

PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement") is dated January 3, 2017 ("Effective Date") and is between the City of Manhattan Beach, a California municipal corporation ("City") and Michael Baker International, Inc., a Pennsylvania corporation, ("Contractor"). City and Contractor are sometimes referred to herein as the "Parties", and individually as a "Party".

RECITALS

A. City issued Request for Proposals No. 1081-17 (RFP) on August 3, 2016, seeking proposals for the provision of design services for the Aviation Boulevard to Artesia Boulevard Southbound to Westbound Right Turn Lane Improvement Project. An Addendum to this RFP was issued on August 17, 2016.

B. Contractor submitted a proposal dated August 24, 2016 in response to the RFP and Addendum.

The Parties therefore agree as follows:

1. Contractor's Services.

A. Scope of Services. Contractor shall perform the services described in the Scope of Services (the "Services"), attached as **Exhibit A**. City may request, in writing, changes in the Scope of Services to be performed. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

B. Party Representatives. For the purposes of this Agreement, the City Representative shall be the City Manager, or such other person designated in writing by the City Manager (the "City Representative"). For the purposes of this Agreement, the Contractor Representative shall be Brian Anderson, Project Manager (the "Contractor Representative"). The Contractor Representative shall directly manage Contractor's Services under this Agreement. Contractor shall not change the Contractor Representative without City's prior written consent.

C. Time for Performance. Contractor shall commence the Services on the Effective Date and shall perform all Services by the deadline established by the City Representative or, if no deadline is established, with reasonable diligence.

D. Standard of Performance. Contractor shall perform all Services under this Agreement in accordance with the standard of care generally exercised by like professionals under similar circumstances and in a manner reasonably satisfactory to City.

E. Personnel. Contractor has, or will secure at its own expense, all personnel required to perform the Services required under this Agreement. All of the Services required under this Agreement shall be performed by Contractor or under its

supervision, and all personnel engaged in the work shall be qualified to perform such Services.

F. Compliance with Laws. Contractor shall comply with all applicable federal, state and local laws, ordinances, codes, regulations and requirements.

G. Permits and Licenses. Contractor shall obtain and maintain during the Agreement term all necessary licenses, permits and certificates required by law for the provision of Services under this Agreement, including a business license.

2. Term of Agreement. The term of this Agreement shall be from the Effective Date through December 7, 2017, unless sooner terminated as provided in Section 12 of this Agreement or extended.

3. Compensation.

A. Compensation. As full compensation for Contractor's Services provided under this Agreement, City shall pay Contractor the total sum of \$ 144,541.00, as set forth in the Approved Fee Schedule attached hereto as **Exhibit B**.

The City Manager shall have authority to increase the Maximum Compensation by up to 20%; any further increase requires City Council approval.

B. Expenses. The amount set forth in paragraph 3.A. above shall include reimbursement for all actual and necessary expenditures reasonably incurred in the performance of this Agreement.

C. Additional Services. City shall not allow any claims for additional Services performed by Contractor, unless the City Council or City Representative, if applicable, and the Contractor Representative authorize the additional Services in writing prior to Contractor's performance of the additional Services or incurrence of additional expenses. Any additional Services or expenses authorized by the City Council or City Representative shall be compensated at the rates set forth in **Exhibit B**, or, if not specified, at a rate mutually agreed to by the Parties. City shall make payment for additional Services and expenses in accordance with Section 4 of this Agreement.

4. Method of Payment.

A. Invoices. Contractor shall submit to City an invoice, on a monthly basis for the Services performed pursuant to this Agreement. Each invoice shall itemize the Services rendered during the billing period, hourly rates charged, if applicable, and the amount due. City shall review each invoice and notify Contractor in writing within ten business days of receipt of any disputed invoice amounts.

B. Payment. City shall pay all undisputed invoice amounts within 30 calendar days after receipt up to the maximum compensation set forth in Section 3 of this Agreement. City does not pay interest on past due amounts. City shall not withhold

federal payroll, state payroll or other taxes, or other similar deductions, from payments made to Contractor.

C. Audit of Records. Contractor shall make all records, invoices, time cards, cost control sheets and other records maintained by Contractor in connection with this Agreement available during Contractor's regular working hours to City for review and audit by City.

5. Independent Contractor. Contractor is, and shall at all times remain as to City, a wholly independent contractor. Contractor shall have no power to incur any debt, obligation, or liability on behalf of City. Neither City nor any of its agents shall have control over the conduct of Contractor or any of Contractor's employees, except as set forth in this Agreement. Contractor shall not, at any time, or in any manner, represent that it or any of its officers, agents or employees are in any manner employees of City.

6. Information and Documents.

A. Contractor covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Contractor or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Contractor without prior written authorization by City. City shall grant such authorization if applicable law requires disclosure. Contractor, its officers, employees, agents, or subcontractors shall not without written authorization from the City Manager or unless requested in writing by the City Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary," provided Contractor gives City notice of such court order or subpoena.

