CITY OF COSTA MESA
PROFESSIONAL SERVICES AGREEMENT
WITH
ALBERT GROVER & ASSOCIATES, INC.

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made and entered into this 16th day of January, 2018 ("Effective Date"), by and between the CITY OF COSTA MESA, a municipal corporation ("City"), and ALBERT GROVER & ASSOCIATES, INC., a California corporation ("Consultant").

W I T N E S S E T H :

A. WHEREAS, City proposes to utilize the services of Consultant as an independent contractor to provide traffic engineering consulting services on an as-needed basis, as more fully described herein; and

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

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

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

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

1.0. SERVICES PROVIDED BY CONSULTANT

1.1. Scope of Services. Consultant shall, on an as-needed basis, provide traffic engineering consulting services relating to traffic signal timing, traffic signal modifications, and related design services. The Scope of Services is further described in Consultant's Proposal, attached hereto as Exhibit "A" and incorporated herein by this reference.

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

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

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

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

(c) Terminate the Agreement as hereinafter set forth.

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

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

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

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

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

2.0. COMPENSATION AND BILLING

2.1. Compensation. Consultant shall be paid in accordance with the fee schedule set forth in Exhibit A.

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

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

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

3.0. TIME OF PERFORMANCE

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

3.2. Excusable Delays. Neither party shall be responsible for delays or lack of performance resulting from acts beyond the reasonable control of the party or parties. Such acts shall include, but not be limited to, acts of God, fire, strikes, material shortages, compliance with laws or regulations, riots, acts of war, or any other conditions beyond the reasonable control of a party.

4.0. TERM AND TERMINATION

4.1. Term. This Agreement shall commence on the Effective Date and continue through June 30, 2018, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

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

4.3. Compensation. In the event of termination, City shall pay Consultant for reasonable costs incurred and professional services satisfactorily performed up to and including the date of City's written notice of termination. Compensation for work in progress shall be

prorated based on the percentage of work completed as of the effective date of termination in accordance with the fees set forth herein. In ascertaining the professional services actually rendered hereunder up to the effective date of termination of this Agreement, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents pertaining to the services contemplated herein whether delivered to the City or in the possession of the Consultant.

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

5.0. INSURANCE

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

(a) Commercial general liability, including premises-operations, products/completed operations, broad form property damage, blanket contractual liability, independent contractors, personal injury or bodily injury with a policy limit of not less than One Million Dollars ($1,000,000.00), combined single limits, per occurrence. If such insurance contains a general aggregate limit, it shall apply separately to this Agreement or shall be twice the required occurrence limit.

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

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

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

after completion of the work hereunder.

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

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

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

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

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

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

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

5.4. Certificates of Insurance. Consultant shall provide to City certificates of insurance showing the insurance coverages and required endorsements described above, in a form and content approved by City, prior to performing any services under this Agreement. The certificates of insurance shall be attached hereto as Exhibit "B" and incorporated herein by this reference.

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

6.0. GENERAL PROVISIONS

6.1. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to any matter referenced herein and supersedes any and all other prior

writings and oral negotiations. This Agreement may be modified only in writing, and signed by the parties in interest at the time of such modification. The terms of this Agreement shall prevail over any inconsistent provision in any other contract document appurtenant hereto, including exhibits to this Agreement.

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

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

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

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

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

IF TO CONSULTANT:

Albert Grover & Associates, Inc.
211 Imperial Highway, Suite 208
Fullerton, CA 92835
Tel: (714) 992-2990
Attn: Chalap Sadam

IF TO CITY:

City of Costa Mesa
77 Fair Drive
Costa Mesa, CA 92626
Tel: (714) 754-5180
Attn: Jennifer Rosales

Courtesy copy to:

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

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

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

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

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

6.9. Indemnification and Hold Harmless. Consultant agrees to defend, indemnify, hold free and harmless the City, its elected officials, officers, agents and employees, at Consultant's sole expense, from and against any and all claims, actions, suits or other legal proceedings brought against the City, its elected officials, officers, agents and employees arising out of the performance of the Consultant, its employees, and/or authorized subcontractors, of the work undertaken pursuant to this Agreement. The defense obligation provided for hereunder shall apply without any advance showing of negligence or wrongdoing by the Consultant, its employees, and/or authorized subcontractors, but shall be required whenever any claim, action, complaint, or suit asserts as its basis the negligence, errors, omissions or misconduct of the Consultant, its employees, and/or authorized subcontractors, and/or whenever any claim, action, complaint or suit asserts liability against the City, its elected officials, officers, agents and employees based upon the work performed by the Consultant, its employees, and/or authorized subcontractors under this Agreement, whether or not the Consultant, its employees, and/or authorized subcontractors are specifically named or otherwise asserted to be liable. Notwithstanding the foregoing, the Consultant shall not be liable for the defense or indemnification of the City for claims, actions, complaints or suits arising out of the sole active negligence or willful misconduct of the City. This provision shall supersede and replace all other indemnity provisions contained either in the City's specifications or Consultant's Proposal, which shall be of no force and effect.

6.10. Independent Contractor. Consultant is and shall be acting at all times as an independent contractor and not as an employee of City. Consultant shall have no power to incur any debt, obligation, or liability on behalf of City or otherwise act on behalf of City as an agent. Neither City nor any of its agents shall have control over the conduct of Consultant or any of Consultant's employees, except as set forth in this Agreement. Consultant shall not, at any time, or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of City. Consultant shall secure, at its sole expense, and be responsible for any and all payment of Income Tax, Social Security, State Disability Insurance Compensation, Unemployment Compensation, and other payroll deductions for Consultant and its officers, agents, and employees, and all business licenses, if any are required, in connection with the services to be performed hereunder. Consultant shall indemnify and hold City harmless

from any and all taxes, assessments, penalties, and interest asserted against City by reason of the independent contractor relationship created by this Agreement. Consultant further agrees to indemnify and hold City harmless from any failure of Consultant to comply with the applicable worker's compensation laws. City shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to City from Consultant as a result of Consultant's failure to promptly pay to City any reimbursement or indemnification arising under this paragraph.

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

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

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

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

6.14. Public Records Act Disclosure. Consultant has been advised and is aware that this Agreement and all reports, documents, information and data, including, but not limited to, computer tapes, discs or files furnished or prepared by Consultant, or any of its subcontractors, pursuant to this Agreement and provided to City may be subject to public disclosure as required by the California Public Records Act (California Government Code section 6250 *et seq.*). Exceptions to public disclosure may be those documents or information that qualify as trade secrets, as that term is defined in the California Government Code section 6254.7, and of which

Consultant informs City of such trade secret. The City will endeavor to maintain as confidential all information obtained by it that is designated as a trade secret. The City shall not, in any way, be liable or responsible for the disclosure of any trade secret including, without limitation, those records so marked if disclosure is deemed to be required by law or by order of the Court.

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

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

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

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

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

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

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

6.22. Construction. The parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement, this Agreement shall be construed as if drafted jointly by the parties

and in accordance with its fair meaning. There shall be no presumption or burden of proof favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

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

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

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

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

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

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

CONSULTANT

Signature

Date: 1-16-2018

Chalap K. Sadam, Vice President
[Name and Title]

[redacted]
Social Security or Taxpayer ID Number

CITY OF COSTA MESA

Thomas Hatch
City Manager

Date: 1/29/18

ATTEST:

Brenda Green 2-6-18

Brenda Green
City Clerk

APPROVED AS TO FORM:

Date: 01/29/18

Thomas Duarte
City Attorney

APPROVED AS TO INSURANCE:

Date: 1/25/18

Ruth Wang
Risk Management

APPROVED AS TO CONTENT:

Date: 1/23/18

Jennifer Rosales
Project Manager

DEPARTMENTAL APPROVAL:

Raja Sethuraman

Date: 1-23-18

Raja Sethuraman
Public Services Director

APPROVED AS TO PURCHASING:

Date: 1/28/18

Stacy Daugherty
Finance Director

EXHIBIT A

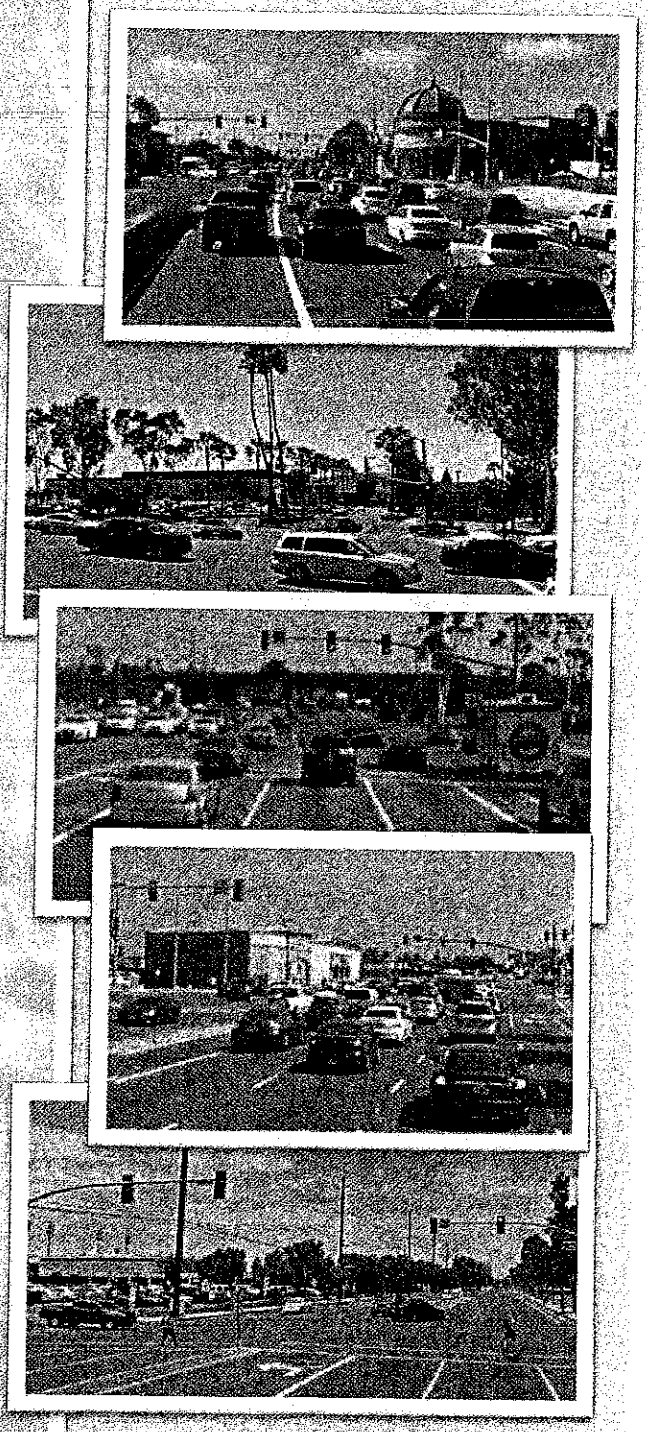
CONSULTANT'S PROPOSAL

Technical Proposal to Provide

ON-CALL TRAFFIC ENGINEERING SERVICES

Submitted to

CITY OF COSTA MESA



August 18, 2017

Submitted By

ALBERT GROVER & ASSOCIATES

ALBERT GROVER & ASSOCIATES

August 18, 2017

Mr. Raja Sethuraman
Public Services Director
City of Costa Mesa
77 Fair Drive
Costa Mesa, CA 92628-1200

RE: Proposal for On-Call Traffic Engineering Services

Dear Mr. Sethuraman:

Albert Grover & Associates (AGA) is pleased to respond to the City of Costa Mesa's Request for Proposal dated August 3, 2017, to provide **On-Call Traffic Engineering Consultant Services** in the form of traffic signal timing and design services. This proposal is based on our previous discussions with City staff; previous projects that AGA has conducted for the City of Costa Mesa; and the many traffic signal systems and citywide central systems that AGA has designed and managed for various municipalities throughout Southern California.

As described in the RFP, AGA will provide on-call services for minor traffic signal timing and design projects which will include review of traffic signal timing for any ongoing issues or complaints and minor traffic signal modifications.

It is anticipated that both office and field services will be provided, including such tasks as signal interconnect and coordination timing development/modification; signal timing modifications; addressing any signal timing related complaints received by the City; coordination with the City's traffic engineering, traffic operations, and signal maintenance staff; and any other traffic engineering related tasks as requested by the City, such as upgrading and maintaining the City's traffic signal system and the Traffic Management Center.

There are several key factors that make AGA uniquely qualified to provide the required services and more. These factors include the following:

- AGA's Project Manager, **Mr. Chalap Sadam, P.E., T.E.**, is extremely knowledgeable of both signal system hardware and software issues in Costa Mesa. Mr. Sadam has been Project Manager for all of the coordination timing projects that we have conducted for/in the City, and has been directly involved in various signal system hardware services provided by AGA to the City over the past several years. Mr. Sadam has also worked extensively with the adjoining Cities of Santa Ana, Huntington Beach, Irvine and Caltrans and has developed excellent working relationships that will be invaluable to the City of Costa Mesa.

- AGA's key staff members, Mr. Chad Veinot, TSOS and Mr. Felipe Ortega, are long-time residents of the City of Costa Mesa and drive the City's street network multiple times on a daily basis. As such, they have first-hand knowledge of the City's arterial network and traffic operations, and can stop by first thing in the morning to help assist the City should there be a need.

- AGA is very familiar with signal timing issues in Costa Mesa. Via various projects over the past several years, we have developed and fine-tuned coordination timing plans for many key arterials involving coordination with neighboring cities and with Caltrans, including Harbor Boulevard, Fairview Road, Sunflower Avenue, Bristol Street, Bear Street, Baker Street, Placentia Avenue, Adams Avenue, and Victoria Street. We also previously completed a citywide "Suggested Routes to School" project and the Traffic Signal System Communications Master Plan for the City.

- AGA is especially familiar with the existing Costa Mesa traffic signal system. Our staff has extensive experience with installing, operating, and maintaining signal systems, and with the conversion from the MIST System to the "state-of-the-art" Centracs systems. For many years we operated the City of Fullerton's signal system, and were responsible for operating and maintaining the system while the City, over a period of time and under our direction, converted to an ACTRA/TACTICS system. We have also overseen conversion of outdated signal systems to various other signal control systems, including Centracs, QuicNet, MaxView and Tactics central systems.

- AGA currently provides on-staff traffic engineering services in the Cities of Fullerton, San Dimas and Victorville, and on-call traffic engineering services in the Cities of La Habra, Montclair, Highland, Long Beach, Fountain Valley, Glendora, West Hollywood, Palm Springs, Indio, Lake Forest, Newport Beach, Seal Beach, County of Los Angeles, SANBAG, and for the Orange County Transportation Authority.

- AGA's extensive expertise and experience is further enhanced by the fact that we actually monitor and maintain the signal timing for hundreds of traffic signals for dozens of governmental agencies throughout Southern California, including several cities in Orange County. We not only identify traffic flow problems and adjust signal timing accordingly, but also identify signal system communication problems and either fix the problem or oversee the repair by others. Key AGA staff have actually been monitoring various signal systems for over twenty-five years.

- AGA staff has timed thousands of signals in Orange County alone over the past twenty years, including Citywide and/or multi-corridor coordination timing projects for La Habra, Fountain Valley, Fullerton, Santa Ana, Brea, Buena Park, Huntington Beach, Lake Forest, and Costa Mesa.

- For OCTA, AGA conducted the Traffic Signal Coordination Forum Project, involving all Orange County cities; developed the Orange County Traffic Signal Coordination Program, the road map for County-wide signal coordination; conducted the Euclid Street Traffic Signal Synchronization Demonstration Project, OCTA's first multijurisdictional signal coordination project; and completed several corridor projects (TLSP or Project P funded), which were all conducted as turn-key projects, with AGA responsible for all components of the projects.

- Additionally, AGA has recently conducted several other relevant projects for OCTA, including the BRT Project on Harbor Boulevard, Fairview Road, and Adams Avenue, and the Orange County Traffic Signal Coordination Program. The project involved coordinating with all 34 cities, Caltrans, and the County of Orange, completing an inventory of existing traffic signal systems, including a countywide needs assessment, identification of arterial traffic operational improvement strategies, and identification of a countywide network of arterials, including cost estimates for the potential implementation of the proposed program. This program required a high degree of consensus building between the various entities.

- AGA also has extensive experience in dealing with Caltrans hardware, software, and most importantly, personnel. We have developed similar master plans for many other cities where Caltrans controlled intersections (both freeway ramp signals and state highways) were key components in the development of multijurisdictional coordination timing. We have worked hand-in-hand with Caltrans District 12 engineering and operations staff for many years, and recently instructed Caltrans personnel in the utilization of AGA's signal timing evaluation program (WEBSTER).

- AGA staff have also designed and installed various Intelligent Transportation System (ITS) elements including CCTV cameras, fiber optic communication systems, wireless interconnect systems, and serial or Ethernet based systems, as well as upgraded multiple central systems throughout Southern California. We also have provided support services for the City's MIST and VMS systems, and have hands-on experience with Econolite Centracs and ASC/3 controllers used by the City. AGA has also completed multiple traffic signal modification projects through Southern California.

