and has held several highly visible, responsible positions in the community, government and media relations in Los Angeles County. As an expert in media relations and strategic planning, she leads client projects in strategic communications, marketing, government relations, media outreach and civic engagement. Josefa is skilled in “big-picture” outreach strategy as well as on-the-ground implementation. She is creative, innovative, and goal-oriented, and she makes client satisfaction her priority. She currently serves as the President of the LA Public Library Commission and has strong relationships with LA City Council districts and public officials from local to congressional members on both the national and state levels. Josefa currently serves the Los Angeles community as the Community Affairs Director at HOT 92.3 radio station and previously served as Power 106 Community Outreach Consultant and On Air Personality. Josefa is a graduate of the non-partisan, non-profit HOPE Leadership Institute, serves on many boards and councils, founder of a non-profit organization and is considered to be a true leader in the community.

RELEVANT EXPERIENCE

LACMTA - Universal City Pedestrian Overcrossing, Universal City, CA

Public Outreach: Josefa provided public outreach services as a Construction Liaison Representative for the LACMTA Universal City Pedestrian Bridge Overcrossing Design Build Project at the entrance to Universal Studios. Duties included, but were not limited to: Creating messaging and marketing materials to LA Metro and Griffith Company for distribution to the project, community and agency stakeholders. Josefa has coordinated and communication at city council and community neighborhood council meetings to proactively inform the community of the project elements, schedule, phasing, mitigations to minimize impacting the environment. Participated in contractor weekly meetings and with Metro Media staff.

Project Cost: \$25M.

City of Indio Andrew Jackson Safety Improvement Project (SRTS), Indio, CA

Community Affairs Director/Public Outreach: Josefa is our Community Affairs Director and provides public outreach and community meeting developments for this project. She is currently preparing the community outreach meetings, documentation, distributions and response to comments during the PAED/PS&E phases of the project. She will be coordinating events, community meetings and managing our public outreach staff, notifying all stakeholders, property owners through distributions, phone calls, emails and person to person communications in both English and in Spanish.

Project Cost: \$20M.



FARZAD TASBIHGOO, PhD, PE, CQA, CWI, PCI III (SMR)

Public Relations & Community Affairs Director



EDUCATION

PhD, Civil Engineering
M.S., Structural Engineering
B.S., Civil Engineering

CERTIFICATION

Licensed Professional Engineer
(Civil) California # C71403
AWS CWI #11081291
ACI #1226819
ASQ CQA #67819
PCI III #14342
SDSW Evaluator ID 64449

Farzad is a registered civil engineer with the State of California, Certified Weld Inspector (CWI), and Certified Quality Auditor (CQA) with American Society for Quality (ASQ) with about 19 years of work experience in design, structure construction, and QC/QA on public transportation projects. He has a strong engineering design background with extensive experience in verification inspection, surveillance audits, and quality assurance services. He has assisted numerous local agencies in the design and construction of their public projects. He has developed and implemented QMP, SIQMP, and construction QC/QA specifications on numerous projects. Farzad has a well-earned reputation for his knowledge of Caltrans Standard Specifications and Greenbook specifications within Caltrans METS, District, and Structure Construction. He has extensive working knowledge of welding codes (AWS), weld inspection, and steel fabrication with railroad code (AREMA). He assisted Caltrans steel committee in implementing Electroslag Welding (ESW) requirements in one of the first Caltrans projects utilizing ESW in District 8.

RELEVANT EXPERIENCE

Sierra Highway Pedestrian Bridge Project, City Santa Clarita, CA

Senior Quality Engineer: This project was construction of a steel pedestrian bridge over Sierra Highway, including the associated approach ramps. Farzad was the project Quality Material Engineer supporting City in the development and implementation of Source Inspection Quality Management Plan. He assisted City in the steel bridge quality verification in the fabrication and field erection stages. He assisted City in reviewing of numerous submittals, RFIs, and CCOs. He supported the project PM in preparing, negotiating, and closing various CCOs regarding structural steel fabrication. **Project Cost: \$3M.**

Monte Vista Grade Separation Project, San Bernardino County Transportation Authority, CA

Senior Quality Engineer: The project construction was to replace the at-grade Monte Vista Avenue and UPRR railroad tracks with an overpass in City of Montclair, CA. Farzad was project SMR who managed QA inspection for about 54,000 SF of MSE precast panels (about 2,200 precast panels) and 27 precast prestressed post-tension bulb tee I girders. He reviewed fabrication submittals, such as PCQCPs, Shop Drawings, and Concrete Mix Designs. He held prefabrication meetings and coordinated inspection of precast items. He worked closely with the QA Inspector to address all of the issues and challenges that arose during the fabrication. **Project Cost: \$10M.**

North At Water Non-Motorized Multimodal Bridge Project, City of Los Angeles, CA

Senior Quality Engineer: This project was construction of a cable-stayed steel bridge spanning over LA River supported on single pier for pedestrian/cyclists, and equestrians. Farzad provided steel fabrication support. He reviewed all of steel fabrication submittals such as shop drawings, welding quality control plan, and distortion plan. He developed the QC/QA inspection testing frequencies and specified NDT methods for welding verification. He reviewed welding reports, materials test results, NDT reports, and addressed numerous RFIs regarding the steel fabrication. He worked closely with the Designer, CM, City, and Fabricator QCM to resolve welding and fabrication challenges. **Project Cost: \$10M.**

I-10 & Jefferson Street Interchange Project, County of Riverside Transportation Authority, CA

Senior Quality Engineer: Project construction consisted of demolishing the existing bridge and northbound Indio Boulevard overcrossing and was replaced with a six-lane bridge. The bridge was complete with bicycle lanes on each side and sidewalks on northbound side of Jefferson Street at I-10. Farzad was the project SMR and supported the CM Team. He prepared the project SIQMP for Caltrans Oversight SMR, reviewed fabricators precast quality control plans for MSE walls, performed material engineering and quality assessment of fabrication. Coordinated and managed source fabrication items such as welded hoops, epoxy coated bars, MSE precast panels, overhead sign structures, light poles, electrical components, and more. **Project Cost: \$56M.**



TAMER KHALIL

Material Technician



CERTIFICATION

ICC, ACI, CTS, CSLB

Mr. Khalil has over 15 years of experience as a Material Technician with experience in the field and in the laboratory. He is an ICC Grading Special Inspector, ICC Reinforced Concrete Special Inspector, ACI, Caltrans Certified. Mr. Khalil has also provided continuous soils observations and testing for various transportation, residential, commercial, and industrial projects. His duties include, but are not limited to density testing of pad subgrade and trench backfill, verifying relative compaction of soil and asphalt, verifying moisture condition of soil, verifying that the soil being used is suitable for its intended purpose and ensuring materials being used are per the latest plans and specifications.

RELEVANT EXPERIENCE

Garretson Emergency Generator Pad Project City Of Corona, CA

Material Technician: includes geotechnical, special inspection, and material laboratory testing. The geotechnical work includes part time field observation and density testing of pad subgrade and trench backfill. The special inspection and material testing, includes concrete, welding, and anchor bolts for establishing a Pad for an emergency generator at the Garretson blend station. **Project Cost: \$600K.**

CDBG CIP Project No. Z10063, City of Lake Elsinore, CA

Material Technician: This project is funded via CDBG grant. This Project includes the construction of ADA Compliant PCC sidewalk, Curb & Gutter, Cross Gutter, Driveway and Curb Ramps, Slurry Seal and Grinding and Resurfacing. Appurtenant and other related work includes adjusting manhole to grade, minor grading of the back of sidewalk and some complete R&R sections. our scope included grading observation and testing, sampling of soils, base, Concrete, AC and slurry. **Project Cost: \$700K.**

Line 52 Storm Drain, City of Corona, CA

Material Technician: Field observation and testing, Managing Scheduling, attending pre-construction and progress meetings and providing onsite geotechnical Support during the construction of 36-96-inch RCP Storm Drain. The project consisted of the installation of Riverside County Flood Control Line 52 Located on Joy St. from the Temescal Channel to 3rd And Grand St in the City of Corona. With Approximately 3000LF of Storm drain ranging from 36-96-inch RCP, the project also Side walk, Curb & Cutter and AC paving. **Project Cost: \$7M.**

3rd Street Storm drain project, City Of lake Elsinore, CA

Material Technician: The project is part of a master drainage facility that will provide flood protection to the "existing Third Street channel watershed and adjacent properties". It will convey storm water and urban runoff from a flood control basin at the east end of Welch Avenue through 96" reinforced concrete pipe (RCP) that leads west to Conard Ave., southeast along Conard to 3rd Street and southwest along 3rd Street to a reinforced concrete box (RCB) under Collier Avenue after crossing west under the I-15 freeway, a total distance of 0.85 miles or 4,488 feet. However, the current extent of the project is from the lateral connection at Cambern Ave. west to 3rd Street and Collier. **Project Cost: \$4M.**

Camino Del Norte Street Improvement, City Of Lake Elsinore, CA

Material Technician: The project scope is the development of roughly 5,000 LF of new improvement on Camino Del Norte and extending to Canyon Estates Drive to the East roughly 550 LF and Franklin Street to the South of roughly 650 LF and roughly 200 LF on Canyon View Drive and approximately 100 LF onto Sagecrest Drive. Improvement entails the installation of a two-way road, fully equipped with Storm Drains curb and gutter, sidewalks and street Asphalt pavement section. The grading involved in this project is very intense, with fills up to 34 vertical feet. With 16 Storm drain crossings, ranging from 18" to 42" RCP along with the headwalls at the inlets and outlets and installation of riprap systems. **Project Cost: \$5M.**

APPENDIX A

DBE CERTIFICATION

[Skip to Main Content](#)[Back To Query Form](#)