Should you have any questions regarding our proposal, please contact me. AGA looks forward to working with City staff on this very important project. Our Technical Proposal is valid for a period of 90 days from the date of this letter, and I am authorized to bind AGA in all contractual matters.

Respectfully submitted,

ALBERT GROVER & ASSOCIATES

Chalap K. Sadam, P.E.
Vice President

Proposals\Costa Mesa\On-Call 2017\2-Technical Proposal\Cover Letter.docx

PROJECT BACKGROUND

The City of Costa Mesa is located in Orange County, occupying approximately 15.7 square miles and has a population of approximately 110,000 (2010 US Census data). The City is home to major attraction destinations including, among others, the South Coast Plaza shopping mall, the Theater and Arts District, the Orange County Fairgrounds, and specialty museums. As such, the City experiences ever changing commuter traffic conditions and demands.

The City currently owns and maintains over 120 traffic signals utilizing a combination of ASC/3 and Multisonics 820 traffic signal controllers which are managed by a Centracs and MIST traffic signal central system. The City's traffic signal communication network is comprised of copper hardwire and fiber optic interconnect cables.

On August 3, 2017, the Public Services Director of the City of Costa Mesa issued a Request for Proposal (RFP) for Traffic Engineering Services to provide on-call services for minor traffic signal timing and design projects. The project will include review of traffic signal timing and minor traffic signal modifications. It will be administered under the Transportation Services Division.

QUALIFICATIONS AND EXPERTISE

Albert Grover & Associates (AGA) has extensive experience providing on-call traffic engineering services to municipalities across Southern California. The engineers and technicians at AGA possess all of the necessary qualifications and experience to ensure successful outcomes for the City, be it a simple traffic investigation, a politically charged development project, a multi-agency project, or a complex traffic systems challenge. In addition to the work tasks identified in the Request for Proposals, AGA can also provide the City with professional on-call technical engineering services in the areas of traffic signal timing and design modification services.

COMPANY PROFILE

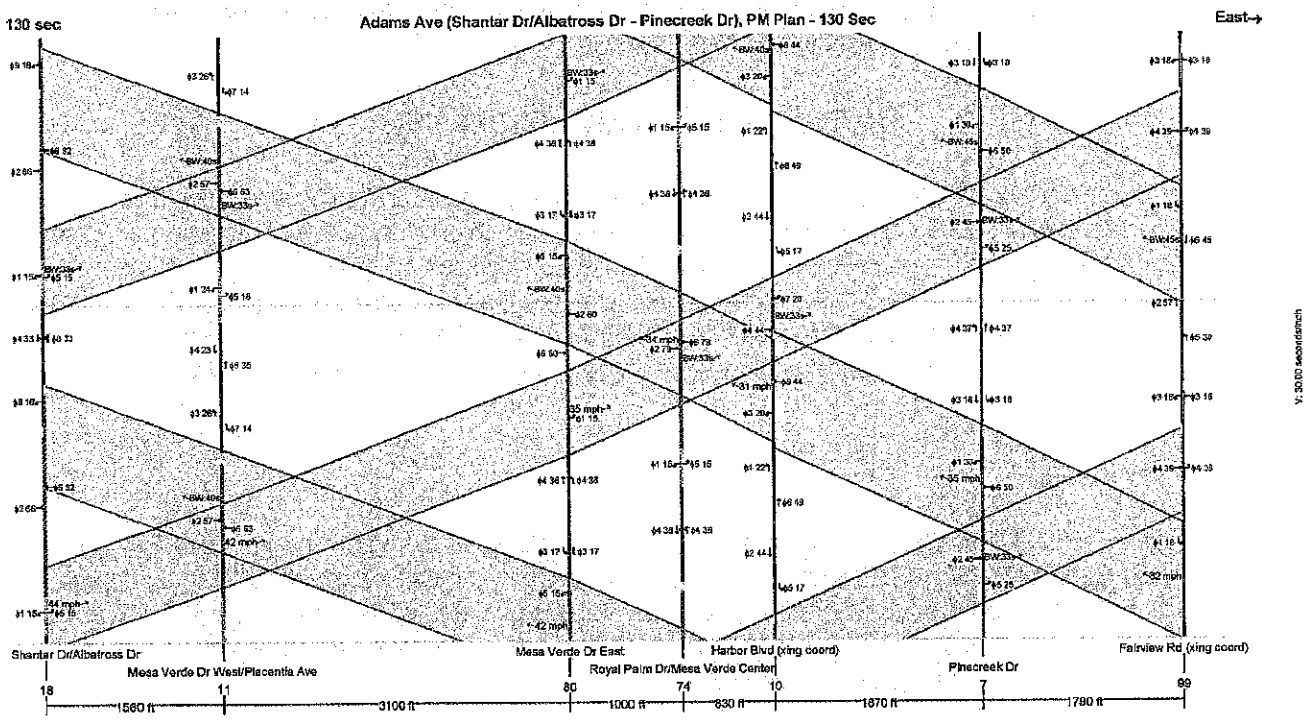
Founded in 1993, Albert Grover & Associates (AGA), is a California corporation and a certified Small Business Enterprise (SBE) with 21 employees, all of whom are based out of the company office on Imperial Highway in the City of Fullerton. The majority of our employees have been with the company for at least five years, which is a good indication of the stability of our work force, while senior management personnel have worked together since the firm's incorporation.

AGA is a multidiscipline engineering firm specializing in municipal and transportation engineering. Through the utilization of today's most sophisticated computer-aided equipment by highly skilled and experienced professional engineers and technicians, AGA is able to provide its clients with quality, cost effective professional services in a timely manner. AGA's success can be attributed to the firm's commitment to provide clients with personalized, quality service.

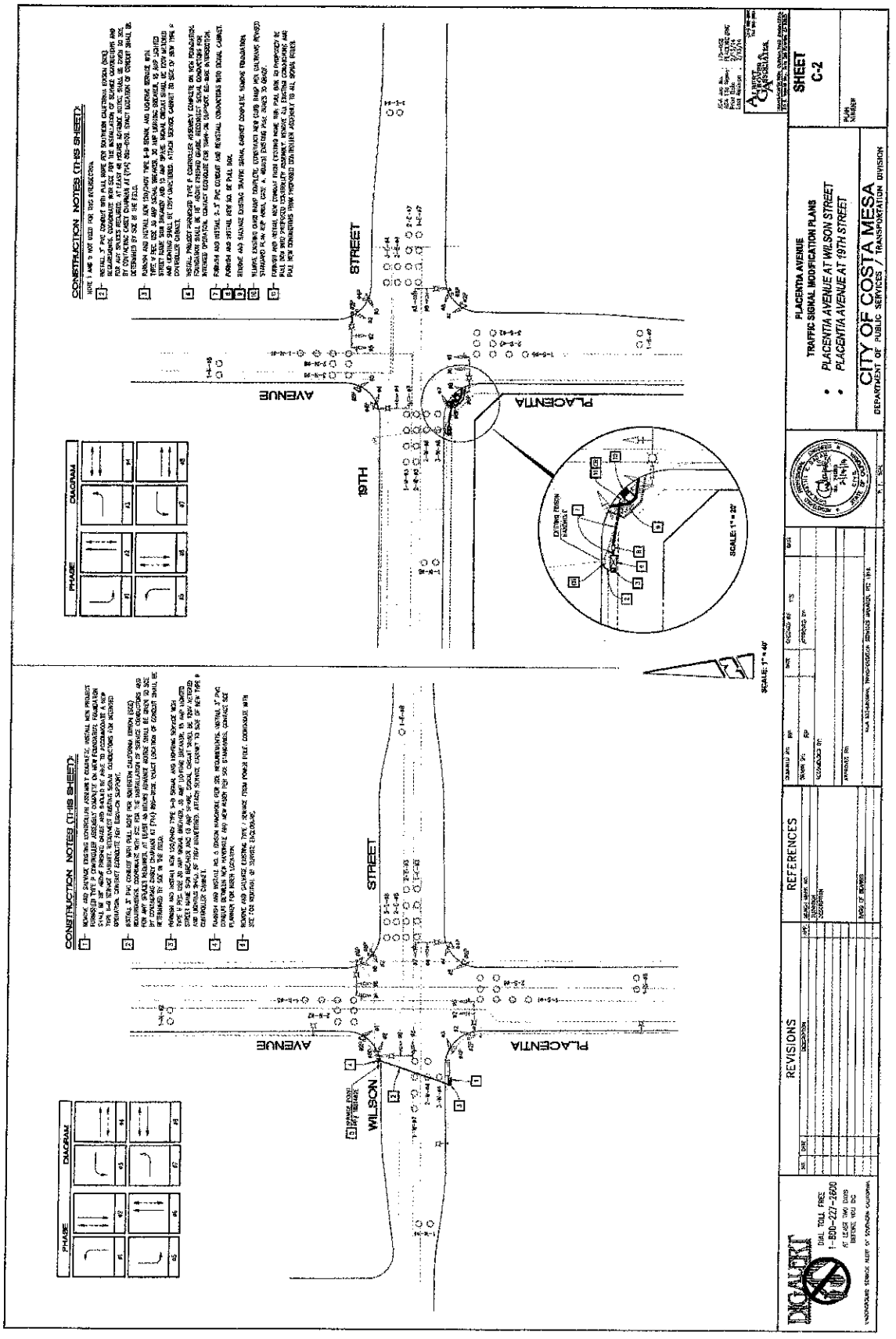
AGA's wide range of services offered can be divided into six primary areas of expertise: traffic engineering, day-to-day traffic signal operations, transportation planning, civil engineering/construction management, communication and operational control of traffic signal systems, and actual onsite City Traffic Engineer staffing.

AGA's services are not just routine, but rather the application of experience and knowledge to first properly identify a problem and then to provide the most appropriate and cost-effective solution. Each project is carried out with the highest degree of pride and professionalism and a dedication to satisfy the client's need. AGA offers professional services that range from the planning and conceptual design stage through the construction supervision and "as-built" stage, placing us among the forerunners in the total service concept.

The AGA Team possesses all of the necessary qualifications and experience required to successfully provide the services anticipated by the City. We fully understand the importance to the City of dealing with the traffic related problems. Staff at AGA have completed many tasks similar or identical to those anticipated under this contract, and have completed such tasks on time, within budget, and in a manner that meets all the requirements of the agency for which the work was completed, while at the same time placing minimal time and effort requirements on agency staff.



AGA personnel, many of whom are former governmental employees, have provided services to clients ranging from design and construction management of full freeway interchanges, at costs exceeding a million dollars, to minor traffic impact studies, at costs of only a few thousand dollars. Whatever the project, our management approach is to complete the project to the satisfaction of the client in as quick a time frame as possible while still producing quality work products.


CONSTRUCTION NOTES (THIS SHEET):
PLACENTIA AVENUE
TRAFFIC SIGNAL MODIFICATION PLANS
PLACENTIA AVENUE AT WILSON STREET
PLACENTIA AVENUE AT 19TH STREET
CITY OF COSTA MESA
DEPARTMENT OF PUBLIC SERVICES / TRANSPORTATION DIVISION
SHEET
C-2
REVISIONS
REFERENCES
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS
BEFORE YOU DIG
WILSON
STREET
AVENUE
PLACENTIA
19TH
PHASE
DIAGRAM
SCALE: 1" = 40'
SCALE: 1" = 20'

AGA's Project Manager, **Mr. Chalap Sadam, P.E., T.E**, has been directly involved with signal timing and traffic signal design/modification projects. Together with several staff members who are residents of the City of Costa Mesa, the AGA Project Team is fully aware of the traffic related challenges faced by the City. More information about AGA's Team are discussed in the next section.

COMPANY'S HEALTH AND STABILITY

AGA has been recognized as one of the most successful architectural, engineering, planning, and environmental consulting firms in the country, having been named as one of the Top 200 "Hot Firms" nationwide, as recognized by ZweigWhite in 2008 and again in 2010. As a recognized leader in the transportation field, AGA is an independent privately-owned company that is financially sound with ample reserves. AGA has not had any contract terminated by any public agency or private client nor has it been a party to any legal or collections actions. Albert L. Grover, P.E., President and Chief Executive Officer, has no plans to relocate the firm from its current offices in Fullerton, sell the company, or to merge with another firm. There are no foreseen conditions that could impede AGA's ability to provide the required project services.

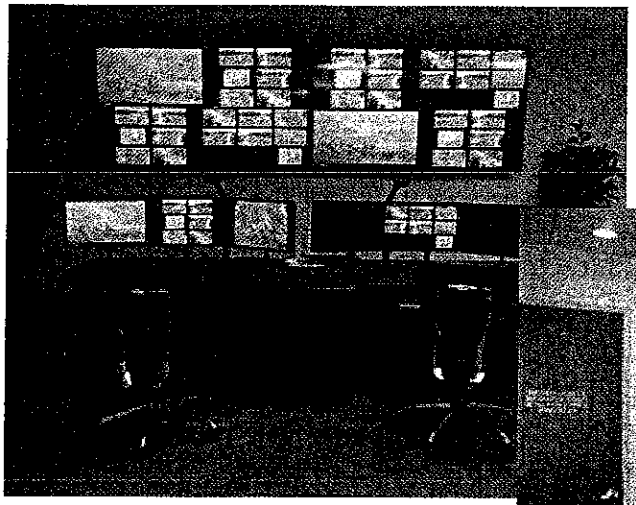
COMPANY'S EXPERIENCE PROVIDING SIMILAR SERVICES TO OTHER MUNICIPALITIES

The AGA approach to on-call professional services and projects is to do more than simply provide labor or prepare design plans and traffic signal timing – *we actually improve traffic operations and safety in everything we touch.* AGA is not a company that simply provides engineering labor to complete client designated tasks; rather, AGA provides a high level of intellectual support to accomplish client objectives. AGA's unique blend of Civil Engineers, Traffic Engineers, and skilled traffic signal system and communications technicians provides a synergy resulting in successful projects where other consulting firms have faltered or failed. Typically, AGA completed projects result in success beyond client expectations.

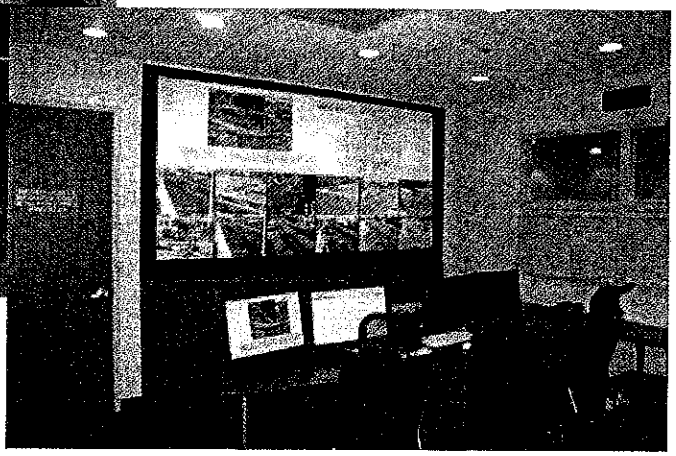
AGA has extensive experience in providing similar services to other cities. We have provided on-call traffic engineering services to the following cities for the length of time noted:

- Montclair 24 years
- La Habra 24 years
- Torrance 17 years
- Victorville 13 years
- Fullerton 19 years
- Cerritos 22 years
- Huntington Beach 23 years
- Fountain Valley 23 years
- Highland 14 years
- San Dimas 5 years

AGA has also developed Traffic Management Centers in Southern California, including those in use in Caltrans Districts 7, 11, and 12. Recent implementations include the TMCs in the City of Buena Park and in the County of Orange. Shown below on the right is the TMC designed and constructed by the AGA Team as part of the Buena Park Citywide ITS Project. This Buena Park project was honored as "Project of the Year" by the Orange County Traffic Engineers Council (OCTEC). On the left is the recently completed TMC designed and constructed by the AGA Team for the County of Orange.



County of Orange Traffic Management Center



City of Buena Park Traffic Management Center

The following is a list of current projects conducted and/or recently completed by AGA for the City of Costa Mesa:

Project: Sunflower Avenue Regional Traffic Signal Synchronization Program (RTSSP)

Services Provided: The City of Costa Mesa developed an overall plan for coordination of traffic signals on major corridors through the City. The Sunflower Avenue Corridor coordinated traffic signal timing and provided necessary upgrades to traffic signal infrastructure to monitor the corridor signals from the City's Traffic Management System. The 3.3 mile corridor, situated between Main Street on the east and Hyland Avenue on the west, includes 14 traffic signals controlled by the Cities of Costa Mesa and Santa Ana.

When: 2016 - Ongoing

Project: Baker Street/Placentia Avenue RTSSP

Services Provided: This City of Costa Mesa administered traffic synchronization project consists of a 17.5 mile corridor containing 25 traffic signals. The project included the design of signal interconnect/communication and traffic signal control systems; construction management; system integration; development, implementation, and fine-tuning of traffic signal

coordination timing plans; monitoring and maintenance of timing plans; and preparation of a final report identifying the work performed, benefits achieved, and recommendations for future improvements. AGA also worked with Caltrans to ensure that the new coordinated traffic signal timing worked in concert with the state owned and operated traffic signals.