Search Returned 1 Records

Thu Sep 17 12:58:08 PDT 2020

Query Criteria

Certification Types: DBE

Firm ID: 46140

Firm ID	46140
DBA Name	FCG CONSULTANTS INC.
Firm Name	
Address Line1	22885 SAVI RANCH PARKWAY
Address Line2	SUITE G
City	YORBA LINDA
State	CA
Zip Code1	92887
Zip Code2	4659
Mailing Address Line1	
Mailing Address Line2	
Mailing City	
Mailing State	
Mailing Zip Code1	
Mailing Zip Code2	
Certification Type	DBE
EMAIL	maha.fakhouri@fcgconsultants.com
Contact Name	MAHA ALFAKOURI
Area Code	714
Phone Number	312-0317
Extension	
Alt Area Code	714
Alt Phone Number	883-8068
Extension	
Fax Area Code	714
Fax Phone Number	312-0793
Agency Name	DEPARTMENT OF TRANSPORTATION
Counties	19; 30; 33; 36; 37; 56;
Districts	07; 08; 11; 12;
DBE NAICS	541611;
ACDBE NAICS	
Work Codes	C8700 CONSULTANT, NON ENGINEERING;
Licenses	
Trucks	
Gender	F
Ethnicity	CAUCASIAN
Firm Type	DBE

[Skip to Main Content](#)[Back To Query Form](#)

Search Returned 1 Records

Thu Sep 17 12:55:59 PDT 2020

Query Criteria

Certification Types: DBE**Firm Name:** rt engineering & associates, inc

Firm ID	40430
DBA Name	RT ENGINEERING & ASSOCIATES, INC.
Firm Name	RT ENGINEERING & ASSOCIATES, INC.
Address Line1	1901 1ST AVENUE, SUITE 217G
Address Line2	
City	SAN DIEGO
State	CA
Zip Code1	92101
Zip Code2	
Mailing Address Line1	1901 1ST AVENUE, SUITE 217G
Mailing Address Line2	
Mailing City	SAN DIEGO
Mailing State	CA
Mailing Zip Code1	92101
Mailing Zip Code2	
Certification Type	DBE
Email	reginaT@rtengineering.net
Contact Name	REGINA MICHELE STEVENS
Area Code	909
Phone Number	855-1807
Extension	
Alt Area Code	
Alt Phone Number	
Extension	
Fax Area Code	909
Fax Phone Number	763-3194
Agency Name	LOS ANGELES COUNTY METRO TRANSPORTATION AUTHORITY (MTA)
Counties	19; 30; 33; 36; 37; 40;
Districts	05; 07; 08; 11; 12;
DBE NAICS	541330; 541618; 541620;
ACDBE NAICS	
Work Codes	C8710 ENGINEERING; C8715 CONSULTANT, ENGINEERING; C8713 CONSULTANT, ENVIRONMENTAL; C8714 CONSULTANT, PROJECT MANAGEMENT/ BUSINESS ADMIN;
Licenses	EC Civil Engineer;
Trucks	
Gender	F
Ethnicity	HISPANIC
Firm Type	DBE



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Freeways
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Water Lines
Sewer Lines
Wastewater
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Fiber Optics
Landscape
Hardscape
Striping
SWPPP*

*Capital Improvements
Public Works
Transportation
Design-Build
CMGC
Ports
Airports
School Districts*



22885 Savi Ranch Parkway, Suite G
Yorba Linda, California 92887
Tele | 714.312.0317
Fax | 714.312.0793
www.fcgconsultants.com

FCG Consultants Inc. - DBE			City of Lake Elsinore	
Construction Management & Inspection Services				
Revised Cost Proposal - October 6, 2020			CM & Inspection for Main St. Interchange Improvement Project	
Classification	Hours	Hourly Rate	Cost	
Pre-construction Phase (5 Working Days)				
Resident Engineer - FCG	80	\$	187.05	\$ 14,964.38
Structures Representative - RTEA	40	\$	168.53	\$ 6,741.00
Public Outreach Officer - RTEA	40	\$	89.88	\$ 3,595.20
Office Engineer - RTEA	20	\$	80.89	\$ 1,617.84
Subtotal (FCG Only)	180		\$	14,964.38
Construction Phase (10 Months)				
Resident Engineer - FCG	600	\$	187.05	\$ 112,232.84
Construction Inspector - FCG	1720	\$	124.70	\$ 214,489.42
Electrical Inspector - FCG	160	\$	124.70	\$ 19,952.50
Structures Representative - RTEA	240	\$	168.53	\$ 40,446.00
Public Outreach Officer - RTEA	200	\$	89.88	\$ 17,976.00
Office Engineer - RTEA	860	\$	80.89	\$ 69,567.12
Field Inspector - Geo-Mat	1150	\$	101.12	\$ 116,288.00
Subtotal (FCG Only)	3,780		\$	346,674.76
Post-Construction Phase (10 Working Days)				
Resident Engineer - FCG	80	\$	187.05	\$ 14,964.38
Structures Representative - RTEA	40	\$	168.53	\$ 6,741.00
Office Engineer - RTEA	40	\$	80.89	\$ 3,235.68
Subtotal (FCG Only)	160		\$	14,964.38
Misc. Expenses	Months		Monthly Cost	Total
Vehicles	10	\$	-	\$ -
Laptops	10	\$	-	\$ -
Cell Phones	10	\$	-	\$ -
Office Supplies	10	\$	-	\$ -
Field Office	10	\$	-	\$ -
Subtotal (FCG Only)			\$	-
			DBE %	
FCG Total			50.65%	\$ 376,603.51
Subconsultants				
			DBE %	
RTEA - DBE	Project Support		20.16%	\$ 149,919.84
Geo - Mat	Materials Testing			\$ 30,516.00
Geo - Mat	Field Inspection			\$ 116,288.00
Surveying	QA Surveying			\$ 20,000.00
ZTC	Source Inspection			\$ 39,714.00
HES	Envi. Monitoring			\$ 10,450.00
			Subtotal	\$ 366,887.84
			Total Cost (NOT TO EXCEED)	\$ 743,491.35

EXHIBIT 10-H COST PROPOSAL								
Specific Rate of Compensation (use for on-call or as-needed contracts)								
City of Lake Elsinore								
Consultant or Subconsultant <u>FCG (Prime)</u>				Contract No. _____ Date _____				
	FRINGE BENEFIT %	+	OVERHEAD %	+	GENERAL ADMINISTRATION %	=	COMBINED%	
NORMAL		+		+		=	133.09%	
OVERTIME		+		+		=	133.09%	
			FEE %	7%				
BILLING INFORMATION				CALCULATION INFORMATION				
Name/Job Title/Classification ¹	Hourly Billing Rates ²			Effective date of hourly rate		Actual hourly rate ³	% or \$ increase	Hourly rate - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To			
Resident Engineer	\$ 187.05	\$ 280.58	\$ 374.11	5/25/20	12/31/20	\$ 75.00		
	\$ 187.05	\$ 280.58	\$ 374.11	1/1/21	12/31/21	\$ 75.00	0.00%	
	\$ 187.05	\$ 280.58	\$ 374.11	1/1/22	12/31/22	\$ 75.00	0.00%	
	\$ 187.05	\$ 280.58	\$ 374.11	1/1/23	12/31/23	\$ 75.00	0.00%	
Construction Inspector Civil / Electrical	\$ 124.70	\$ 187.05	\$ 249.41	5/25/20	12/31/20	\$ 50.00		
	\$ 124.70	\$ 187.05	\$ 249.41	1/1/21	12/31/21	\$ 50.00	0.00%	
	\$ 124.70	\$ 187.05	\$ 249.41	1/1/22	12/31/22	\$ 50.00	0.00%	
	\$ 124.70	\$ 187.05	\$ 249.41	1/1/23	12/31/23	\$ 50.00	0.00%	

1. Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
2. Billing rate = actual hourly rate * (1 + ICR) * (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
3. For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (*)



RT Engineering & Associates, Inc.

October 6, 2020

City of Lake Elsinore
130 S. Main Street
Lake Elsinore, CA 92530

Subject: RT Engineering & Associates, Inc. (RTEA) Cost Proposal and Rates for RFP Construction Management Services, and Construction Surveying for the Main Street Interchange Improvement Project, City Project #. Z10017

RT Engineering & Associates, Inc. (RTEA) is pleased to submit the attached cost proposal and rates for RFP Construction Management Services, and Construction Surveying for the Main Street Interchange Improvement Project, City Project #. Z10017.

DBE Status: RT Engineering & Associates is a certified Disadvantaged Business Enterprise. CUCP Certification No. 40430.

We look forward to continuing our successful partnership on this new contract. I may be contacted at (909) 855-1807 or reginat@rtengineering.net.

Kind regards,

A handwritten signature in blue ink, appearing to read 'Regina M. Talamantez', is written over a faint, stylized blue line.

Regina M. Talamantez, CEO/President
RT Engineering & Associates, Inc.

Attachment(s):
RTEA Cost Proposal
RTEA Rates for City of Lake Elsinore

Program Management ~ Project Management ~ Construction Management ~ Environmental ~ Public Outreach

Executive Headquarters:
1901 First Avenue, Suite 217G
San Diego, CA 92101
(619) 255-7287
Email: reginat@rtengineering.net

Inland Empire Office:
202 E. Airport Dr #140
San Bernardino, CA 92408
(909) 763-3194

RTEA - DBE			City of Lake Elsinore	
Construction Management & Inspection Services				
Revised Cost Proposal - October 6, 2020		CM & Inspection for Main St. Interchange Improvement Project		
Classification	Hours	Hourly Rate	Cost	
Pre-construction Phase (5 Working Days)				
Structures Representative - RTEA	40	\$	168.53	\$ 6,741.00
Public Outreach Officer - RTEA	40	\$	89.88	\$ 3,595.20
Office Engineer - RTEA	20	\$	80.89	\$ 1,617.84
Subtotal (FCG Only)	100		\$	11,954.04
Construction Phase (10 Months)				
Structures Representative - RTEA	240	\$	168.53	\$ 40,446.00
Public Outreach Officer - RTEA	200	\$	89.88	\$ 17,976.00
Office Engineer - RTEA	860	\$	80.89	\$ 69,567.12
Subtotal (RTEA Only)	1,300		\$	127,989.12
Post-Construction Phase (10 Working Days)				
Structures Representative - RTEA	40	\$	168.53	\$ 6,741.00
Office Engineer - RTEA	40	\$	80.89	\$ 3,235.68
Subtotal (FCG Only)	80		\$	9,976.68
Subconsultants				
DBE %				
RTEA - DBE	Project Support	20.16%	\$	149,919.84
Total Cost (NOT TO EXCEED)			\$	149,919.84



GeoMat Testing Laboratories, Inc.