When: 2013 – 2017

Project: Costa Mesa Traffic Signal System Review and Analysis Project

Services Provided: The City initiated a Traffic Signal System Master Plan Project which focused on traffic signal timing services and a signal system review of the City's existing signal system. The traffic signal timing services involved conducting an initial review of the existing signal timing plans, providing routine maintenance of traffic signal timing, and resolving traffic signal timing issues. Traffic signal system review focused on the future signal system considerations and developing a Communications Master Plan for implementation of upgrade of the existing system.

When: 2010 – 2012

REFERENCES

Over the past several years, staff of AGA have provided services similar to those required by the City of Costa Mesa to several other agencies in Southern California. Following is a listing of those cities, the services provided, and contacts at the cities who are familiar with AGA's capabilities, personnel and work products.

City: CITY OF FULLERTON

Services Provided: **On-Call Traffic Engineering and Transportation Planning Services**

AGA has provided on-call traffic engineering and transportation planning services to the City since 1997. This includes fulfilling the role of an on-site City Traffic Engineer who attends and presents at the Traffic Commission, Planning Commission, City Council Meetings, and public meetings as a staff representative. Other traffic services include developing a citywide transportation model; recommending modifications to the City's General Plan Circulation Element; conducting/reviewing traffic impact studies for proposed developments; conducting capacity/level of service analyses; conducting citywide radar speed surveys; preparing PS&E for transportation projects; designing and modifying traffic signal installations; designing geometric plans; designing bicycle and pedestrian improvement projects; overseeing construction; preparing, developing, implementing, and fine-tuning signal timing and coordination plans; developing parking management plans; preparation and plan checking traffic control plans; conducting neighborhood traffic studies; and various other tasks. AGA is also under contract to monitor and operate the City's traffic signal control system from our offices. Earlier this year, AGA was awarded the multi-agency Malvern Avenue/Chapman Avenue Corridor Project which is a part of the Orange County Regional Traffic Signal Synchronization Program. That project is currently underway and is being managed by Chalap Sadam.

When: 1997 – Present

Contact: Mr. Don Hoppe, Director of Public Works - (714) 738-6864

City: CITY OF LA HABRA
Services Provided: **On-Call Traffic Engineering and Transportation Planning Services**
AGA has provided on-call traffic engineering and transportation planning services to the City since 1993. Services provided include presentations at the Traffic Commission, Planning Commission and City Council; traffic signal warrant analyses and subsequent traffic signal designs; residential and school traffic studies; traffic impact analyses; development of press releases and videos for local cable television relative to various traffic engineering issues; preparing grant applications; representation at regional governmental meetings; contract administration and construction management. AGA is also under contract to monitor and operate the City's traffic signal control system from our offices.
When: 1993 – Present
Contact: Mr. Chris Johansen, City Engineer - (562) 383-4153

City: CITY OF MONTCLAIR
Services Provided: **On-Call Traffic Engineering and Transportation Planning Services**
AGA has provided on-call traffic engineering and transportation planning services to the City since 1993. Services provided includes presentations at the Traffic Commission, Planning Commission and/or City Council meetings; development of a focused traffic forecast model (of the SCAG sub regional model) to generate future peak hour turning movement volumes, and the determination of LOS and required mitigation measures; traffic signal warrant analyses and subsequent traffic signal designs; traffic impact analyses; preparing grant applications; developing traffic signal timing; representation at countywide inter-governmental meetings; contract administration and construction management. AGA is also under contract to monitor and operate the City's traffic signal control system from our offices.
When: 1993 – Present
Contact: Mr. Mike Hudson, Special Assignments – (909) 625-9445
Mr. Derek Wiescke, Director of Public Works/City Engineer (909) 625-9441

City: ORANGE COUNTY TRANSPORTATION AUTHORITY (OCTA)
Services Provided: **Orange County Regional Traffic Signal Synchronization Program**
AGA is under contract to OCTA to provide professional design and implementation services for traffic signal synchronization projects across Orange County. We have completed five Regional Traffic Signal Synchronization Program (RTSSP) corridor projects over the last five years and will be completing our sixth within the next 90 days. No other consultant has successfully synchronized more traffic signals for OCTA. Each RTSSP project involves the design of signal interconnect/communication and control systems; construction management; system integration; development, implementation, and fine-tuning of coordination traffic signal timing plans; monitoring and maintenance of timing plans; and preparation of a final report identifying the work performed, benefits achieved, and recommendations for future improvements.
When: 2006 – Present
Contact: Mr. Ron Keith, Principal Traffic Engineer (714) 560-5990

City: **SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY (SBCTA) - FORMERLY SANBAG**

Services Provided: **San Bernardino Valley Coordinated Traffic Signal System Project**
On behalf of SBCTA, AGA developed a master plan outlining traffic signal communications and timing needs along major arterials across the San Bernardino Valley. The plan encompasses 650 traffic signals operated by Caltrans, the County, and fifteen cities. AGA has been continuously under contract to SBCTA for more than fifteen years tasked with preparing plans, specifications, and estimates for various interconnect projects across the valley and the development, implementation, and fine-tuning of hundreds of traffic signal synchronization timing plans for morning and afternoon peak period traffic as well as timing plans to address light traffic, or mid-day, periods. Over the past five years, AGA has received and completed over fifty traffic signal synchronization project task orders from SBCTA. Most recently, AGA was awarded a new project to develop traffic signal coordination timing plans for approximately fifty traffic signals along Haven Ave and Milliken Ave in Rancho Cucamonga.

When: 2000 – 2017
Contact: Ms. Andrea Zureick, Director of Fund Administration and Programming, (909) 884-8276

PROJECT TEAM

The key members of AGA's staff have been working together as a team since 1990, completing for both government agencies and developers many different types of projects covering all areas of transportation engineering. Our proposed team, who all work out of our Fullerton office, will be headed by **Mr. Chalap Sadam, P.E., T.E.,** who will serve as the Project Manager for all work conducted for this project. As such, he will remain in charge throughout the contract period and he will be the primary point of contact with the City of Costa Mesa.

Mr. Chalap Sadam, Vice President, is a registered Civil and Traffic Engineer with twenty-seven years of experience his extensive experience in managing and successfully completing multi-agency traffic signal coordination and synchronization projects on-time and within budget has been previously detailed in the Proposed Staffing section of this proposal. Mr. Sadam joined Albert Grover & Associates in 1993, where he quickly exhibited his expertise in preparation of traffic impact studies, development of transportation planning models to evaluate long range impacts, recommendation of practical mitigation measures, design of intersection improvements, design of traffic signal improvements, and preparation of freeway interchange feasibility studies and major investment studies. Over the years, he has completed numerous traffic impact and transportation planning studies for both private developers and municipal clients throughout Southern California. In recent years, Mr. Sadam developed a keen interest in, and has become one of the regions foremost experts in, the development of signal coordination master plans, preparation of traffic signal coordination timing plans, design and operation of traffic signal systems, and implementation of various ITS strategies and programs.

Mr. Sadam's additional experience includes the development of traffic circulation studies and corridor improvement studies, accident analysis, parking feasibility studies, street lighting master plans, speed studies, traffic engineering software development, and project management. His computer skills include experience in the usage of transportation planning and traffic engineering software such as Synchro,

Vissim, TruTraffic, HCS and WEBSTER. He is also familiar with relational database management systems and has used Microsoft Access and Oracle databases along with programming languages such as Visual Basic and C/C++.

Most recently, Mr. Sadam was Project Manager for the Alton Parkway, Adams Avenue, and Antonio Parkway RTSSP Projects in Orange County. All three projects were concurrently managed by him and all three have recently been successfully completed on time within budget and to the satisfaction of our clients. Over the course of his twenty-seven-year career, Mr. Sadam has successfully directed and managed the evaluation, development, and implementation of thousands of coordinated traffic signals throughout Southern California. There simply isn't a project manager available with more hands-on local experience successfully managing and delivering on multi-agency traffic signal coordination and synchronization projects.

Mr. Sadam was AGA's Project Manager for the San Bernardino Valley Coordination Traffic Signal On-Call System Support project. He was the Project Manager for design and implementation of SBCTA's Tier 1 and Tier 2 Traffic Signal Coordination Projects. He is also currently Project Manager for various traffic signal systems projects in the cities of Rancho Cucamonga and Ontario. He was also AGA's Project Manager for the Buena Park Citywide ITS Project; citywide signal retiming projects in the cities of La Habra, Fullerton, Fountain Valley, and Santa Ana. Additionally, Mr. Sadam successfully managed more than a dozen projects conducted by AGA for OCTA, including traffic signal coordination master plan projects, traffic signal coordination demonstration projects, Traffic Light Synchronization Program (TLSP) projects, Traffic Signal Synchronization Program (TSSP) projects, and Regional Traffic Signal System Program (RTSSP) projects.

In addition to Mr. Sadam, the support staff includes **Mr. Mark Miller, P.E., T.E., PTOE,** who will provide project oversight and **Quality Assurance/Quality Control (QA/QC)** for all project work products.

Mr. Mark Miller, Executive Vice President, is a registered Civil and Traffic Engineer, as well as a certified Professional Traffic Operations Engineer, with more than forty years of experience. He has completed numerous traffic and transportation engineering projects and studies ranging from traffic signal and striping designs to review of traffic impact studies to speed zone surveys to warrant analysis for removal of midblock crosswalks, and has made many presentations to Traffic and Planning Commissions and City Councils. His operational experience includes actually operating the City of Montclair's traffic control system for the past fifteen years from AGA's offices in Fullerton.

As is the case with the vast majority of AGA's senior staff, Mr. Miller has prior public agency experience. He previously served as the City Traffic Engineer for the City of Pomona where he was responsible for a $3,000,000 operations and capital improvement budget and managed 14 subordinates in the traffic engineering division. His responsibility included preparation of the traffic and transportation engineering budget, street light assessment districts, and parking districts. He was responsible for the maintenance of over 120 traffic signals, 8,000 street lights, and over 300 miles of pavement markings and signing, and made numerous presentations to commissions, councils, and neighborhood groups. Prior to working in Pomona, he served as Assistant Traffic Engineer in the City of Pasadena for several years. He presently spends 8 hours per week serving as the Contract Traffic Engineer for the City of Fullerton conducting a wide assortment of tasks very similar to those anticipated in the RFP.

Mr. Miller is a thirteen-year member and Past President of the City Traffic Engineers Association. While with that organization, one of his key accomplishments was conducting workshops for various Traffic Commissions and Planning Commissioners from throughout Southern California to educate them on various aspects of traffic engineering.

Project management is a critical component of this project. Unlike other projects where Task Managers can simply manage their respective tasks and report to the overall Project Manager, this project requires extensive involvement of the Project Manager in all tasks and aspects of the project identically to the manner in which AGA has successfully conducted previous projects.

AGA's entire staff will be available to provide specific required services vis-à-vis each individual's expertise on an as-needed basis. We understand that from time-to-time additional staff support may be required and it is in the City's best interest to optimize these services, and complete tasks in an expeditious and economic manner. AGA staff's multi-disciplinary qualifications and experiences allow AGA to provide all the services requested in this RFP. Additional staff that is likely to provide general support to the City over the contract term and their areas of expertise are identified below:

Greg Wong, P. E.	Traffic Signal Timing and Operations
Ruben Perales, P.E.	Traffic Signal Design and Modification
Felipe Ortega	Traffic Signal System Integration and Support

Mr. Greg Wong, Senior Transportation Engineer, is a registered Civil Engineer with twenty years of experience conducting traffic signal timing, transportation planning, capacity and level of service analysis, environmental impact report review and analysis, parking studies, and traffic impact study preparation and review. He has worked extensively on timing plan development utilizing a variety of traffic engineering software, including PASSER, WEBSTER and Synchro. He was instrumental in developing hundreds of signal timing plans for the cities of La Habra, Fountain Valley, Santa Ana, and Fullerton; hundreds of signal timing plans for various agencies under the OCTA traffic synchronization program, and for approximately 650 intersections in the San Bernardino Valley Coordinated Traffic Signal System Project for SBCTA. In addition to his timing development projects, he has provided transportation planning services for a variety of projects such as land developments, site analyses, traffic impact studies/analyses, parking and circulation analyses, and traffic forecasting and modeling. He has also been responsible for annual CMP monitoring in both Montclair and Upland.

Mr. Wong rejoined AGA in July 2001 after having had previously worked for AGA for several years prior to leaving to obtain experience working in the public sector for both the City and County of Los Angeles. His duties at AGA include the preparation of traffic signal coordination timing plans, traffic impact studies/analyses, GIS analysis/ design/implementation projects, parking circulation analyses, and traffic signal designs. As a Transportation Engineering Associate for the City of Los Angeles Department of Transportation, he worked in the Bureau of Traffic Management. His duties were to divert and control the flow of cut-through traffic from residential areas to arterials and to monitor the Safe Route to School program. He also prepared the AB 1475 Grant application for installation of Smart Crosswalks at 50 uncontrolled intersections. As a Civil Engineering Assistant for the County of Los Angeles, he prepared and reviewed traffic signal coordination timing plans, traffic signal modification plans, striping and marking layouts, maps utilizing GIS (ArcView), and left-turn studies.

Mr. Wong will be supported by **Andrew Luna, Kawai Mang, Yolanda Cervantes,** and **Jessica Espinoza.**

Mr. Ruben Perales, Senior Design Engineer, has been working on conceptual improvement plans, intersection level of service analyses, signal design and signal modification plans, fiber optic communication plans, signal coordination plans, citywide speed surveys, signing & striping plans and street lighting plans. He has prepared plans for Caltrans, other government agencies such as the County of Los Angeles, City of Indio, City of Calimesa, City of Fullerton, and for various private developers such as Home Depot, Walmart, etc. He has conducted field topographic surveys required to develop design plans to improve intersection safety and update signal hardware to current standards. He is very familiar with AutoCAD, MicroStation, Crossroads software, and various Microsoft applications.

Providing technical support to Mr. Perales will be **Ignacio Sanchez H., P.E., T.E., PTOE, Roland P. Hizon, Chad Veinot, TSOS,** and **Elias Garcia.**

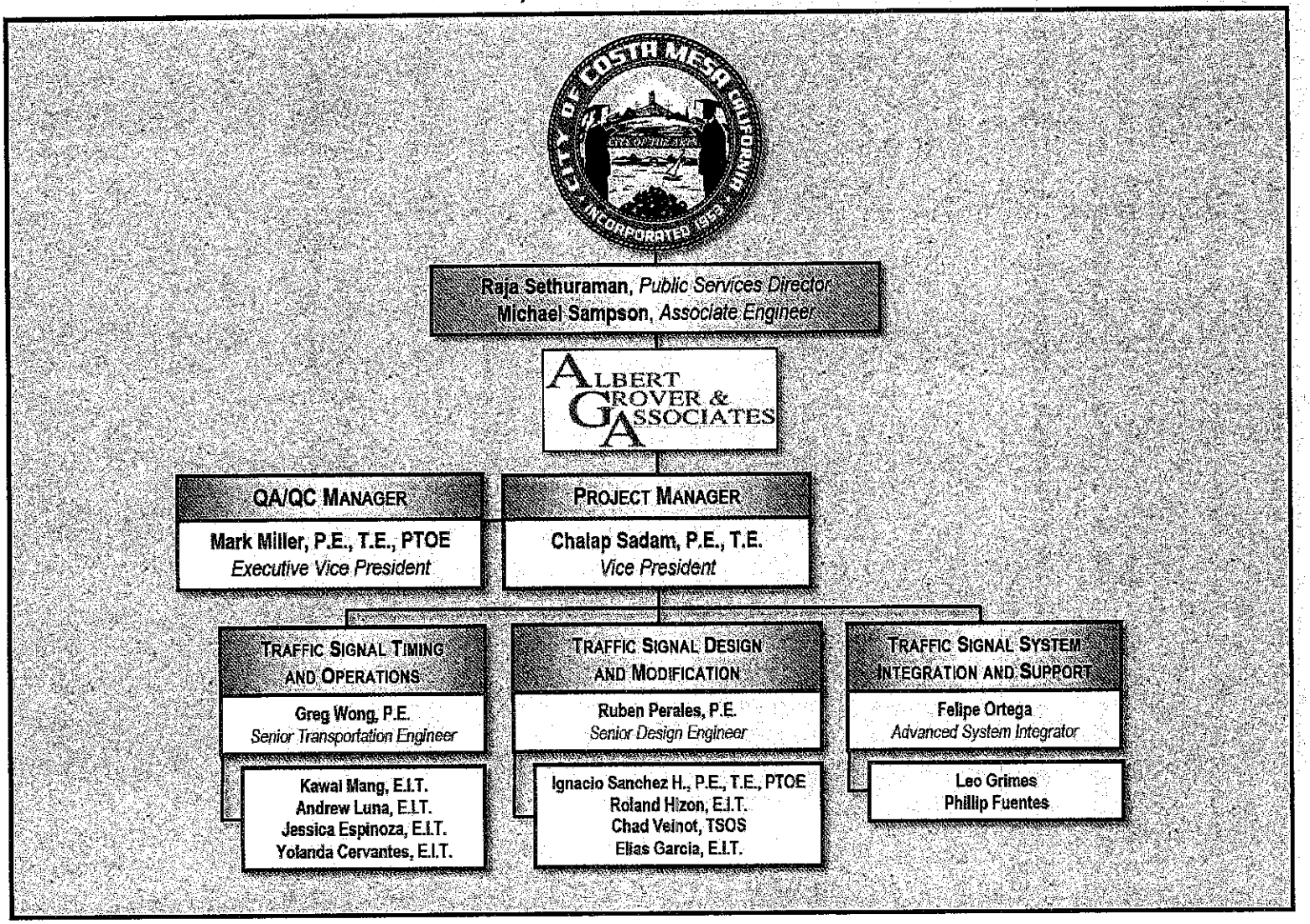
Mr. Felipe Ortega, Advanced Systems Integrator, is a Level 3 Signal Technician and a recognized expert in traffic signal controller technology and communications systems. Mr. Ortega has been sharing technical knowledge and providing training to multiple cities on the various traffic signal control systems. He was responsible for conducting field evaluations of hundreds of signalized intersections throughout the San Bernardino Valley and multiple corridor projects in Orange County. Along with AGA's support team members, **Mr. Phillip Fuentes, and Mr. Leo Grimes**, Mr. Ortega implemented both local and coordination timing plans in hundreds of signal controllers, including nearly every brand of controller in use in Southern California. They have been responsible for fine-tuning signal timing plans at hundreds of locations, as well as daily monitoring of signal systems in Orange County and the Inland Empire. They have also been responsible for purchasing, installing, and integrating hardware and software in local Traffic Management Centers, including a wide range of central control systems such as Intelight MaxView, McCain QuicNet, TransSuite, Econolite Aries and Centracs, and Siemens Actra and Tactics systems. They resolved signal system communication problems, addressing both internal communication issues and multijurisdictional issues. Their familiarity with signal maintenance procedures and personnel are great assists in the implementation, fine-tuning, operation, monitoring, and troubleshooting of various signal systems.

Mr. Ortega will be supported by **Leo Grimes** and **Phillip Fuentes.**

The AGA Team Organization Chart is shown on page 12. Full resumes for the Project/Task Leads are provided in **Appendix A**.

The multi-disciplinary qualifications and experiences of AGA's technical staff allows the Project Team to address all of the services requested in this RFP. The table on page 13 summarizes AGA's Staff Qualifications.

On-Call Traffic Engineering Services
Project Organization Chart



AGA's Staff Qualifications and Availability

Name	Certification/ Registration	Years of Experience	Years with AGA	Education Training	Position
Chalap Sadam	P.E., Civil #74080 P.E., Traffic #1813	27	24	MS-Civil, 1990 MBA, 2002	Vice President
Mark Miller	P.E., Civil #40956 P.E., Traffic #1575 P.T.O.E. #233	43	24	BS-Civil, 1974	Executive Vice President
David Roseman	P.E., Traffic #1585	30	2	BS-Civil, 1988	Principal Transportation Engineer
Greg Wong	P.E., Civil #64349	21	16	BS-Civil, 1996	Senior Transportation Engineer
Ruben Perales	P.E., Civil #83169	14	12	BS-Civil, 2004	Senior Design Engineer
Ignacio Sanchez H	P.E., Civil #72073 P.E., Traffic #2344 P.T.O.E. #2457	26	12	BS-Civil 1986	Senior Design Engineer
Roland Hizon	E.I.T. #XE095497	28	12	BS-Civil, 1982	Transportation Engineer
Felipe Ortega	Level 3-Signal Technician	22	9	Signal Technician Level 3	Advanced System Integrator
Chad Veinot	T.S.O.S. #136	16	13	Traffic Signal Operations Specialist	Project Development Manager
Leo Grimes	Level 3-Signal Technician	27	17	Signal Technician Level 3	Senior Signal System Specialist
Phillip Fuentes	C-10 License	28	10	Signal Technician Level 2	Signal System Specialist
David Chen	P.E., Civil #71656	19	15	MS-Civil, 1999	Design Engineer
Elias Garcia	E.I.T. #154726	4	4	BS-Civil, 2015	Associate Engineer
Kawai Mang	E.I.T. #153235	3	3	BS-Civil, 2013	Associate Engineer
Andrew Luna	E.I.T. #156851	2	2	BS-Civil, 2016	Associate Engineer
Jessica Espinoza	E.I.T. #160008	2	2	BS-Civil, 2016	Associate Engineer
Yolanda Cervantes		2	2	BS-Civil, 2016	Associate Engineer

HOURLY RATES

Albert Grover & Associates (AGA) schedule of hourly rates is shown below and will remain unchanged for a minimum of one-year from the date of contract acceptance. After one-year, any proposed change in rates will be provided in writing to the City for consideration and authorization. Staff services will be billed on an hourly basis per each individual's job title shown on the schedule of hourly rates.

Principal/President	$	275	
Vice President	$	250	
Director of Project Development	$	250	
Principal Transportation Engineer	$	225	
Senior Transportation Engineer	$	200	
Senior Design Engineer/Project Development Manager	$	185	
Advanced System Integrator	$	180	
Senior Associate	$	170	
Transportation Engineer/Senior Project Coordinator	$	165	
Design Engineer/Senior Signal Systems Specialist/ System Integrator	$	150	
Associate Transportation Engineer/Civil Engineering Associate	$	140	
Transportation Engineering Associate	$	135	
Signal Systems Specialist	$	135	
Signal Systems Technician	$	125	
Senior CADD Operator	$	125	
Project Coordinator/Associate Engineer	$	110	
CADD Operator	$	110	
Assistant Transportation Engineer/Assistant Engineer	$	90	
Traffic Enumerator, Engineering Aide	$	75	
Engineering Aide II	$	50	
Council/Commission Meetings, Hearings, etc. (Billing Rate + $50 Surcharge)	$	1,000	Minimum
Expert Witness (Billing Rate + $50 Surcharge)	$	1,000	Minimum
Expert Witness - Deposition/Court (Billing Rate + $100 Surcharge)	$	1,000	Minimum
Subconsultants will be billed at cost plus 20%			

Conditions of Usage: The above rates are typically effective for a 12-month period, but AGA maintains the right to change the billing rates at any time for convenience of record keeping. Therefore, all billings will always be at the then current billing rates. This will not affect any agreed upon total or not-to-exceed fees.

INVOICES WILL BE SUBMITTED MONTHLY AND SHALL BE DUE AND PAYABLE WITHIN 30 DAYS. FINANCE CHARGES MAY BE ACCRUED DAILY ON UNPAID BALANCES BASED ON A 10% ANNUAL PERCENTAGE RATE.

COMPLIANCE WITH PROFESSIONAL SERVICES AGREEMENT

AGA has reviewed the City's standard Professional Services Agreement and accept its terms and conditions in their entirety as set forth in the RFP. Furthermore, we have no existing or potential conflict of interest which might impair or undermine our ability or credibility regarding the proposed services.

APPENDIX A

Resumes of Key Personnel

ALBERT GROVER & ASSOCIATES

CHALAP K. SADAM, P.E.
VICE PRESIDENT

EDUCATION

Master of Business Administration
University of Southern California
Los Angeles, 2002

Master of Science, Civil Engineering
(Transportation)
Virginia Polytechnic Institute & State University,
Virginia 1990

Bachelor of Engineering, Civil Engineering
Jawaharlal Nehru Technological University
India, 1988

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers
Institute of Transportation Engineers
Intelligent Transportation Systems Council
Transportation Planners Council
Southwestern Region Transportation Model Users' Group
The Urban and Regional Information Systems Association

PROFESSIONAL REGISTRATION

Registered Civil Engineer in California
CE # 74080
Registered Traffic Engineer in California
TE # 1813

PROFESSIONAL EXPERIENCE

Mr. Sadam joined Albert Grover & Associates in 1993 as a Transportation Engineer, and provides expertise in the preparation of traffic impact studies, development of transportation planning models to evaluate long range impacts, development of signal coordination master plans, preparation of traffic signal coordination timing plans, design and operation of traffic signal systems, design of intersection improvement plans, traffic signal interconnect plans and Intelligent Transportation System (ITS) plans, traffic accident analysis and recommendation of mitigation measures, and the preparation of freeway interchange feasibility studies and Major Investment Studies (MIS). Mr. Sadam has completed numerous traffic impact and transportation planning studies in Southern California.

Mr. Sadam's additional experience includes the development of traffic circulation studies and corridor studies, signal synchronization feasibility studies, parking feasibility studies, street lighting master plans, speed studies, traffic engineering software development and project management. Computer skills include experience in the usage of transportation planning and traffic engineering software such as Synchro, Tranplan, Transyt-7F, Passer-II, Passer-IV, HCS and WEBSTER. Mr. Sadam is also familiar with relational database management systems and has used Microsoft Access and Oracle databases along with programming languages such as Visual Basic and C/C++. His expertise includes experience and education in Geographical Information Systems (GIS), and he has extensively used GIS software and applications.

Mr. Sadam was instrumental in the development of a microscopic air quality emissions model to quantify the reduction in pollution due to traffic signal coordination. Mr. Sadam was also responsible for the development of AGA's Time-Space Diagram routine using Autolisp in AutoCAD. Additionally, Mr. Sadam developed a computer program based on NCHRP-255 procedures, which predicts future turning movements using link volumes from transportation planning models. Prior to joining AGA, Mr. Sadam was a Transportation Engineer with Mohle, Grover & Associates for four years.

The following is a brief listing of some of Mr. Sadam's projects:

- OCTA Euclid Street Signal Synchronization Demonstration Project and Chapman Avenue and Orangethorpe Avenue TLSP Projects.
- Tier-1 and Tier-2 San Bernardino Valley Coordinated Traffic Signal System Design, Implementation and Management of 650 signals in 15 cities.
- OCTA Bus Rapid Transit and Traffic Signal Synchronization Project on Harbor Boulevard and State College Boulevard.
- Orange County Traffic Signal Coordination Program.
- I-405 Freeway (SR-73 to I-605) Major Investment Study and subsequent PSR/PDS and PA/ED in Orange County.
- Orange County and Southern California Regional ITS Architecture
- San Bernardino Valley Coordinated Traffic Signal System Plan, San Bernardino Associated Governments.
- Coachella Valley Signal Synchronization Feasibility Study, Coachella Valley Association of Governments.
- Fullerton Year 2020 Traffic Projections and Identification of Long Term Roadway Improvement Study.
- Bolsa Chica Corridor Capacity Augmentation Study.
- Indian Canyon Drive, One-Way to Two-Way Conversion Traffic Study, Palm Springs.
- Citywide Transportation Study and Developer Fee Program, Montclair.
- Yuma Drive/I-15 Freeway Interchange Feasibility Study, Norco.
- Soledad Canyon Road Traffic Flow Improvement Study, Santa Clarita.
- Travel Demand Forecasting Models - Cities of Colton and Montclair.
- Lancaster Citywide traffic signal coordination project, which involved coordinating 85 signals on ten crossing arterials.
- Traffic signal synchronization of 260 signals on 22 crossing arterials in the Cities of Fountain Valley, Garden Grove, Huntington Beach, Seal Beach and Westminster.
- Multitude of traffic signal system design and signal coordination projects throughout Southern California.
- Traffic signal synchronization of 113 signals on eight arterials in the Cities of Chino, Montclair, Ontario, Upland and the County of San Bernardino.
- Street Lighting Master Plans for Beverly Hills, Baldwin Park, and Orange.
- Pavement Management Program for Beverly Hills.
- Accident analysis and improvements, separate studies in the Cities of Baldwin Park, Downey, Inglewood, La Habra, Montclair and Palm Springs.

PAPERS/PRESENTATIONS

"San Bernardino Valley Coordinated Traffic Signal System – Implementation of Tiers 1 & 2"
Presented at ITE Annual Conference, Anaheim, California

"Orange County, California's Traffic Signal Coordination Program"
Presented at ITE District 6 Meeting in Portland, Oregon

"Strategies to Recapture Lost Arterial Traffic Carrying Capacities." Presented at the ITE Annual Conference, Rapid City, South Dakota

"Measures to Mitigate Impacts Associated with Temporary Closure of a Major Intersection in Orange County"
Presented at ITE District 6 Annual Meeting, Honolulu, Hawaii

"Developing Coordination Signal Timing Using Software as a Tool"
Presented at ITE Southern California and RSBTEA Seminars

"Development of Traffic Signal Coordination Timing." Presented at the Riverside-San Bernardino ITE Section Workshop

"Quantification of Air Quality Benefits Achieved Through Traffic Signal Coordination"
Presented at ITE District 6 Annual Conference, Salt Lake City, Utah

"A Successful Multijurisdictional Traffic Signal Coordination Project"
Presented at ITE Annual Conference, Dana Point, California

"Multijurisdictional Traffic Signal Coordination - A Pleasant Experience"
Presented at the 65th Institute of Transportation Engineers Annual Meeting, Denver, Colorado

ALBERT GROVER & ASSOCIATES

MARK H. MILLER, P. E.
EXECUTIVE VICE PRESIDENT

EDUCATION

BS Civil/Traffic Engineering
California Polytechnic University
Pomona, 1974

Northwestern University
Evanston, Illinois
Traffic & Transportation Engineering
Highway Capacity Workshop

Institute of Transportation Studies
Safety Design and Operational Practices for Streets and Highways (FHWA)
Traffic Signal Equipment & Operations
Urban Street Design
Public Works Inspections
Legal Aspects and Liabilities
Risk Management & Traffic Safety

PROFESSIONAL ASSOCIATIONS

American Public Works Association
American Society of Civil Engineers
City Traffic Engineers Association
Institute of Transportation Engineers
Orange County Traffic Engineering Council
American League of Cyclists

PROFESSIONAL REGISTRATION

Registered Civil Engineer in California
CE #40956
Registered Traffic Engineer in California
TE #1575
Professional Traffic Operations Engineer
PTOE #233

PROFESSIONAL EXPERIENCE

Mr. Miller joined Albert Grover & Associates in 1993 as Vice President, and provides the firm extensive experience in all phases of ITS design, signal interconnect and coordination plans, CCTV installations, traffic signal/signal system design, and street lighting evaluation and design. Mr. Miller began his consulting career with Mohle, Grover & Associates in January, 1990, as a senior engineer to provide professional traffic engineering and operations services. He is a registered Civil Engineer, Traffic Engineer, and Professional Traffic Operations Engineer with over thirty-five years' experience. This includes more than fifteen years serving as a City Traffic Engineer. Mr. Miller has managed many ITS, traffic signal and street light system projects. He has developed and implemented design standards, specifications and cost estimates for traffic signals, interconnect projects, CCTV projects, and street light projects. He also has experience in preparing traffic signal coordination and timing plans. Additionally, Mr. Miller has provided expert witness testimony on a variety of issues. He has served as both a member and the Chairman of the City Traffic Engineers Association (CTE) and, as such, has been instrumental in conducting workshops to educate Traffic Commissioners and Planning Commission from Cities throughout Southern California on various aspects of traffic engineering. Mr. Miller has provided on call as-needed traffic engineering services to the Cities of Cerritos, La Habra, Montclair, San Dimas, Torrance, and Victorville, and is serving as the Contract City Traffic Engineer for the Cities of Fullerton (since 1998) and Placentia.

While employed as City Traffic Engineer for the City of Pomona, he was responsible for a $3,000,000 operations and capital improvement budget, and managed 14 subordinates in the traffic engineering division. Mr. Miller has "hands on" experience with programming all models of traffic signal controllers. He has developed numerous traffic signal coordination and timing plans for use with a wide variety of central control and local controller software. His experience also includes four years with the City of Pasadena as an Assistant Engineer in Traffic. He was responsible for the preparation

and review of major transportation studies. He also assisted in the preparation and implementation of the Rose Bowl Major Event Traffic and Parking Study, Madison Heights/Oakknoll Neighborhood Traffic Study, various bikeway studies, traffic control device inventories and traffic safety studies. He also developed a traffic accident recording system.

From 1979 to 1982, Mr. Miller was a Civil Engineer with the Illinois Department of Transportation. During this time, he worked in the Bureau of Traffic and the Bureau of Bridges. He was responsible for establishing policies and contracts for maintenance of major interstate signing projects. He also managed various statewide hazard elimination safety projects. He was responsible for developing traffic signing and pavement marking standards for the Illinois Manual of Traffic Control Devices.

Mr. Miller's engineering experience began when he was an Engineering Assistant in the City of San Dimas, California, for two years. He was involved with the preparation and review and inspection of municipal street improvement projects. He managed a variety of pavement maintenance projects from major street reconstruction to slurry sealing. He performed various traffic engineering functions such as speed surveys, school zone signing, and signing and striping projects, in addition to a wide array of street lighting projects.

The following is a brief listing of specific consulting projects for which Mr. Miller has been responsible:

- Certification testing of various electronic equipment.
- Interconnect Analysis, Design and Coordination - Cities of Bakersfield, Cerritos, Chino, Colton, La Habra, Lancaster, Loma Linda, Montclair, Palm Springs, Pomona, Rialto, San Bernardino, Santa Clarita, Temecula, Upland, and Visalia.
- Multijurisdictional Traffic Signal Synchronization - S.C.A.Q.M.D and Orange County Growth Management Area No. 6.
- Various Traffic Signal Design, CCTV, Striping & Street Light Design Projects for Cities, Counties, and State.
- Montclair Plaza Traffic Operations Study - City of Montclair.
- Roadway Signal Improvements - Cities of Cerritos, Chino, Claremont, Cypress, Ontario, and Upland.
- Congestion Management Plan - City of Santa Ana.
- Bridge Design and Load Limit Determination, Statewide, State of Illinois.
- Annual Statewide Interstate Maintenance Signing Project, State of Illinois.
- Statewide Hazard Elimination Project for Narrow Bridges, State of Illinois.
- Identification of High Accident Locations - Cities of Downey, Inglewood and Pomona.
- Annual Citywide Pavement Maintenance Projects - City of San Dimas.
- Computerized Traffic Accident Record System - City of Pasadena.
- Annual Monitoring of Traffic Signal Timing - Cities of Colton, Fullerton, Loma Linda, Montclair, Palm Springs and Rialto.