Soil Engineering, Environmental Engineering, Materials Testing, Geology

October 2, 2020

Project No. 20246-01
Caltrans Certified, Lab No. 562
City of Los Angeles Certified, Lab No. 10217
AASHTO and ASTM Certified

TO: FCG Consultants
Engineering Department
22885 Savi Ranch Pkwy Suite G,
Yorba Linda, California 92887

ATTENTION: Mr. Abdallah Fakhouri, P.E.

SUBJECT: Response to RFP and Fee for Professional Geotechnical, Material testing and inspection Services, Main Street Interchange Project Z10017.

GeoMat Testing Laboratories, Inc. appreciates the opportunity to provide the FCG and the City of Lake Elsinore with complete geotechnical and material testing and inspection services per the subject RFP.

We are committed to providing FCG and the City of Lake Elsinore with high quality services in a timely and cost efficient manner. GeoMat will provide the following services for on this project:

- Field Inspection Services: Mr. Tamer Khalil will perform field inspection on materials placement such as subgrade, subbase, HMA, and Concrete. Mr. Khalil will provide daily reports to the Resident Engineer.
- Materials Sampling and Testing; GeoMat will deploy laboratory technicians (not Tamer Khalil) to perform the necessary sampling of materials, batch plant inspection, field testing of materials, and laboratory testing per the project special provisions and proper standards.

Our firm is fully staffed and carries professional/general liability insurance, auto, and workman compensation insurance. Our certified laboratory and well qualified local professional and technical staff will assure that an exceptional level of service is provided to the project team.

With our vast experience, local presence, and low overhead you can expect quality service at reasonable rate. Our capabilities, project experience, resumes, and references. Mr. Tamer Khalil, P.M. is the contact at GeoMat Testing Laboratories, Inc. and will be our field construction inspector for this project. Mr. Khalil Has been certified with Caltrans for the past 10 years, carries ICC and grading special inspection cert, ACI Field Grade I and a General Engineering license (A). His contact information is as follows:

Email Tamer@geomatlabs.com
Phone (951) 688-5400 or (909) 913-3024

We look forward to work with you on this important contract. Should you have any questions or need further information, please do not hesitate to call this office.

Submitted for GeoMat Testing Laboratories, Inc.

Tamer Khalil,
Project Manager

COST ESTIMATE:

ITEM	UNIT	QUANTITY	RATE	COST (\$)
FIELD INSPECTION				
Field Construction Inspector – Inspection and Quality Assurance of Materials Placement of Subgrade; Subbase; HMA, and Concrete.	Hr.	900	101.12	\$91,008.00
FIELD SAMPLING & TESTING AND LABORATORY TESTING				
Project Engineer and Management for Reviews	Hr.	50	110.00	\$5,500.00
Field Material Sampling & Testing	Hr.	200	101.12	\$20,224.00
Percent Crushed Particles (CT205)	Ea.	12	150.00	\$1,800.00
Specific Gravity/Absorption Coarse Agg (CT206)	Ea.	12	150.00	\$1,800.00
Specific Gravity/Absorption Fine Agg (CT207)	Ea.	12	245.00	\$2,940.00
Abrasion Soils/Agg (CT211)	Ea.	12	245.00	\$2,940.00
Relative Compaction Soils/Base (CT216)	Ea.	20	150.00	\$3,000.00
Sand Equivalent (CT 217)	Ea.	12	113.00	\$1,356.00
Moisture Content Soil/Agg Oven (CT 226)	Ea.	8	150.00	\$1,200.00
Cleaness Of Agg (CT 227)	Ea.	8	210.00	\$1,680.00
Durability Index (CT 229)	Ea.	12	200.00	\$2,400.00
AC Extraction	Ea.	8	150.00	\$1,200.00
AC Density (CT308)	Ea.	25	150.00	\$3,750.00
AC Maximum Density (CT309)	Ea.	6	150.00	\$900.00
Concrete Compressive Strength (CT501)	Ea.	76	50.00	\$3,800.00
Mobile Lab	Hr.	1,100	5.00	\$5,500.00
TOTAL COST				\$147,248.00

EXHIBIT 10-H COST PROPOSAL

Specific Rate of Compensation (use for on-call or as-needed contracts)

City of Lake Elsinore

Consultant or Subconsultant RTEA (Subconsultant) Contract No. _____ Date October 6, 2020

	FRINGE BENEFIT %	+	OVERHEAD %	+	GENERAL ADMINISTRATION %	=	COMBINED%
NORMAL		+		+		=	110.00%
OVERTIME		+		+		=	110.00%
			FEE %	7%			