- Speed Zone Surveys - Cities of Baldwin Park, Buena Park, Cathedral City, Cerritos, Chino, Cypress, Fountain Valley, Fullerton, Gardena, Hawthorne, Hermosa Beach, Huntington Park, La Habra, Lancaster, Long Beach, Norco, Ontario, Palm Springs, Pomona, San Dimas, San Marino, Santa Ana, Santa Clarita, Santa Fe Springs, Santa Monica, Torrance, and Yucaipa; California State Universities of Fullerton, Long Beach, and Los Angeles; and Antelope Valley Community College.
- School Safety Studies and Development of Safe Route to School Programs.

PAPERS/PRESENTATIONS

"Strategies to Recapture Lost Arterial Traffic Carrying Capacities." Presented by Mark Miller at the ITE Annual Conference, Rapid City, South Dakota

"Three Year Experience with Flashing Yellow Arrow Display"
Presented at ITE Annual Conference, Anaheim, California

"Effectively Slowing Drivers – Speed Feedback Signs"
Presented at ITE District 6 Annual Meeting, Honolulu, Hawaii

"School Area Traffic Safety"
Presented at City Traffic Engineers Traffic Commissioners Workshop

"Quantifications of Air Quality Benefits Achieved Through Traffic Signal Coordination"
Presented at ITE District 6 Annual Meeting, Salt Lake City, Utah

"A Successful Multijurisdictional Traffic Signal Coordination Project"
Presented at ITE Annual Conference, Dana Point, California

"Minimize Delay Maximize Progression with Protected Permissive Lead/Lag Phasing"
Presented at ITE Inland Empire Section Technical Workshop

"Microwave Traffic Signal Interconnect - A Viable Alternative to Land Lines"
Presented at ITE District 6 Annual Meeting, Portland, Oregon
(Best Paper Award)

ALBERT GROVER & ASSOCIATES

GREG WONG, P.E.
SENIOR TRANSPORTATION ENGINEER

EDUCATION

BS, Civil Engineering
University of California
Irvine, 1996

Certified Geographical Information Systems
Westech College
Irvine1997

PROFESSIONAL ASSOCIATIONS

Institute of Transportation Engineers

PROFESSIONAL REGISTRATION

Registered Civil Engineer in California
CE # 64349

PROFESSIONAL EXPERIENCE

Mr. Wong rejoined Albert Grover & Associates (AGA) in July 2001, as a Transportation Engineer. He had previously worked for AGA for several years prior to leaving to obtain experience working in the public sector. His duties at AGA include the preparation of ITS design plans, traffic impact studies/analyses, traffic signal coordination timing plans, GIS analysis/design/implementation projects, parking circulation analyses, and traffic signal designs. Mr. Wong has extensive experience in using a variety of transportation planning and traffic engineering software, such as Synchro, VISSIM, HCS, and WEBSTER. Other software includes GIS (ArcView), AutoCAD and MicroStation.

Prior to rejoining AGA, Mr. Wong worked for the City of Los Angeles Department of Transportation as a Transportation Engineering Associate and the Los Angeles County Public Works Department as a Civil Engineering Assistant. As a Transportation Engineering Associate, Mr. Wong worked in the Bureau of Traffic Management. His duties were to divert and control the flow of cut-through traffic from residential areas on to arterials and to monitor the Safe Route to School program. He also prepared the AB 1475 Grant application for the installation of Smart Crosswalks at 50 uncontrolled intersections in the City of Los Angeles. As a Civil Engineering Assistant for the County of Los Angeles, Mr. Wong prepared and reviewed traffic signal coordination timing plans, traffic signal modification plans, striping and marking layouts, maps utilizing GIS (ArcView), and left-turn studies. He was a key participant in numerous projects that involved the state, local cities and private agencies. These included County TSSP projects, street and highway improvement projects, local city projects and County signal upgrades.

The following is a brief listing of some of the projects on which Mr. Wong has been involved:

- La Habra/Brea Signal Timing Coordination Project: Signal timing and coordination for 74 signals on 8 arterials in the Cities of La Habra and Brea.
- City of Burbank: Signal timing and coordination of 25 signals (including one Caltrans signal) on two arterials (Magnolia Street and Garden Grove Boulevard).
- Orange County Transportation Authority Orangethorpe Avenue TLSP Project: Signal timing and coordination for 48 signals in the Cities of La Palma, Buena Park, Fullerton, Anaheim and Placentia, including Caltrans.

- San Bernardino Associated Governments Signal Coordination Project: Signal interconnect, timing and coordination of approximately 650 signals throughout 12 Cities.
- City of Fullerton General Plan Update: Assist the City of Fullerton in the traffic analysis of the update to the General Plan. Analysis includes the traffic impacts to 96 intersections and development of long term mitigation needs.
- Orange County Transportation Authority Bus Rapid Transit Project: Signal timing and coordination of 157 signals on three arterials (Harbor Blvd, Chapman Avenue and State College Boulevard) in the Cities of Brea, Fullerton, Anaheim, Garden Grove, Santa Ana, Fountain Valley and Costa Mesa.
- Los Angeles County Traffic Signal Synchronization Projects: Analysis and recommendations on upgrading signals along Artesia Boulevard, Studebaker Road, Wilmington Avenue, and Vincent/Glendora/Hacienda Boulevard.
- City of West Hollywood, Sunset Boulevard Signal Timing Project (12 intersections): Convert BiTran 233 program timing to BiTran 2033 program timing. Modify/fine tune existing timing plans and/or create additional timing plans where needed.
- Costa Mesa/Santa Ana Signal Timing Coordination Project: Signal timing and coordination for 41 signals on 5 arterials in the Cities of Costa Mesa and Santa Ana.
- Orange County Transportation Authority Chapman Avenue TLSP Project: Signal timing and coordination for 52 signals in the Cities of Orange and Garden Grove, including Caltrans.
- Orange County Transportation Authority I-405 Widening Project (I-605 to SR-73): Freeway, ramp and arterial intersections evaluations/analyses.
- Fullerton Transportation Center Project: Assist the City of Fullerton in the traffic impact analysis of the Fullerton Transportation Center. Run the City's model and analyze the impacts of the project and develop mitigations.
- City of Burbank: Signal timing and coordination of 37 signals on two arterials (Hollywood Way and Buena Vista Street).
- City of Huntington Beach: Signal timing and coordination of 51 signals on five arterials.
- City of Fountain Valley: Signal timing and coordination of 55 signals on nine arterials.
- Orange County Transportation Authority Euclid Street Regional Traffic Signal Synchronization Project: Signal timing and coordination of 66 signals on Euclid Street in the Cities of La Habra, Fullerton, Anaheim, Garden Grove, Santa Ana and Fountain Valley, including Caltrans.
- City of Pasadena: VISSIM Modeling and signal timing for the Pasadena Light Rail (Gold Line).
- Multijurisdictional Traffic Signal Coordination Timing Project: Coordination of 50 signals on one arterial for the Cities of Pico Rivera, Downey, South Gate, and Paramount.
- Los Angeles County: Multijurisdictional signal timing and coordination of signals on Atlantic Boulevard, Garfield Avenue, and Sepulveda Boulevard.

- City of Fullerton: Citywide Traffic Impact Analysis and Long Term Mitigation Needs.
- City of Lancaster Signal Timing Project: Signal timing and coordination of 85 signals on 10 arterials.
- Multijurisdictional Traffic Signal Coordination Timing Project: Coordination of 56 signals on two arterials for the Cities of Fullerton, Placentia, and Yorba Linda.
- City of La Habra traffic impact studies at various locations.
- Coachella Valley Association of Governments: Signal Interconnect Master Plan Cost Analysis.
- Assisted in preparing signal modification plans for projects in the Cities of Yucaipa, Cerritos, and La Habra.
- City of Beverly Hills Street Lighting System Master Plan: Data gathering and analysis.
- DataBase & Software Development - Accident Surveillance, Traffic Sign Inventory, Collision Diagrams & Training of staff for the Cities of: Brea, Murrieta, Taft, San Fernando, Newport Beach, and the County of Monterey. Traffic Study Reports and Traffic Impact Reports for various agencies in California.
- Analysis for Build-Out & Projected Year 2020 and Regional Traffic Plan RTP 2030 as part of the General Circulation Plan for the City of Murrieta.
- Design of the "Parabolic Vertical Curve program", "Time Space Diagram", "Collision Diagram", and many other computer programs and routines.

ALBERT GROVER & ASSOCIATES

RUBEN PERALES, P.E.
SENIOR DESIGN ENGINEER

EDUCATION

BS, Civil Engineering
California State Polytechnic University
Pomona, 2005

PROFESSIONAL ASSOCIATIONS

Institute of Transportation Engineers
American Society of Engineers
Orange County Traffic Engineering Council

PROFESSIONAL REGISTRATION

Registered Professional Engineer in California
CE #83169

PROFESSIONAL EXPERIENCE

Mr. Perales joined Albert Grover & Associates (AGA) in September 2005 as a Transportation Engineering Assistant. While with AGA, Mr. Perales has been working on conceptual improvement plans, intersection level of service analyses, signal design and signal modification plans, fiber optic communication plans, signal coordination plans, citywide speed surveys, signing & striping plans and street lighting plans. He has prepared plans for Caltrans, other government agencies such as the County of Los Angeles, City of Indio, City of Calimesa, City of Fullerton, and for various private developers such as Home Depot, Walmart, etc. He has conducted field topographic surveys required to develop design plans to improve intersection safety and update signal hardware to current standards. He is very familiar with AutoCAD, MicroStation, Crossroads software, and various Microsoft applications.

Mr. Perales had previously worked for the City of Upland Traffic Division for one and one half years. His experience there included preparing street improvement/striping/traffic control plans; initiating work orders for removal and installation of traffic signs; preparing striping modification plans; retrieval of accident reports and collision diagrams utilizing the Crossroads software program; setting up traffic counters and compiling the count data; calculating traffic volumes; conducting traffic signal warrant analyses; and providing "counter service."

The following is a brief listing of some of the projects on which Mr. Perales has been involved at AGA:

- City of Huntington Beach: Conducted Level of Service (LOS) analysis for the intersections of Brookhurst Street/Adams Avenue and Bushard Street/Adams Street to identify required geometric improvements at intersection to achieve an acceptable LOS. Prepared geometric conceptual plans, illustrating required improvements and impacts to adjacent properties.
- City of Indio: Conceptual roadway improvement plans, signing and striping plans, street lighting plans, traffic signal plans, and signal interconnect plans for Jackson Avenue/I-10 Freeway interchange, for Monroe Street/I-10 Freeway interchange, and a new shopping center at Jackson Avenue/Avenue 42. Flashing yellow arrow conversions at Oasis Street/Requa Avenue and Avenue 46/Clinton Street. Traffic signal plans at Jefferson Street/Highway 111 (intersection shared with City of La Quinta) and Highway 111/Shields Road.

- OCTA Chapman Avenue Traffic Light Synchronization Program (TLSP) Project: Intersection equipment upgrades for communication purposes for City of Garden Grove, City of Orange, Caltrans, and County of Orange. Fiber Optic Communication Plans and Specifications for City of Garden Grove. Intersection improvement plans for Caltrans to upgrade controllers and connect existing fiber for communication purposes.
- OCTA Orangethorpe Avenue TLSP Project: Intersection equipment upgrades or communication purposes for City of La Palma, City of Buena Park, City of Fullerton, City of Anaheim, City of Placentia, Caltrans, and County of Orange. Caltrans controller upgrades along with installation of GPS units and antenna at various locations, and fiber integration to Caltrans TMC. Coordinated with each agency in applying for all required encroachment permits. Procurement of required equipment (controllers, GPS units, traffic signal cabinets, service cabinets, etc.) from different vendors and from Caltrans.
- Orange County Transportation Authority Bus Rapid Transit Project: Signal timing and coordination of 157 signals on three arterials (Harbor Blvd, Chapman Avenue and State College Boulevard) in the Cities of Brea, Fullerton, Anaheim, Garden Grove, Santa Ana, Fountain Valley and Costa Mesa.
- Orange County Transportation Authority Traffic Signal Synchronization Implementation Project: Implementation and monitoring of signals on three arterials (Harbor Blvd, Chapman Avenue, and State College Boulevard) in the Cities of Brea, Fullerton, Anaheim and Costa Mesa. Development of Traffic Signal Interconnect Plans for City of Costa Mesa along Harbor corridor, which included fiber optic cable installation and integration of fiber related equipment.
- Los Angeles County Traffic Signal Synchronization Projects: Traffic signal modifications along Artesia Boulevard, Wilmington Avenue, Vincent/Glendora/Hacienda Boulevard, and Studebaker Road.
- City of Buena Park: Field inventory of existing signal equipment in controller cabinets along Valley View Street, Knott Avenue, and La Palma Avenue to be utilized in signal synchronization project. Coordination with Caltrans for installation of GPS time source receiver unit at the Valley View Street/SR-91 Freeway interchange, which included Encroachment Permit application process.
- City of Calimesa: Traffic signal plan for Calimesa Boulevard at Myrtlewood Drive along with street lighting plans for Calimesa Boulevard.
- City of Carson: Traffic signal plans for various intersections including 223rd Street at Bonita Street and 223rd Street at the RV America Driveway.
- City of Costa Mesa: Traffic Signal System Master Plan detailing existing infrastructure and infrastructure required for the future. Identification of several corridors throughout the City that could potentially be funded by local grant money.
- City of Fullerton: Traffic signal plans for various intersections including Harbor Boulevard/Houston Street and Orangethorpe Avenue/Highland Avenue. Flashing yellow arrow conversions at several locations including Euclid Street/Malvern Street and Euclid Street/Commonwealth Avenue. Signal interconnect plans which include installation of wireless ethernet radios for communication purposes along Chapman Avenue.

- City of La Habra: Conceptual roadway improvement plans for Harbor Boulevard/Whittier Boulevard and Harbor Boulevard/Lambert Road to be used for grant applications.
- City of La Habra: Harbor Boulevard Fiberoptic Signal Interconnect Plans including design of CCTV camera installations along with integration in Traffic Management Center. Integration of fiber optic and wireless communications.
- City of Ontario: Traffic signal plans, signing and striping plans, street lighting plans, and signal interconnect plans for Home Depot on Euclid Avenue (SR-83)/Riverside Drive.
- City of Palm Springs: Traffic signal plans, signing and striping plans, and signal interconnect plans for Home Depot at Gene Autry Trail and Ramon Road.
- City of Placentia: Local Signal Synchronization Plan for Rose Drive corridor. Traffic signal cabinet inventory to identify required equipment upgrades along project corridor. Preparation of Citywide Traffic Signal System Map identifying existing signal interconnect, traffic signal cabinet and controller type.
- City of Redondo Beach: Signing and striping plans for Esplanade between Paseo de la Playa and Knob Hill Avenue. Included conceptual plans for several alternatives such as reverse angle parking and parallel parking with bike lanes and buffer zones.
- City of Seal Beach: Traffic signal modification, intersection equipment upgrade, and signal interconnect plans. GPS time source unit installation at three Caltrans intersections via Caltrans Encroachment Permit.
- City of Victorville: Traffic signal plan at Bear Valley Road/3rd Avenue. Conceptual roadway improvement plans for Bear Valley Road/I-15 Freeway interchange.
- Town of Yucca Valley: Traffic signal plans, signing and striping plans, signal interconnect plans and street lighting plans for Home Depot and Walmart along Twentynine Palms Hwy (SR-62).
- Citywide Traffic Engineering and Speed Surveys for the Cities of Palm Springs, Buena Park, Cerritos, Chino, Lancaster, Santa Ana, Long Beach, and Fountain Valley, many of which included Citywide Speed Zone Maps and Citywide Traffic Volume Maps.

ALBERT GROVER & ASSOCIATES

FELIPE ORTEGA
ADVANCED SYSTEM INTEGRATOR

EDUCATION

CompTIA A+ Certified

IMSA Work Zone Safety

IMSA Traffic Signal Senior Field Technician Level III

Iteris Vantage Intermediate Planning
Video Detection Training
Iteris, 2013

PROFESSIONAL ASSOCIATIONS

International Municipal Signal Association (IMSA)

Traffic Signal Association (TSA)

PROFESSIONAL EXPERIENCE

Mr. Felipe Ortega joined Albert Grover & Associates in 2008, after having spent four years with Intersection Development Corporation (Systems Support) and four years with Team Econolite working as a lead man. Mr. Ortega routinely monitors signal operations and coordination along the streets of various cities that have contracted with AGA to provide such ongoing signal monitoring services, looking for both hardware and timing related problems. He also quickly responds to requests from various cities on an as-needed basis. His expertise in both signal timing software and signal hardware enables AGA to quickly identify the actual cause of the problem and take definitive action to provide the appropriate solution.

Since joining AGA, Mr. Ortega has been responsible for conducting field reviews of hundreds of signalized intersections, including physically opening controller cabinets and pull boxes to assess the condition and usability of existing equipment. Mr. Ortega has implemented both local and coordination timing plans in hundreds of signal controllers, including nearly every brand of controller in use in Southern California. He has been responsible for fine-tuning of timing plans at hundreds of locations, and for daily monitoring of signal systems in the Cities of Fullerton, Ontario, Chino, San Bernardino, and Redlands. Mr. Ortega's familiarity with maintenance procedures and Central Systems experience greatly assists AGA in the implementation, fine-tuning, operation and monitoring of various signal systems.

Recently, Mr. Ortega has been involved in purchasing and installing several central traffic systems throughout San Bernardino County as part of a multijurisdictional SBCTA project using QuicNet, CTNET, Actra and Aries software. This includes:

- Preparing communications plans for various locations using existing fiber optic and copper interconnect.
- Implementing communications plans via splicing twisted pairs, installing jumpers at patch panels, configuring and installing routers, switches, encoders, decoders, and ethernet extenders.
- Troubleshooting existing/newly installed interconnect and fiber optics using toners, TDRs, etc.
- Managing communications network including hardware and software.

- Creating and managing VLANs and other networking parameters.
- Modernizing legacy type equipment, installing/configuring software and hardware on new type of communication protocols (e.g., converting FSK/ Serial to Ethernet compatible platform).
- Providing Construction Management and Construction Inspection Services for traffic signal and signal communication projects.

Mr. Ortega provides onsite and remote support, administration, installation, repair, software/hardware implementation and product maintenance services to clients. He is highly proficient in all types of communication systems, especially Ethernet type communication configurations. Specific expertise provided by Mr. Ortega includes:

- Complex controller replacement and intersection rephasing (i.e., applying special logic/configurations to all types of controllers).
- Conducting before and after time delay studies at various major arterials throughout Southern California.
- Rebuilding communication infrastructure (in some cases where interconnect was abandoned or was non-operational for years).
- Designing communication master plans which incorporate Layer 3 Ethernet components,
- Designing and implementing TMCs for various agencies.
- Troubleshooting every type of communication issue, including hardwire, fiber optic, and wireless equipment.
- Developing communication maps.
- Designing and creating network schematics for SBCTA Tier 1 & 2 agencies.
- Establishing relationships with local agencies, both with engineers and field technicians.
- Training city staff on how to properly maintain and use their newly installed traffic system/TMC equipment and software.
- Training the city traffic signal maintenance staff on how to properly maintain the coordination system as well as the wireless/hardwire interconnect equipment.
- Monitoring all city intersections, including observing traffic, checking controller times, and making coordination timing changes as needed to keep traffic flowing optimally. Adjusting timing as needed per change in traffic volumes and conditions.
- Physically installing GPS time source units in cabinets for Caltrans, including flashing Caltrans firmware as needed, as well as modifying Caltrans software/hardware configuration as needed to ensure stable operation of the GPS time source system.
- Converting and upgrading controller firmware to enable Ethernet communications.
- Assisting with new intersection "turn-ons" and special configurations (sequences/logic).

- Resolving client problems by phone, email or on-site visits by gathering information, analyzing and/or reproducing the problem in a lab environment and providing a solution.
- Installing, integrating and maintaining Central Office Traffic Systems with a focus on communications.
- Upgrading legacy Central Traffic Systems, focusing on migrating/converting from serial communications to IP communications.
- Providing expertise in building/repairing/upgrading industrial/business grade servers and workstations which greatly assists in Traffic Management Center upgrades and repairs.

ALBERT GROVER & ASSOCIATES

KAWAI MANG, E.I.T.
ASSOCIATE ENGINEER

EDUCATION

BS, Civil and Environmental Engineering
University of California, Berkeley
Berkeley, 2013

PROFESSIONAL ASSOCIATIONS

Institute of Transportation Engineers
Young Professionals in Transportation
American Society of Civil Engineers
Tau Beta Pi Association
Orange County Traffic Engineering Council

PROFESSIONAL REGISTRATION

Registered Engineer-In-Training in California
EIT #153235

PROFESSIONAL EXPERIENCE

Ms. Mang joined Albert Grover & Associates (AGA) in September 2014 as an Assistant Transportation Engineer. Her duties at AGA include collecting field data such as average daily traffic counts, turning movement counts, before and after studies via GPS; intersection delay and phasing, sight distance, speed surveys and various other field studies; developing yellow, pedestrian, bicyclist, and other local timing; as well as developing various traffic signal installation and modification design plans. Ms. Mang has experience in a variety of transportation planning and traffic engineering software, including Synchro, Tru-Traffic, and WEBSTER, as well as design software such as AutoCAD and SolidWorks.

Prior to joining AGA, Ms. Mang gained experience as a college intern at several positions in the San Francisco Bay Area. She has worked in the public sector with Marin Transit in San Rafael, CA as a seasonal transit liaison, facilitating communication amongst agencies and the public for the Muir Woods Shuttle; in the private sector with Fehr & Peers conducting modal observations and passenger surveys at commuter transit stations; and in data collection with Quality Counts, LLC conducting peak-period travel-time runs on Bay Bridge westbound approaches as well as passenger on-ramp counts in the East Bay.

The following is a brief listing of some projects in which Ms. Mang has been involved at AGA:

- City of Irvine Alton Parkway Regional Traffic Signal Synchronization Project (RTSSP): signal timing and coordination of 49 signals under the jurisdictions of the Cities of Irvine and Lake Forest as well as Caltrans
- Orange County Transportation Authority (OCTA) Adams Avenue RTSSP: signal timing and coordination of 27 signals in the Cities of Huntington Beach and Costa Mesa
- OCTA Antonio Parkway RTSSP: signal timing, coordination, and signal design of 27 locations under the jurisdictions of the City of Rancho Santa Margarita, the County of Orange, and Caltrans; design plans for fiber optic connection from the Antonio Parkway system to Traffic Management Center (TMC) at Rancho Santa Margarita City Hall
- Left-Turn Study for Pacific Coast Highway {CA-1} at Madison Street in the City of Torrance
- Various traffic studies at several locations for the City of La Habra
- Streetlight inventory and replacement study for the City of Fullerton
- Speed surveys for the Cities of Fullerton and Laguna Niguel

- City of South Gate: signal design plans for the intersection of Firestone Boulevard and Otis Street
- City of West Hollywood Street Lighting Assessment: design layout and field study at eight crosswalk locations along Santa Monica Boulevard
- City of Loma Linda: design for installation of new signal at the intersection of Anderson Street and Prospect Avenue
- City of Garden Grove Valley View Street Coordination Timing Project: signal timing and coordination for four signals
- Town of Yucca Valley SR-62 Traffic Control Synchronization Project: signal timing and coordination for four signals

ALBERT GROVER & ASSOCIATES

ANDREW LUNA, E.I.T.
ASSOCIATE ENGINEER

EDUCATION

Bachelor of Science, Civil Engineering
California State University, Fullerton
Fullerton, CA, 2016

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers
Institute of Transportation Engineers
Orange County Traffic Engineering Council

PROFESSIONAL CERTIFICATIONS

Engineer-In-Training
EIT # 156851

PROFESSIONAL EXPERIENCE

Mr. Luna joined Albert Grover & Associates in October 2015 as an Assistant Transportation Engineer before becoming an Associate Engineer in 2016. His duties at AGA include city traffic requests, sight distance, circulation analyses, and various other field studies; developing signal timing modifications including queuing data and volume analyses, developing traffic signal coordination plans. In addition, Mr. Luna's experience includes assisting in design of traffic signal, intersection capacity analysis, preparing stop warrant analysis, neighborhood traffic studies, circulation studies and field inspections. Mr. Luna has experience in a variety of transportation planning and traffic engineering software, including Synchro and Webster, as well as design software such as AutoCAD.

Prior to joining AGA, Mr. Luna worked as a college intern with Southern California Edison. He worked in the private sector with Southern California Edison as a designer, performing underground design and drafting; revising preliminary design plans, conducting technical calculations, quality control, and revisions to base maps.

The following is a brief listing of some of Mr. Luna's project involvements with AGA:

- City of Irvine: City wide Traffic Operations and Traffic Management Study; intersection capacity analysis, vehicle queuing analysis, volume analysis,
- City of La Habra: Sight distance analysis, traffic studies, stop warrant analysis
- Los Angeles County Public Works: Topographic survey, Traffic signal design
- City of Chino: Speed surveys
- La Paz RTSSP Project: Synchro modeling, Yellow time evaluation
- City of Newport Beach – Balboa Peninsula crossing study
- Town of Yucca Valley: Developed intersection timing plans, traffic signal coordination plans, synchro modeling
- Brea Boulevard RTSSP/ Antonio Parkway RTSSP/ Adams Avenue RTSSP/Alicia Parkway RTSSP/Imperial Hwy RTSSP

ALBERT GROVER & ASSOCIATES

JESSICA ESPINOZA, E.I.T.
ASSOCIATE ENGINEER

EDUCATION

Bachelor of Science, Civil Engineering
California State University, Fullerton
Fullerton, CA, 2016

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers
Institute of Transportation Engineers
Orange County Traffic Engineering Council

PROFESSIONAL CERTIFICATIONS

Engineer-In-Training
EIT # 160008

PROFESSIONAL EXPERIENCE

Ms. Espinoza joined Albert Grover & Associates in 2015 as an Assistant Transportation Engineer. Her duties include signal design and signal modification plans, fiber communication plans, and other plan modifications for various projects. Additional duties include responding to city requests, sight distance, traffic signal warrant and various other field studies. She has conducted field topographic surveys required to develop design plans to improve intersection safety and update signal hardware to current standards. Ms. Espinoza has worked with government agencies such as County of Los Angeles and City of Buena Park. She has experience in a variety of design software such as AutoCAD and MicroStation.

Prior to joining AGA, Ms. Espinoza worked as a Traffic Engineering Intern for the City of Santa Ana. She worked in the public sector with the City of Santa Ana Public Works as a traffic engineering intern, designing signing and striping plans, and traffic signal plans utilizing MicroStation as well as preparing traffic control plans.

Ms. Espinoza's involvement within Transportation Engineering began in 2015 when she began working as a traffic engineering intern for the City of Santa Ana. She conducted field surveys for signing and stripping plans, traffic signal design and implementation of bike lanes, prepared and reviewed traffic control plans, and prepared quantity calculations for contract bid items.

The following is a brief listing of some of Ms. Espinoza's project involvements with AGA:

- City of Buena Park: Worked on sight distance studies and traffic signal warrants.
- Mountain View School District (MVSD): Performed crossing guard studies at various locations in the Cities of El Monte and South El Monte.
- Orange County Transportation Authority (OCTA): Worked on presentation preparation for Alicia Parkway, Antonio Parkway, and Adams Avenue.
- Los Angeles County Public Works: Valley Blvd-Holt Ave. TSSP. Conducted topographic surveys to verify existing conditions of traffic signals.
- City of Buena Park: Signal design for the intersection of Commonwealth Avenue and Indiana Avenue.
- City of Buena Park: Signal design on Valley View Street for the SCE Trail.
- City of Fullerton: Currently working on Malvern Avenue/Chapman Avenue Corridor RTSSP.

ALBERT GROVER & ASSOCIATES

YOLANDA G. CERVANTES
ASSOCIATE ENGINEER

EDUCATION

Bachelor of Science, Civil Engineering
California State University, Fullerton
Fullerton, CA, 2016

PROFESSIONAL ASSOCIATIONS

Institute of Transportation Engineers
Orange County Traffic Engineering Council

PROFESSIONAL EXPERIENCE

Ms. Cervantes joined Albert Grover & Associates in 2016 as an Associate Engineer. Her duties include signal design and signal modification plans, fiber communication plans, and other plan modifications for various projects. She has conducted field topographic surveys required to develop design plans to improve intersection safety and update signal hardware to current standards. Ms. Cervantes has worked with government agencies such as County of Los Angeles and City of South Gate. She has experience in a variety of design software such as AutoCAD and MicroStation.

Prior to joining AGA, Ms. Cervantes worked as a Traffic Engineering Intern for the City of Santa Ana. During her time with the City of Santa Ana, she conducted field surveys for traffic signal design and modification plans. She also worked on designs of new traffic signal installations, modification of signalized intersections, stripping plans, and implementation of bike lanes.

Ms. Cervantes's involvement within Transportation Engineering began in 2014 when she began working as an Engineering Technician Trainee for the County of Orange. She conducted field surveys of streets to be included in plans for slurry seal and asphalt overlay resurfacing, prepared quantity calculations for contract bid items, prepared engineer estimates for Capital Improvement Projects, worked on utility research, prepared right of way maps, assisted resident engineer with preparing drawings, and inspected slurry seal jobs for OC Parks.

The following is a brief listing of some of Ms. Cervantes's project involvements with AGA:

- Orange County Transportation Authority (OCTA): Worked on presentation preparation for La Paz Road, Alicia Parkway, Antonio Parkway, and Adams Avenue.
- Los Angeles County Public Works: Valley Blvd-Holt Ave. TSSP. Conducted topographic surveys to verify existing conditions of traffic signals and worked on modification design.
- City of South Gate: Signal modification design for the intersection of Imperial Hwy and Amery Ave.
- City of Placentia: Currently working on street configuration alternatives for Old Town Placentia.
- City of La Habra: Currently working on Imperial Hwy/SR-90 Corridor RTSSP.

ALBERT GROVER & ASSOCIATES

IGNACIO SANCHEZ H., P.E., T.E., PTOE
SENIOR TRANSPORTATION ENGINEER

EDUCATION

BS, Civil Engineering
Universidad De Guadalajara, Guadalajara, Mexico, 1986

Computer Aided Design, and Customizing with AutoLisp

Fullerton College, 1988, 1989
ArcCAD, ArcView, and Customizing ArcView

Environmental Systems Research Institute (ESRI), 1994

Iteris Vantage Intermediate Planning Video Detection Training
Iteris, 2013

PROFESSIONAL ASSOCIATIONS

Institute of Transportation Engineers
Orange County Traffic Engineering Council

PROFESSIONAL REGISTRATION

Registered Civil Engineer in California
CE # 72073

Registered Traffic Engineer in California
TE # 2344

Professional Traffic Operations Engineer
PTOE #2457

Registered Civil Engineer in Mexico
Cedula Profesional #3806180

PROFESSIONAL EXPERIENCE

Mr. Sanchez joined Albert Grover & Associates (AGA) as a Transportation Engineer. His duties include design of traffic signal, signing, striping, and signal interconnect plans; project management; preparation of engineers cost estimates and specifications; GPS unit installations; street lighting design; improvement plans; and development and installation of system graphics for various Traffic Control Systems. Mr. Sanchez has prepared plans for Caltrans and other government agencies including the County of Riverside, County of Los Angeles, the Cities of Riverside, Santa Clarita, Victorville, Fullerton, Brea, Highland and La Habra, and for private developers including Home Depot. He recently worked with the Orange County Transportation Authority (OCTA) as Task Manager of the Bus Rapid Transit (BRT) project, Transit System Priority (TSP). Mr. Sanchez is responsible for ensuring compliance with all current regulations and standards, including the most recent CA MUTCD, the Caltrans Highway Design Manual, ADA requirements, etc.

Additional experience includes work with SBCTA on a project with Caltrans and 15 agencies in the County of San Bernardino. Duties included managing installation of GPS units on Interstate and State Routes in coordination with Caltrans and development and installation of Aries Traffic Management system graphics for the County of San Bernardino and the Cities of Chino, Fontana, Rancho Cucamonga, Rialto, and Ontario. Mr. Sanchez was also the project manager for the design of the Lambert Corridor and La Habra/Central/State College Regional Signal Synchronization Projects (RTSSP) for OCTA in coordination with the Cities of La Habra and Brea.

Prior to joining AGA, Mr. Sanchez worked for Rick Engineering as a Principal Traffic Engineer. His duties there included project coordination with Caltrans and other government agencies. Specifically, he was responsible for coordination and implementation of traffic signal design and construction; coordination timing plan development; signal modification; plan checking; development of signing and striping plans; development of traffic control plans, and PS&E. Mr. Sanchez also provided on-site traffic engineering services to the City of Murrieta where he was responsible for developing coordination timing plans Citywide, including with Caltrans signals. Mr. Sanchez began his career at Mohle, Grover & Associates in 1989, and next worked at Hank Mohle & Associates. At these two companies, Mr. Sanchez was a GIS Manager & Data Analysis/Transportation Designer.