BILLING INFORMATION

CALCULATION INFORMATION

Name/Job Title/Classification ¹	Hourly Billing Rates ²			Effective date of hourly rate		Actual hourly rate ³	% or \$ increase	Hourly rate - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To			
Utility Coordinator	\$ 168.53	\$ 252.79	\$ 337.05	10/6/20	12/31/20	\$ 75.00		
	\$ 168.53	\$ 252.79	\$ 337.05	1/1/21	12/31/21	\$ 75.00	0.00%	
	\$ 168.53	\$ 252.79	\$ 337.05	1/1/22	12/31/22	\$ 75.00	0.00%	
	\$ 168.53	\$ 252.79	\$ 337.05	1/1/23	12/31/23	\$ 75.00	0.00%	
Public Outreach Officer	\$ 89.88	\$ 134.82	\$ 179.76	10/6/20	12/31/20	\$ 40.00		
	\$ 89.88	\$ 134.82	\$ 179.76	1/1/21	12/31/21	\$ 40.00	0.00%	
	\$ 89.88	\$ 134.82	\$ 179.76	1/1/22	12/31/22	\$ 40.00	0.00%	
	\$ 89.88	\$ 134.82	\$ 179.76	1/1/23	12/31/23	\$ 40.00	0.00%	
Office Engineer	\$ 80.89	\$ 121.34	\$ 161.78	10/6/20	12/31/20	\$ 36.00		
	\$ 80.89	\$ 121.34	\$ 161.78	1/1/21	12/31/21	\$ 36.00	0.00%	
	\$ 80.89	\$ 121.34	\$ 161.78	1/1/22	12/31/22	\$ 36.00	0.00%	
	\$ 80.89	\$ 121.34	\$ 161.78	1/1/23	12/31/23	\$ 36.00	0.00%	

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate * (1 + ICR) * (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (*)

EXHIBIT 10-H COST PROPOSAL

Specific Rate of Compensation (use for on-call or as-needed contracts)

City of Lake Elsinore

Consultant or Subconsultant Geo-Mat (Subconsultant) Contract No. _____ Date October 6, 2020

	FRINGE BENEFIT %	+	OVERHEAD %	+	GENERAL ADMINISTRATION %	=	COMBINED%
NORMAL		+		+		=	110.00%
OVERTIME		+		+		=	110.00%
			FEE %	7%			

BILLING INFORMATION

CALCULATION INFORMATION

Name/Job Title/Classification ¹	Hourly Billing Rates ²			Effective date of hourly rate		Actual hourly rate ³	% or \$ increase	Hourly rate - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To			
Construction Inspector	\$ 101.12	\$ 151.67	\$ 202.23	10/6/20	12/31/20	\$ 45.00		
	\$ 101.12	\$ 151.67	\$ 202.23	1/1/21	12/31/21	\$ 45.00	0.00%	
	\$ 101.12	\$ 151.67	\$ 202.23	1/1/22	12/31/22	\$ 45.00	0.00%	
	\$ 101.12	\$ 151.67	\$ 202.23	1/1/23	12/31/23	\$ 45.00	0.00%	
Project Engineer	\$ 110.00	\$ 165.00	\$ 219.99	10/6/20	12/31/20	\$ 48.95		
	\$ 110.00	\$ 165.00	\$ 219.99	1/1/21	12/31/21	\$ 48.95	0.00%	
	\$ 110.00	\$ 165.00	\$ 219.99	1/1/22	12/31/22	\$ 48.95	0.00%	
	\$ 110.00	\$ 165.00	\$ 219.99	1/1/23	12/31/23	\$ 48.95	0.00%	
Field Technician	\$ 101.12	\$ 151.67	\$ 202.23	10/6/20	12/31/20	\$ 45.00		
	\$ 101.12	\$ 151.67	\$ 202.23	1/1/21	12/31/21	\$ 45.00	0.00%	
	\$ 101.12	\$ 151.67	\$ 202.23	1/1/22	12/31/22	\$ 45.00	0.00%	
	\$ 101.12	\$ 151.67	\$ 202.23	1/1/23	12/31/23	\$ 45.00	0.00%	

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate * (1 + ICR) * (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (*)

October 05, 2020



A.B. Fakhouri. PE
Resident Engineer
FCG
22885 Savi Ranch Parkway, Suite G
Yorba Linda, CA 92887

Subject: Hernandez Environmental Services (HES) Environmental Commitments for Biological Resources Main Street Interchange Improvement Project, City of Lake Elsinore, CA

Mr. Fakhouri:

The following are the biological environmental commitments for the Main Street Interchange Improvement Project, in the City of Lake Elsinore, Riverside County, California. These environmental commitments were obtained and are referenced on page 82 of the City of Lake Elsinore Public Works Department Special Provisions for Construction on State Highway in Lake Elsinore in Riverside County Street and Ramp Widening at I-15/Main Street Interchange.

The project is within or near habitat for the following regulated species:

Coastal California Gnatcatcher
Burrowing Owl
Nesting Birds

To avoid any potential impact to these species, HES will implement the following measures:

Task 1. A pre-construction survey within 3 days prior to ground disturbance is mandatory in suitable habitat areas for burrowing owl. A report presenting the results will be prepared.