The following is a brief listing of some of the projects on which Mr. Sanchez has been involved:

- Orange County Transportation Authority I-405 Major Investment Study, I-405 Widening Project Study Report (PSR) and I-405 Widening Project Report & Environmental Document (PR-PD): Intersection level of service analyses at 29 arterial intersections and 14 freeway interchanges.
- City of Lake Elsinore - Central Avenue/SR-74 at I-15 for both Interim and Ultimate improvements. Assisted in preparing traffic analysis report for Interim PSR-PR.
- City of Indio - Jackson Street at I-10 for both Interim and Ultimate improvements. Included the signalization of ramps with PPLT phasing as well as signal coordination, implementation, fine-tuning and monitoring. Prepared traffic analysis report for PSR.
- City of Indio – Monroe Street at I-10 for Interim Improvements. Includes the signalization of ramps with PPLT phasing as well as coordination timing plans.
- City of Victorville: Bear Valley Road Improvement Project: Signal timing and coordination, striping and intersection improvements for 17 intersections (City and Caltrans intersections), including the conversion of five intersections to Protected/Permissive Left Turn Phasing.
- Emergency Vehicle Pre-Emption (EVP) of infrared equipment at five traffic signals and 15 emergency vehicles in the City of Highland (included construction management in the field).
- Signal modification at Euclid Street/Country Hills Drive in the cities of La Habra and Fullerton (included bid assistance and construction management).
- La Habra Boulevard/Central Avenue/State College Boulevard Corridor RTSSP Project
- Euclid Street Corridor RTSSP Project
- Brea Boulevard RTSSP Corridor Project
- Lemon Street Corridor RTSSP Project
- Bolsa Avenue/1st Street Corridor RTSSP Project
- Lambert Road Corridor Regional Traffic Signal Synchronization Project RTSSP
- Traffic Control Technology Improvement Program for the City of Brea

The responsibilities and tasks performed by Mr. Sanchez included construction inspection in the field, answer design questions to contractor during construction (RFI), generate change directives and change orders on behalf of the City, coordination with Caltrans, coordination with Southern California Edison, daily logs reporting using a City's online Virtual Program Manager, review and approval of equipment quantities during construction for progress payments, and preparation of as-built plans.

The improvements and equipment for the projects mentioned above included installation of traffic controller cabinets and controller units, service cabinets, pull boxes, conduits, signal cables, DSL switches, fiber optic cable and fiber switches in the cities and at Caltrans interchanges, Closed Circuit Television Systems at the signalized intersections and at each city's Traffic Management Centers, video detection system including capture of video to the TMC, GPS Emergency Vehicle Pre-Emption System at the intersections and the EVP Central Management System at the city's TMC, signal communication HUB including a Gb switch, and Layer 3 switch/router with integration to the city's TMC.

ALBERT GROVER & ASSOCIATES

ROLAND P. HIZON
TRANSPORTATION ENGINEER

EDUCATION

BS, Civil Engineering
University of the Philippines
Manila, Philippines 1982

PROFESSIONAL ASSOCIATIONS

Institute of Transportation Engineers

PROFESSIONAL REGISTRATION

EIT XE095497

PROFESSIONAL EXPERIENCE

Mr. Hizon joined Albert Grover & Associates in April 2005 as Transportation Engineer working primarily on SBCTA's Coordinated Traffic Signal System – Tiers 1 and 2, which focuses on interjurisdictional traffic signal coordination throughout the San Bernardino Valley. Mr. Hizon was involved in all phases of the project, including the field design and construction, signal synchronization and central system implementation phases. With part of the project being federally funded, Mr. Hizon was also involved in ensuring federal guidelines were met in the implementation of the project. This included keeping accurate and appropriate documentation for this extremely large and complex project involving 650 signalized intersections controlled by 16 separate governmental agencies.

Mr. Hizon has also been involved in various design activities including traffic signing and striping design, signal modification design and signal interconnect projects in various cities including Cerritos, Fullerton, West Hollywood, Palm Springs, Brea, Indio, Montclair, Upland, Victorville and the counties of Riverside and Los Angeles. He was lead engineer for the Harbor Boulevard/Lemon Street One-Way Couplet Study in the City of Fullerton and also for the Pacific Cinerama Dome parking analysis in Hollywood. He also developed conceptual roadway signing/striping/signal installations for major retail stores including Home Depot.

Mr. Hizon was also lead engineer responsible for putting together the applications for OCTA funding for synchronizing traffic signals along Orange County Priority Corridors as part of the 2011 Project P/Regional Traffic Signal Synchronization Program (RTSSP) Call for Projects, including applications for the Euclid Street Corridor, the Bastanchury Road Corridor and the Lambert Road Corridor.

Mr. Hizon was also involved in the field inventory and review for the Traffic Signal Synchronization Projects for Chapman Avenue and Orangethorpe Avenue in Orange County. Both projects were designed to improve traffic flow along these key corridors.

Mr. Hizon was task engineer for the OCTA Bus Rapid Transit (BRT) Project which involved signal timing and coordination on the Harbor Boulevard corridor in the City of Anaheim. He was responsible for field inventory, review and design plan preparation for 21 signalized intersections.

From 1997 through 2005, Mr. Hizon worked for Meyer, Mohaddes Associates/Iteris as Senior Transportation Engineer in various professional engineering services including PS&E preparation of fiber optic communication systems, traffic signals and interconnect, and transportation planning projects. Mr. Hizon was also responsible for training junior and entry-level engineers.

While employed at Kimley-Horn and Associates, Inc. (July 1996 through December 1997), Mr. Hizon was lead engineer for the Harbor Boulevard Smart Street which covered the 9½ mile stretch from the SR-91 freeway in the City of Anaheim to the I-405 freeway in the City of Fountain Valley (through the Cities of Garden Grove and Santa Ana). With input from the jurisdictions involved, he was responsible for developing the conceptual alignment of Harbor Boulevard while maintaining the required cross section to handle the projected traffic volumes. Mr. Hizon was also task leader for the Arroyo Verdugo Traffic Forum which covered the Cities of Pasadena, Glendale, Burbank and La Canada/Flintridge. He was involved in the development of ITS strategies based on the transportation system requirements in the Arroyo Verdugo Region.

From June 1990 to July 1996, Mr. Hizon was employed by DKS Associates, working on Early Deployment Plans (EDP) for the Cities of Hartfort CT, Indianapolis IN and Las Vegas NV. In addition, Mr. Hizon was also design engineer responsible for design of fiber optic and VSAT communications systems in addition to various Traffic Operation Systems (TOS) elements along 150 miles of major freeways including SR-14, SR-101, I-105, SR-110, SR-170, I-405 and SR-118 in Los Angeles County. Additional tasks included inventory of existing TOS elements, selection and design of proposed closed circuit television (CCTV) camera locations, freeway ramp meter stations (RMS), traffic monitoring stations (TMS), changeable message signs (CMS) and highway advisory radios (HAR).

The following is a brief listing of specific projects for which Mr. Hizon has also been responsible:

- **SR-710 ITS Mitigation Project.** Project engineer responsible for the PS&E design of approximately 100 intersections in the City of Pasadena, including 21 intersections with CCTV installations.
- **Lakewood Boulevard Traffic Signal Communication System.** Project Manager and lead engineer in charge of the PS&E design of 18 signalized intersections to be incorporated into the proposed signal communications system.
- **Port of Oakland Dynamic Message Systems (DMS).** Project engineer responsible for the design of 2 dynamic message systems.
- **SR-55/Dyer Road IC Surveillance System, Cities of Santa Ana and Irvine.** Project lead engineer in charge of the PS&E design of four CCTV installations and fiber optic communications intertie between the Cities of Santa Ana and Irvine.
- **Mission Viejo CCTV and Detection System.** Responsible for the PS&E design of a CCTV system and system detection for the Cities of Mission Viejo and Lake Forest.
- **Marina Boulevard Surveillance Project.** Design engineer in charge of PS&E design of four CCTV systems in the City of San Leandro, CA.
- **Riverside County On-Call Project.** Project engineer providing technical engineering support for signing and striping design and traffic signal modification plan checks for developer projects.
- **OCTA's Centerline Project.** Design engineer responsible for signing and striping and traffic signal modification design for proposed intercity rail project.

ALBERT GROVER & ASSOCIATES

CHAD A. VEINOT, TSOS

PROJECT DEVELOPMENT MANAGER/SENIOR PROJECT COORDINATOR

EDUCATION

Master Certification in Applied Project Management
Villanova University, Pennsylvania

Special Training in Traffic Engineering, Traffic Calming, Traffic Signal Timing
University of California

Variety of Studies in Civil Engineering
University of Prince Edward Island, PEI, Canada

PROFESSIONAL ASSOCIATIONS

Institute of Transportation Engineers
Illuminating Engineering Society
Orange County Traffic Engineering Council
City Traffic Engineers Association
American League of Cyclists

PROFESSIONAL CERTIFICATES

Traffic Signal Operations Specialist
TSOS #136

PROFESSIONAL EXPERIENCE

Mr. Veinot joined Albert Grover & Associates (AGA) in August 2004 as a Transportation Engineering Associate. While with AGA, Mr. Veinot has been responsible for an extensive range of projects, including both design related projects (CCTV designs, street lighting evaluations and design, signal designs, striping plans, interconnect plans, speed studies, etc.) and neighborhood traffic problem resolutions (cut through traffic, STOP sign requests, traffic calming issues, etc.).

Mr. Veinot has a wide range of traffic engineering and transportation planning experience, including both field and office activities. He has been responsible for reviewing and preparing traffic studies, evaluating traffic signal operations, preparing signal and stop warrant analysis, preparing safe route to school maps and grant applications, analyzing neighborhood traffic problems (developing alternative solutions and presenting results to neighborhood groups), preparing and presenting staff reports, conducting public meetings, performing construction inspection and management, and conducting several traffic engineering and transportation planning studies (citywide speed surveys, pedestrian/bike, left turn, etc.). Mr. Veinot has designed effective road diets, bicycle facilities, and conceptual alternatives for one-way conversions and roundabouts. He has also been responsible for projects that involve a review/approval process for any State (Caltrans), and/or federally funded improvements including preparation of encroachment permits, PEERs, and fact sheets. Additionally, Mr. Veinot has served as a Chair of the City Traffic Engineers (CTE) Association. His involvement with CTE included conducting and presenting workshops to educate Traffic Commissioners and Planning Commissioners of cities throughout Southern California on various aspects of Traffic Engineering.

Mr. Veinot previously worked for the City of Glendora Traffic Division for two and a half years. His experience there included signal/striping/lighting PS&E preparation; neighborhood traffic calming studies; speed surveys; intersection capacity analysis; timing plan development and implementation; signal system monitoring; traffic impact analysis; and providing "counter service," which he has done not only in Glendora, but also for cities where AGA is under contract as the on-site Consultant Traffic Engineer.

The following is a brief listing of AGA's projects in which Mr. Veinot has been involved:

- Developed street and safety lighting design and evaluations, including photometric plans for the Cities of Beverly Hills, Brea, Compton, Fullerton, Irvine, Long Beach, Signal Hill, Torrance, and Yorba Linda.
- Developed parking lot and lighting plans for the Cities of Cerritos and Torrance, Orange County Great Park, and California State University, Fullerton.
- Developed conceptual alternatives for one-way conversions, roundabouts, road diets, ingress/egress, intersection geometrics, etc. for the Cities of Fullerton, Newport Beach, Palm Springs, Seal Beach, and Torrance.
- Pedestrian enhancement projects (both landscape and hardscape), including lighting, for the City of Long Beach.
- Researched and developed Safe Route to School maps, Crossing Guard studies, and circulation studies for the Cities of Cerritos, Costa Mesa, Cypress, Huntington Beach, San Dimas and Upland, Fullerton Joint Union High School District, and Pomona Unified School District.
- Developed citywide bikeway maps/bicycle routes/bike lane signing and striping for the Cities of Cerritos, Corona, Fullerton, Long Beach, and Newport Beach.
- Developed traffic signal design/modification plans for the Cities of Big Bear Lake, Carson, Cerritos, Fullerton, Huntington Beach, Huntington Park, Long Beach, Montclair, Redondo Beach, Torrance, West Hollywood, and Yorba Linda.
- Prepared in-roadway warning light/flashing beacon designs for the Cities of Cerritos, Claremont, Fullerton, Huntington Beach, and San Dimas.
- Prepared special event traffic control plans for the Cities of Fullerton, Glendora, Hermosa Beach, La Habra, and Seal Beach.
- Developed signing and striping plans for the Cities of Claremont, Fullerton, Montclair, Newport Beach, and Palm Springs.
- Developed Traffic Signal Priority Lists for the Cities of Fullerton and Huntington Beach.
- Prepared grant applications and/or permit applications from Caltrans (including E76) and/or OCTA for the Cities of Big Bear Lake, Fullerton, La Habra, Long Beach, and Torrance.
- Prepared signal modification plans for conversion to protected/permissive left turn phasing utilizing Flashing Yellow Arrow (FYA) for the Cities of Fullerton, Rancho Cucamonga, and Torrance.

PAPERS/PRESENTATIONS

"Fundamentals of Traffic Engineering"
City Traffic Engineers Traffic Commissioner's Workshop

"Effectively Slowing Drivers – Speed Feedback Signs"
Presented at ITE District 6 Annual Meeting, Honolulu, Hawaii

"Pedestrian Countdown Heads – The Final Countdown"
Presented at ITE District 6 Annual Meeting, Honolulu, Hawaii

"Moderator and Chair"
City Traffic Engineers Traffic Commissioner's Workshop

ALBERT GROVER & ASSOCIATES

ELIAS GARCIA, E.I.T.
ASSOCIATE ENGINEER

EDUCATION

Bachelor of Science, Civil Engineering
California State University, Fullerton
Fullerton, CA, 2015

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers
Chi Epsilon – Nat'l. Civil Eng. Honor Society
City Traffic Engineers Association
Institute of Transportation Engineers
Orange County Traffic Engineering Council

PROFESSIONAL CERTIFICATIONS

Engineer-In-Training
EIT # 154726

PROFESSIONAL EXPERIENCE

Mr. Garcia joined Albert Grover & Associates in 2014 as an Engineering Aide before becoming an Associate Engineer in 2015. He provides expertise in conducting and preparing city-wide speed surveys, traffic sign inventories, traffic impact studies, traffic calming studies, parking studies, city-wide street lighting feasibility studies, expert witness research, and preparing Caltrans encroachment permits to furthermore manage projects and oversee project status until full completion.

In addition, Mr. Garcia's experience includes assisting in design of traffic signal, roadway striping, roundabouts, and signal interconnect plans, street lighting master plans, street bicycle studies, red curb studies, and field inspections. His computer skills include experience in the usage of transportation planning and traffic engineering software such as HCS+, Synchro, and WEBSTER. His design software experience includes AutoCAD, Civil 3D, and Esri's ArcGIS for mapmaking.

Mr. Garcia is heavily involved in maintaining relations with professional engineering organizations, and has previously held board member positions within these organizations. He served as Secretary for the Institute of Transportation Engineers, Fullerton chapter, from 2012-2014 and as President from 2014-2015. He also served in the National Civil Engineering Honor Society, Fullerton chapter, as Editor of the Transit 2014-2015, and in the American Society of Civil Engineers, Fullerton chapter, as Captain of the Steel Bridge 2014-2015.

The following is a brief listing of some of Mr. Garcia's project involvements:

- California State University, Fullerton – Speed Survey and GIS Traffic Sign Inventory of Streets within CSU Fullerton
- City-wide Traffic Speed Survey for the following cities within Southern California:
  - City of Buena Park
  - City of Fullerton
  - City of Garden Grove
  - City of Gardena
  - City of Hawthorne
  - City of Laguna Niguel
  - City of Lancaster

- City of Anaheim, Kindred Community Church – Traffic Impact Study and Striping Modifications on East Santa Ana Canyon Road
- City of Fullerton – Streetlight inventory and replacement study
- City of La Habra – No Stopping/Parking Traffic Sign and Inventory regarding Imperial Highway, Beach Boulevard, Whittier Boulevard, and Harbor Boulevard corridors within city limits.
- City of Newport Beach – Striping and Roundabout design on Bayside Drive
- City of Norco – Traffic Calming Study on North Drive
- Law Offices of Robert Gokoo – Huntington Drive at Canyon in City of Monrovia expert witness studies
- La Habra Boulevard/Central Avenue/State College Boulevard Corridor RTSSP Project
- Euclid Street Corridor RTSSP Project
- Brea Boulevard RTSSP Corridor Project
- Lemon Street Corridor RTSSP Project
- Bolsa Ave/1st Street Corridor RTSSP Project
- Lambert Road RTSSP Project
- Lemon St/SR91 RTSSP Project
- OCTA Antonio Parkway TRSSP Project
- OCTA Tustin Ave-Rose Dr Corridor Project

PAPERS/PRESENTATIONS

"Traffic Sign Inventory on Various Street within California State University, Fullerton"
Presented at ITE/OCTEC Student Presentation Night, Buena Park, CA - 2014

"Bayside Drive: Striping and Lane Modification"
Presented at ITE/OCTEC Student Presentation Night, Buena Park, CA - 2015

ALBERT GROVER & ASSOCIATES

LEO GRIMES
SENIOR SIGNAL SYSTEMS SPECIALIST

EDUCATION

Signal Technician Level 3 Certified

Signal Technician Level 2 Certified
Management/Training Seminars

High School, Gentry, Arkansas

PROFESSIONAL EXPERIENCE

Mr. Leo Grimes joined Albert Grover & Associates in 2000, after having spent ten years working with Signal Maintenance, Inc. (SMI), most recently as a Lead Man. Mr. Grimes routinely monitors signal operations and coordination along the streets of various cities that have contracted with AGA to provide such on-going signal monitoring services, looking for both hardware related and timing related problems. He also quickly responds to requests from various cities on an as-needed basis. His unique expertise in both signal timing software and signal hardware enables AGA to quickly identify the actual cause of the problem and take definitive action to provide the appropriate solution.