Cost

HES anticipates a total of 30 hours to complete this task at a rate of \$95.00 per hour. **Total anticipated time and materials not to exceed cost: \$2,850.00**

Task 2. If feasible, project construction and all vegetation removal, including coastal sage scrub, should be completed outside of the general bird breeding season, that is inclusive of the coastal California gnatcatcher (February 15 – August 31). In the event that vegetation removal cannot be conducted outside of the coastal California gnatcatcher breeding season, focused surveys will be conducted by a qualified biologist three days prior to vegetation removal activities. Should nesting

birds be found, an exclusionary buffer will be established by a qualified biologist. The buffer may be up to 500 feet in diameter. This buffer will be clearly marked in the field by construction personnel under guidance of the qualified biologist, and construction or clearing will not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active. A report presenting the results will be prepared.

Cost

HES anticipates a total of 40 hours to complete this task at a rate of \$95.00 per hour. **Total anticipated time and materials not to exceed cost: \$3,800.00**

Task 3. If nesting birds are found within the Main Street Bridge structure, exclusionary devices and nest prevention methods, designed to prevent birds from utilizing the bridge, will be determined and implemented by a qualified biologist. Exclusionary devices must be installed prior to the initiation of nesting season (February 15), and before any bridge demolition and other bridge construction activities begin. The biologist will determine high-visibility fence placement as needed.

Cost

HES anticipates a total of 25 hours to complete this task at a rate of \$95.00 per hour. **Total anticipated time and materials not to exceed cost: \$2,375.00**

Task 4. Nesting bird habitat within the project limits will be resurveyed during bird breeding season if there is a lapse in construction activities longer than seven days.

Cost

HES anticipates a total of 15 hours to complete this task at a rate of \$95.00 per hour. **Total anticipated time and materials not to exceed cost: \$1,425.00**

Total for all tasks: \$10,450.00

Please let me know if you have any further questions or require any additional information from us.

Thank you A.B.

Sincerely,

Juan J. Hernandez
Principal Biologist
Hernandez Environmental Services

EXHIBIT 10-H COST PROPOSAL

Specific Rate of Compensation (use for on-call or as-needed contracts)

City of Lake ElsinoreConsultant or Subconsultant HES (Subconsultant) Contract No. _____ Date October 6, 2020

	FRINGE BENEFIT %	+	OVERHEAD %	+	GENERAL ADMINISTRATION %	=	COMBINED%
NORMAL		+		+		=	110.00%
OVERTIME		+		+		=	110.00%
			FEE %	7%			

BILLING INFORMATION**CALCULATION INFORMATION**

Name/Job Title/Classification ¹	Hourly Billing Rates ²			Effective date of hourly rate		Actual hourly rate ³	% or \$ increase	Hourly rate - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To			
Environmental Monitoring	\$ 95.00	\$ 142.49	\$ 189.99	5/27/20	12/31/20	\$ 42.28		
	\$ 95.00	\$ 142.49	\$ 189.99	1/1/21	12/31/21	\$ 42.28	0.00%	
	\$ 95.00	\$ 142.49	\$ 189.99	1/1/22	12/31/22	\$ 42.28	0.00%	
	\$ 95.00	\$ 142.49	\$ 189.99	1/1/23	12/31/23	\$ 42.28	0.00%	

1. Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.

2. Billing rate = actual hourly rate * (1 + ICR) * (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.

3. For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (*)

EXHIBIT 10-H1 COST PROPOSAL Page 1 of 4

ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS

(DESIGN, ENGINEERING AND ENVIRONMENTAL STUDIES)

Note: Mark-ups are Not Allowed

☐ Prime Consultant ☒ Subconsultant ☐ 2nd Tier Subconsultant

Consultant ZT Consulting Group

Contract No. City of Lake Elsinore Main S

Date 9/13/2020

DIRECT LABOR

Classification/Title	Name	hours	Actual Hourly Rate	Total
Structural Material Rep.*	Farzad Tasbihgoo	120	\$80.00	\$9,600.00
QA Inspector **	Various Staff	96	\$50.00	\$4,800.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00

LABOR COSTS

a) Subtotal Direct Labor Costs	\$14,400.00
b) Anticipated Salary Increases (see page 2 for sample)	\$0.00
c) TOTAL DIRECT LABOR COSTS [(a) + (b)]	\$14,400.00

FRINGE BENEFITS

d) Fringe Benefits (Rate: 0.00%)	e) Total Fringe Benefits [(c) x (d)]
	\$0.00

INDIRECT COSTS

f) Overhead (Rate: 110.00%)	g) Overhead [(c) x (f)]
h) General and Administrative (Rate: 0.00%)	i) Gen & Admin [(c) x (h)]
j) Total Indirect Costs [(e) + (g) + (i)]	\$15,840.00

FEE (Profit)

q) (Rate: 10.00%)	k) TOTAL FIXED PROFIT [(c) + (j)] x (q)]
	\$3,024.00

OTHER DIRECT COSTS (ODC)

Description	Unit(s)	Unit Cost	Total
l) Travel (Per Caltrans Policies)	1	\$1,000.00	\$1,000.00
m) Mileage (per IRS rate)	1810	\$0.58	\$1,050.00
n) Material Testing (see attached)	1	\$4,400.00	\$4,400.00
o) Subconsultant Costs			

p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$6,450.00
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TOTAL COST [(c) + (j) + (k) + (p)]	\$39,714.00
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NOTES:

1. Key personnel must be marked with an asterisk (*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (**). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
2. The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant’s annual accounting period and established by a cognizant agency or accepted by Caltrans.
3. Anticipated salary increases calculation (page 2) must accompany.