Mr. Grimes' duties for SMI involved supervision and training of employees as Signal Technicians, including all phases of troubleshooting, maintenance, repairs, and record keeping for thousands of traffic signal installations throughout Southern California. He was also responsible for coordination between SMI's office personnel and the appropriate City maintenance and engineering forces. Mr. Grime's duties also included scheduling, product evaluations and job performance reviews. As Lead Man for supervision and training, Mr. Grimes was also responsible for operation, maintenance and troubleshooting of problem signals at various locations throughout the Los Angeles area.

Since joining AGA, Mr. Grimes has been responsible for conducting field reviews of hundreds of signalized intersections, including physically opening controller cabinets and pull boxes to assess the condition and usability of existing equipment. Mr. Grimes has implemented both local and coordination timing plans in hundreds of signal controllers, including nearly every brand of controller in use in Southern California. Mr. Grimes has been responsible for supervision of fine-tuning the timing plans at hundreds of locations, and for daily monitoring of signal systems in the Cities of La Habra, Fullerton, Loma Linda, Fountain Valley, and Seal Beach. He has also been responsible for purchasing and installing hardware and software in local agencies' Traffic Management Centers, including a wide range of central control systems: QuicNet, CTNET, ACTRA, ARIES, CENTRACS, TACTICS, and others. He has provided Construction Management and Construction Inspections services for all aspects of traffic signal communication components and system integration for a wide variety of cities throughout Southern California. He has resolved signal system communication problems, addressing both internal communication issues and multijurisdictional issues. Mr. Grimes' familiarity with signal maintenance contractor's procedures and personnel greatly assists AGA in the implementation, fine-tuning, operation and monitoring of various signal systems.

Mr. Grimes provides technical expertise in the design of new, and upgrading existing, Traffic Management Centers. He is especially well versed in the utilization of various communication techniques such as fiberoptics, radios, Ethernet over copper, etc., including previous generation equipment utilizing Ethernet, serial, and FSK communication. His experience includes assistance in designing and installing video walls and video display systems for various cities, along with utilizing video detection cameras to provide live video feeds to city Traffic Management Centers. Mr. Grimes has also been involved in the development and design of IP schemes for cities' traffic signal related equipment, including assisting in the configuration of Layer 3 switches.

Mr. Grimes also provides AGA with expertise in the research of new products such as communication hardware and software, signal control equipment, computers, servers, etc. to ensure that proposed system designs are not only state-of-the-art but also capable of compatible integration with existing IT Department software and hardware at various local agencies. His long-term relationships with a wide assortment of equipment manufacturers ensures that clients obtain the best equipment at the best price.

Additional specific areas of expertise include the following:

- Upgrading legacy Central Traffic Systems, focusing on migrating/converting from serial communications to IP communications.
- Converting and upgrading controller firmware to enable Ethernet communications.
- Designing communication master plans which incorporate Layer 3 Ethernet components,
- Physically installing GPS time source units in cabinets for Caltrans, including flashing Caltrans firmware as needed, as well as modifying Caltrans software/hardware configuration as needed to ensure stable operation of the GPS time source system.
- Troubleshooting every type of communication issue, including hardwire, fiberoptic, and wireless equipment.
- Training city staff on how to properly maintain and use their newly installed traffic system/TMC equipment and software.
- Training the city traffic signal maintenance staff on how to properly maintain the coordination system as well as the wireless/hardwire interconnect equipment.
- Installing, integrating and maintaining Central Office Traffic Systems with a focus on communications.
- Assisting with new intersection "turn-ons" and special configurations (sequences/logic).
- Developing communication maps.

ALBERT GROVER & ASSOCIATES

PHILLIP FUENTES
SIGNAL SYSTEMS SPECIALIST

EDUCATION

Certified General Electrician (DIR-NEC) No. 1219960
Signal Technician IMSA Level 2 Training
Signal Technician IMSA Level 1 Training and Safety
High School, Santa Ana, California

PROFESSIONAL LICENSES

Contractor's State License
C-10 Electrical #984491

PROFESSIONAL EXPERIENCE

Mr. Phillip Fuentes joined Albert Grover & Associates in 2007, after having spent eighteen years working with Computer Service Co. (CSC) and with Team Econolite, the last two years as a Lead Man. Mr. Fuentes routinely monitors signal operations and coordination along the streets of various cities that have contracted with AGA to provide such ongoing signal monitoring services, looking for both hardware related and timing related problems. He also quickly responds to requests from various cities on an as-needed basis.

Mr. Fuentes has been responsible for conducting field reviews of hundreds of signalized intersections, including physically opening controller cabinets and pull boxes to assess the condition and usability of existing equipment. Mr. Fuentes has implemented both local and coordination timing plans in hundreds of signal controllers, including nearly every brand of controller in use in Southern California. He has been responsible for fine-tuning of timing plans at hundreds of locations, and for daily monitoring of signal systems in the Cities of La Habra, Loma Linda and Montclair, and the San Bernardino County Cedar Avenue Signal System. Mr. Fuentes' familiarity with CSC and Team Econolite procedures and personnel greatly assists AGA in the implementation, fine-tuning, operation and monitoring of various signal systems.

Prior to joining AGA, Mr. Fuentes' duties for CSC and Team Econolite involved supervision and training of employees as Signal Technicians, including all phases of troubleshooting, maintenance, repairs, and record keeping for thousands of traffic signal installations throughout Southern California. He was also responsible for coordination between CSC and Team Econolite office personnel and the appropriate City maintenance and engineering forces. Mr. Fuentes' duties included installing detector loops; conducting preventative maintenance; operating bucket trucks; installing traffic signal equipment (i.e., signal traffic poles, intersection cabinets, Opticom, controllers); troubleshooting a variety of calls; supervising various projects to make sure all deadlines were met by different teams of workers; interacting and dealing with City personnel (engineers, supervisors, and inspectors) on a day-to-day basis to provide updates on the work being done in their City; overseeing work being done by contractors; logging and submitting Daily Service Reports for each job; ordering parts; and reviewing contract and pre-job inspections.

As Lead Man, Mr. Fuentes was also responsible for operation, maintenance and troubleshooting of problem signals at various locations throughout the Inland Empire area.

Recently, Mr. Fuentes has been involved in installing and maintaining various central traffic systems throughout San Bernardino County as part of a multijurisdictional SBCTA project using QuicNet, CTNET, Actra, and Aries software. He provides onsite and remote support, administration, installation, repair, hardware implementation and product maintenance services to clients. He is highly proficient in all types of communication systems.

Specific areas of expertise include the following:

- Providing Construction Management and Construction Inspection services for traffic signal and signal communication projects.
- Conducting field measurements to create new local and coordination signal timing charts; implementing and fine tuning the new timing.
- Converting complex timing charts from one type to another as a result of controller changes (such as different manufactures, different types, software upgrades, etc.). This includes converting Caltrans C-8 timing charts to BiTrans timing charts.
- Troubleshooting communication issues, including interconnect hardwire and Encom & GDI wireless equipment.
- Developing communication maps.
- Building ongoing relationships with local agency personnel, including both engineers and technicians.
- Based on previous positions with signal maintenance contractors, ensuring that they do not take advantage of cities.
- Training city staff on how maintain their traffic signal control systems; also, train city traffic signal maintenance company technicians.
- Working with city maintenance departments to maintain coordination with non-system controllers.
- Coordinating with various cities' IT Departments.
- Running, maintaining, monitoring, and supporting city traffic signal control systems.
- Monitoring all city intersections, including observing traffic, checking controller times, and making coordination timing changes as needed to keep traffic flowing optimally.
- Installing GPS units in cabinets for Caltrans.
- Testing new equipment and products first before installing in the field.
- Installing/converting/configuring wireless radios.
- Assisting in converting master controllers to Ethernet communications.
- Assisting in the installation of a wireless dual system on an Ethernet backbone.
- Assisting in expansion of an existing fiberoptic communication system.
- Assisting with new intersection "Turn-ons".

EXHIBIT B

CERTIFICATES OF INSURANCE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 11/30/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER IOA Insurance Services 130 Vantis, Suite 250 Aliso Viejo, CA 92656	CONTACT NAME: Betty Tran PHONE (A/C, No, Ext): 949-297-5962 FAX (A/C, No): 949-297-5960 E-MAIL ADDRESS: betty.tran@ioausa.com	
www.ioausa.com CA License #0E67768	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED Albert Grover & Associates, Inc. 211 East Imperial Hwy, Suite 208 Fullerton CA 92835	INSURER A : RLI Insurance Company	13056
	INSURER B : RSUI Indemnity Company	22314
	INSURER C : Continental Casualty Company	20443
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 39024470 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	✓ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☑ OCCUR ✓ Primary/Non-Contributory ✓ Waiver of Subrogation GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☑ PRO-JECT ☑ LOC ☐ OTHER:	✓	✓	PSB0001618 Scheduled AI Endt #PPB3130212 Professional Services performed by the Insured are Excluded	7/1/2017	7/1/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$ 1,000,000 $ 1,000,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
A	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ✓ HIRED AUTOS ONLY ☑ NON-OWNED AUTOS ONLY			PSB0001618 Included in General Liability	7/1/2017	7/1/2018	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$ 1,000,000 $ $ $ $
B	☐ UMBRELLA LIAB ☑ OCCUR ✓ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $			NHA242892 Excludes Professional Liability; Follow Form	7/1/2017	7/1/2018	EACH OCCURRENCE AGGREGATE $	$ 2,000,000 $ 2,000,000 $
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: Y If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	✓	PSW0001494 Waiver of Subrogation Endt #WC0403060484	7/1/2017	7/1/2018	✓ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
C	Professional Liability Claims-Made			MCH288354455	7/1/2017	7/1/2018	$2,000,000 Each Claim $4,000,000 Aggregate	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Certificate Holder is an Additional Insured with respect to General Liability (GL) but only when required by written contract with the Insured prior to an occurrence as per Endorsement noted above. GL includes Separation of Insureds and Contractual Liability per limitations in the BusinessOwners' Coverage form. A Workers' Compensation Waiver of Subrogation as noted above is included for the person or organization named in the Schedule that are parties to a contract requiring this Endorsement, provided that contract is executed before the loss. Coverage subject to all policy terms conditions, limitations and exclusions. 30 Day Notice Cancellation/10 Days for Non-Payment in accordance with policy provisions.

CERTIFICATE HOLDER

On-Call Traffic Engineering Services

City of Costa Mesa, its elected and appointed boards, officers and employees
77 Fair Drive
Costa Mesa CA 92626

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

(AVC) Alicia K. Igram

Policy Number: PSB0001618
Named Insured: Albert Grover & Associates, Inc.

RLI Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

RLIPack® FOR PROFESSIONALS
SCHEDULED ADDITIONAL INSURED ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESSOWNERS COVERAGE FORM – SECTION II – LIABILITY

Schedule

Name of Person(s) or Organization(s):

City of Costa Mesa, its elected and appointed boards, officers and employees

1. **SECTION II C. Who Is An Insured** is amended to include as an additional insured the person or organization shown in the schedule above, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused in whole or in part by you or those acting on your behalf:
   a. In the performance of your ongoing operations;
   b. In connection with premises owned by or rented to you; or
   c. In connection with "your work" and included within the "product-completed operations hazard".
2. The insurance provided to the additional insured by this endorsement is limited as follows:
   a. This insurance does not apply to the rendering of or failure to render any "professional services".
   b. This endorsement does not increase any of the limits of insurance stated in **D. Liability And Medical Expenses Limits of Insurance**.
3. The following is added to **SECTION III H.2. Other Insurance – COMMON POLICY CONDITIONS (BUT APPLICABLE ONLY TO SECTION II – LIABILITY)**

   However, if you specifically agree in a contract or agreement that the insurance provided to an additional insured under this policy must apply on a primary basis, or a primary and non-contributory basis, this insurance is primary to other insurance that is available to such additional insured which covers such additional insured as a named insured, and we will not share with that other insurance, provided that:
   a. The "bodily injury" or "property damage" for which coverage is sought occurs after you have entered into that contract or agreement; or
   b. The "personal and advertising injury" for which coverage is sought arises out of an offense committed after you have entered into that contract or agreement.
4. The following is added to **SECTION III K.2 Transfer of Rights of Recovery Against Others to Us – COMMON POLICY CONDITIONS (BUT APPLICABLE TO SECTION I – PROPERTY AND SECTION II – LIABILITY)**

   We waive any rights of recovery we may have against any person or organization because of payments we make for "bodily injury", "property damage" or "personal and advertising injury" arising out of "your work" performed by you, or on your behalf, under a contract or agreement with that person or organization. We waive these rights only where you have agreed to do so as part of a contract or agreement with such person or organization entered into by you before the "bodily injury" or "property damage" occurs, or the "personal and advertising injury" offense is committed.

ALL OTHER TERMS AND CONDITIONS OF THIS POLICY REMAIN UNCHANGED.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT–CALIFORNIA

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be 2 % of the California workers' compensation premium otherwise due on such remuneration.

Schedule

Person or Organization	Job Description
City of Costa Mesa, its elected and appointed boards, officers and employees	Jobs performed for any person or organization that you have agreed with in a written contract to provide this agreement.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective 7/1/2017
Insured
Albert Grover & Associates, Inc.

Policy No. PSW0001494
Insurance Company
RLI Insurance Company

Endorsement No.

Countersigned By _____

EXHIBIT C

CITY COUNCIL POLICY 100-5

CITY OF COSTA MESA, CALIFORNIA

COUNCIL POLICY

SUBJECT	POLICY NUMBER	EFFECTIVE DATE	PAGE
DRUG-FREE WORKPLACE	100-5	8-8-89	1 of 3

BACKGROUND

Under the Federal Drug-Free Workplace Act of 1988, passed as part of omnibus drug legislation enacted November 18, 1988, contractors and grantees of Federal funds must certify that they will provide drug-free workplaces. At the present time, the City of Costa Mesa, as a sub-grantee of Federal funds under a variety of programs, is required to abide by this Act. The City Council has expressed its support of the national effort to eradicate drug abuse through the creation of a Substance Abuse Committee, institution of a City-wide D.A.R.E. program in all local schools and other activities in support of a drug-free community. This policy is intended to extend that effort to contractors and grantees of the City of Costa Mesa in the elimination of dangerous drugs in the workplace.

PURPOSE

It is the purpose of this Policy to:

1. Clearly state the City of Costa Mesa's commitment to a drug-free society.

2. Set forth guidelines to ensure that public, private, and nonprofit organizations receiving funds from the City of Costa Mesa share the commitment to a drug-free workplace.

POLICY

The City Manager, under direction by the City Council, shall take the necessary steps to see that the following provisions are included in all contracts and agreements entered into by the City of Costa Mesa involving the disbursement of funds.

1. Contractor or Sub-grantee hereby certifies that it will provide a drug-free workplace by:

   A. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in Contractor's and/or sub-grantee's workplace, specifically the job site or location included in this contract, and specifying the actions that will be taken against the employees for violation of such prohibition;

   B. Establishing a Drug-Free Awareness Program to inform employees about:

1. The dangers of drug abuse in the workplace;

2. Contractor's and/or sub-grantee's policy of maintaining a drug-free workplace;

3. Any available drug counseling, rehabilitation and employee assistance programs; and

4. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

C. Making it a requirement that each employee to be engaged in the performance of the contract be given a copy of the statement required by subparagraph A;

D. Notifying the employee in the statement required by subparagraph 1 A that, as a condition of employment under the contract, the employee will:

1. Abide by the terms of the statement; and

2. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;

E. Notifying the City of Costa Mesa within ten (10) days after receiving notice under subparagraph 1 D 2 from an employee or otherwise receiving the actual notice of such conviction;

F. Taking one of the following actions within thirty (30) days of receiving notice under subparagraph 1 D 2 with respect to an employee who is so convicted:

1. Taking appropriate personnel action against such an employee, up to and including termination; or

2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health agency, law enforcement, or other appropriate agency;

G. Making a good faith effort to maintain a drug-free workplace through implementation of subparagraphs 1 A through 1 F, inclusive.

2. Contractor and/or sub-grantee shall be deemed to be in violation of this Policy if the City of Costa Mesa determines that:

   a. Contractor and/or sub-grantee has made a false certification under paragraph 1 above;

   b. Contractor and/or sub-grantee has violated the certification by failing to carry out the requirements of subparagraphs 1 A through 1 G above;

   c. Such number of employees of Contractor and/or sub-grantee have been convicted of violations of criminal drug statutes for violations occurring in the workplace as to indicate that the contractor and/or sub-grantee has failed to make a good faith effort to provide a drug-free workplace.

3. Should any contractor and/or sub-grantee be deemed to be in violation of this Policy pursuant to the provisions of 2 A, B, and C, a suspension, termination or debarment proceeding subject to applicable Federal, State, and local laws shall be conducted. Upon issuance of any final decision under this section requiring debarment of a contractor and/or sub-grantee, the contractor and/or sub-grantee shall be ineligible for award of any contract, agreement or grant from the City of Costa Mesa for a period specified in the decision, not to exceed five (5) years. Upon issuance of any final decision recommending against debarment of the contractor and/or sub-grantee, the contractor and/or sub-grantee shall be eligible for compensation as provided by law.