EXHIBIT 10-H1 COST PROPOSAL (EXAMPLE #1) PAGE 2 OF 2
ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS
(SAMPLE CALCULATIONS FOR ANTICIPATED SALARY INCREASES)

Consultant ZT Consulting Group Contract No. City of Lake Elsinore Main S Date 9/13/2020

1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours) 44087

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal		Avg Hourly Rate	5 Year Contract Duration
\$14,400.00	216	=	\$66.67	Year 1 Avg Hourly Rate

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

	Avg Hourly Rate		Proposed Escalation			
Year 1	\$66.67	+	0%	=	\$66.67	Year 2 Avg Hourly Rate
Year 2	\$66.67	+	0%	=	\$66.67	Year 3 Avg Hourly Rate
Year 3	\$66.67	+	0%	=	\$66.67	Year 4 Avg Hourly Rate
Year 4	\$66.67	+	0%	=	\$66.67	Year 5 Avg Hourly Rate
Year 5	\$66.67	+	0%	=	\$66.67	Year 5 Avg Hourly Rate

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	90.00%	*	216.0	=	194.4	Estimated Hours Year 1
Year 2	10.00%	*	216.0	=	21.6	Estimated Hours Year 2
Year 3	0.00%	*	216.0	=	0.0	Estimated Hours Year 3
Year 4	0.00%	*	216.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	216.0	=	0.0	Estimated Hours Year 5
Total	100%		Total	=	216.0	

4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours) \$14,400.00

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$66.67	*	194	=	\$12,960.00	Estimated Hours Year 1
Year 2	\$66.67	*	22	=	\$1,440.00	Estimated Hours Year 2
Year 3	\$66.67	*	0	=	\$0.00	Estimated Hours Year 3
Year 4	\$66.67	*	0	=	\$0.00	Estimated Hours Year 4
Year 5	\$66.67	*	0	=	\$0.00	Estimated Hours Year 5
Total Direct Labor Cost with Escalation				=	\$14,400.00	
Direct Labor Subtotal before Escalation				=	\$14,400.00	
Estimated total of Direct Labor Salary Increase				=	\$0.00	Transfer to Page 1

- NOTES:
- This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
 - An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology)
 - This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.

EXHIBIT 10-H1 COST PROPOSAL (EXAMPLE #1) PAGE 3 OF 4
ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS
(SAMPLE CALCULATIONS FOR ANTICIPATED SALARY INCREASES)

Consultant ZT Consulting Group Contract No. City of Lake Elsinore Main S Date 9/13/2020

Estimate of Other Direct Cost (ODC)

Material Testing Summary of Cost		Units	Cost per Unit	Cost
1)	Epoxy Coated Bars	0	\$ 100.00	\$0.00
2)	Elastomer Seal	0	\$ 1,200.00	\$0.00
3)	Splices - Mechanical or Hoops or Headed Bars	0	\$ 150.00	\$0.00
4)	Bearing Pads	0	\$ 1,200.00	\$0.00
5)	Structural Fasteners - Anchor Rods	4	\$ 350.00	\$1,400.00
6)	Structural Fasteners - High Strength Bolts	4	\$ 250.00	\$1,000.00
7)	Strands	8	\$ 150.00	\$1,200.00
8)	PT Anchorage	2	\$ 150.00	\$300.00
9)	APS	2	\$ 250.00	\$500.00
				\$4,400.00

Travel Cost - Per Caltrans Policies (Note 1)		Units	Cost per Unit	Cost
1)	Travel per Note 1	1	\$ 1,000.00	\$1,000.00
2)	Mileage per IRS Rate	1810	\$ 0.58	\$1,050.00
				\$2,050.00

Total ODC \$6,450.00

Notes

1. Pre-approved travel and Per Diem will be reimbursed in accordance with the current Caltrans Travel Guide for consultants, and detailed in executed Task Order Cost Estimates. No charge will be invoiced for employee relocation costs.

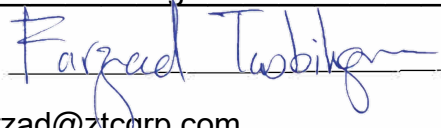
EXHIBIT 10-H1 COST PROPOSAL Page 3 of 3**Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. [Title 23 United States Code Section 112](#) - Letting of Contracts
4. [48 Code of Federal Regulations Part 31](#) - Contract Cost Principles and Procedures
5. [23 Code of Federal Regulations Part 172](#) - Procurement, Management, and Administration of Engineering and Design Related Service
6. [48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board](#) (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement. Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:

Name: Farzad Tasbihgoo Title *: Principal
Signature:  Date of Certification (mm/dd/yyyy): 09/13/20
Email: farzad@ztcgrp.com Phone Number: 818-929-8162
Address: 1041 E Green St., Suite 204, Pasadena, CA 91106

*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

Quality Assurance and Source Inspection - Material Verification and Testing at Source