B. Contractor shall promptly notify City should Contractor, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the City. City may, but has no obligation to, represent Contractor or be present at any deposition, hearing or similar proceeding. Contractor agrees to cooperate fully with City and to provide City with the opportunity to review any response to discovery requests provided by Contractor. However, City's right to review any such response does not imply or mean the right by City to control, direct or rewrite the response.

C. All Data required to be furnished to City in connection with this Agreement shall become City's property, and City may use all or any portion of the Data submitted by Contractor as City deems appropriate. Upon completion of, or in the event of termination or suspension of this Agreement, all original documents, designs, drawings, maps, models, computer files containing data generated for the Services, surveys,

notes, and other documents prepared in the course of providing the Services shall become City's sole property and may be used, reused or otherwise disposed of by City without Contractor's permission. Contractor may take and retain copies of the written products as desired, but the written products shall not be the subject of a copyright application by Contractor.

D. Contractor's covenants under this Section 6 shall survive the expiration or termination of this Agreement.

7. Conflicts of Interest. Contractor and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Contractor's Services under this Agreement, including the Political Reform Act (Gov. Code § 81000, *et seq.*) and Government Code Section 1090. During the term of this Agreement, Contractor may perform similar Services for other clients, but Contractor and its officers, employees, associates and subcontractors shall not, without the City Representative's prior written approval, perform work for another person or entity for whom Contractor is not currently performing work that would require Contractor or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Contractor shall incorporate a clause substantially similar to this Section 7 into any subcontract that Contractor executes in connection with the performance of this Agreement.

8. Indemnification.

A. Indemnity for Design Professional Services. To the fullest extent permitted by law, Contractor shall, at its sole cost and expense, protect, indemnify, and hold harmless City and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those City agents serving as independent contractors in the role of City officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith, and reimbursement of attorney's fees and costs of defense (collectively "Liabilities"), whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to, in whole or in part, the negligence, recklessness or willful misconduct of Contractor, its officers, agents, servants, employees, subcontractors, material men, contractors or their officers, agents, servants or employees (or any entity or individual that Contractor shall bear the legal liability thereof) in the performance of design professional services under this Agreement by a "design professional," as the term is defined under California Civil Code Section 2782.8(c)(2).

B. Other Indemnities.

1) Other than in the performance of design professional services, and to the fullest extent permitted by law, Contractor shall, at its sole cost and expense,

defend, hold harmless and indemnify the Indemnitees from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Claims"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Contractor, its officers, agents, servants, employees, subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that Contractor shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Claims arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties. Contractor shall defend the Indemnitees in any action or actions filed in connection with any Claim with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Contractor shall reimburse the Indemnitees for any and all legal expenses and costs incurred by the Indemnitees in connection therewith.

2) Contractor shall pay all required taxes on amounts paid to Contractor under this Agreement, and 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. Contractor shall fully comply with the workers' compensation law regarding Contractor and Contractor's employees. Contractor shall indemnify and hold City harmless from any failure of Contractor to comply with applicable workers' compensation laws. City may offset against the amount of any fees due to Contractor under this Agreement any amount due to City from Contractor as a result of Contractor's failure to promptly pay to City any reimbursement or indemnification arising under this subparagraph B.2).

3) Contractor shall obtain executed indemnity agreements with provisions identical to those in this Section 8 from each and every subcontractor or any other person or entity involved by, for, with or on behalf of Contractor in the performance of this Agreement. If Contractor fails to obtain such indemnities, Contractor shall be fully responsible and indemnify, hold harmless and defend the Indemnitees from and against any and all Claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Contractor's subcontractor, its officers, agents, servants, employees, subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that Contractor's subcontractor shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Claims arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties.

C. Workers' Compensation Acts not Limiting. Contractor's obligations under this Section 8, or any other provision of this Agreement, shall not be limited by the

provisions of any workers' compensation act or similar act. Contractor expressly waives its statutory immunity under such statutes or laws as to City, its officers, agents, employees and volunteers.

D. Insurance Requirements not Limiting. City does not, and shall not, waive any rights that it may possess against Contractor because of the acceptance by City, or the deposit with City, of any insurance policy or certificate required pursuant to this Agreement. The hold harmless and indemnification provisions in this Section 8 shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liabilities, Claims, tax, assessment, penalty or interest asserted against City.

E. Survival of Terms. The indemnification in this Section 8 shall survive the expiration or termination of this Agreement.

9. Insurance.

A. Minimum Scope and Limits of Insurance. Contractor shall procure and at all times during the term of this Agreement carry, maintain, and keep in full force and effect, insurance as follows:

1) Commercial General Liability Insurance with a minimum limit of \$2,000,000.00 per occurrence for bodily injury, personal injury and property damage and a general aggregate limit of \$2,000,000.00 per project or location. If Contractor is a limited liability company, the commercial general liability coverage shall be amended so that Contractor and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

2) Automobile Liability Insurance for any owned, non-owned or hired vehicle used in connection with the performance of this Agreement with a combined single limit of \$2,000,000.00 per accident for bodily injury and property damage. If Contractor does not use any owned, non-owned or hired vehicles in the performance of Services under this Agreement, Contractor shall obtain a non-owned auto endorsement to the Commercial General Liability policy required under subparagraph A.1) of this Section 9.

3) Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance with a minimum limit of \$1,000,000.00 per accident for bodily injury or disease. If Contractor has no employees while performing Services under this Agreement, workers' compensation policy is not required, but Contractor shall execute a declaration that it has no employees.

4) Errors and Omissions Insurance with minimum limits of \$2,000,000.00 per claim and in aggregate.

B. Acceptability of Insurers. The insurance policies required under this Section 9 shall be issued by an insurer admitted to write insurance in the State of California with a rating of A:VII or better in the latest edition of the A.M. Best Insurance

Rating Guide. Self insurance shall not be considered to comply with the insurance requirements under this Section 9.

C. Additional Insured. The commercial general and automobile liability policies shall contain an endorsement naming City, its officers, employees, agents and volunteers as additional insureds.

D. Primary and Non-Contributing. The insurance policies required under this Section 9 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to City. Any insurance or self-insurance maintained by City, its officers, employees, agents or volunteers, shall be in excess of Contractor's insurance and shall not contribute with it.

E. Contractor's Waiver of Subrogation. The insurance policies required under this Section 9 shall not prohibit Contractor and Contractor's employees, agents or subcontractors from waiving the right of subrogation prior to a loss. Contractor hereby waives all rights of subrogation against City.

F. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by City. At City's option, Contractor shall either reduce or eliminate the deductibles or self-insured retentions with respect to City, or Contractor shall procure a bond guaranteeing payment of losses and expenses.

G. Cancellations or Modifications to Coverage. Contractor shall not cancel, reduce or otherwise modify the insurance policies required by this Section 9 during the term of this Agreement. The commercial general and automobile liability policies required under this Agreement shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail 30 days' prior written notice to City. If any insurance policy required under this Section 9 is canceled or reduced in coverage or limits, Contractor shall, within two business days of notice from the insurer, phone, fax or notify City via certified mail, return receipt requested, of the cancellation of or changes to the policy.

H. City Remedy for Noncompliance. If Contractor does not maintain the policies of insurance required under this Section 9 in full force and effect during the term of this Agreement, or in the event any of Contractor's policies do not comply with the requirements under this Section 9, City may either immediately terminate this Agreement or, if insurance is available at a reasonable cost, City may, but has no duty to, take out the necessary insurance and pay, at Contractor's expense, the premium thereon. Contractor shall promptly reimburse City for any premium paid by City or City may withhold amounts sufficient to pay the premiums from payments due to Contractor.

I. Evidence of Insurance. Prior to the performance of Services under this Agreement, Contractor shall furnish City's Risk Manager with a certificate or certificates of insurance and all original endorsements evidencing and effecting the coverages required under this Section 9. The endorsements are subject to City's approval. Contractor may provide complete, certified copies of all required insurance policies to

City. Contractor shall maintain current endorsements on file with City's Risk Manager. Contractor shall provide proof to City's Risk Manager that insurance policies expiring during the term of this Agreement have been renewed or replaced with other policies providing at least the same coverage. Contractor shall furnish such proof at least two weeks prior to the expiration of the coverages.

J. Indemnity Requirements not Limiting. Procurement of insurance by Contractor shall not be construed as a limitation of Contractor's liability or as full performance of Contractor's duty to indemnify City under Section 8 of this Agreement.

K. Subcontractor Insurance Requirements. Contractor shall require each of its subcontractors that perform Services under this Agreement to maintain insurance coverage that meets all of the requirements of this Section 9.

10. Mutual Cooperation.

A. City's Cooperation. City shall provide Contractor with all pertinent Data, documents and other requested information as is reasonably available for Contractor's proper performance of the Services required under this Agreement.

B. Contractor's Cooperation. In the event any claim or action is brought against City relating to Contractor's performance of Services rendered under this Agreement, Contractor shall render any reasonable assistance that City requires.

11. Records and Inspections. Contractor shall maintain complete and accurate records with respect to time, costs, expenses, receipts, correspondence, and other such information required by City that relate to the performance of the Services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Contractor shall provide free access to City, its designees and representatives at reasonable times, and shall allow City to examine and audit the books and records, to make transcripts therefrom as necessary, and to inspect all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three years after receipt of final payment.

12. Termination of Agreement.

A. Right to Terminate. City may terminate this Agreement at any time, at will, for any reason or no reason, after giving written notice to Contractor at least five calendar days before the termination is to be effective. Contractor may terminate this Agreement at any time, at will, for any reason or no reason, after giving written notice to City at least 60 calendar days before the termination is to be effective.

B. Obligations upon Termination. Contractor shall cease all work under this Agreement on or before the effective date of termination specified in the notice of termination. In the event of City's termination of this Agreement due to no fault or failure of performance by Contractor, City shall pay Contractor based on the percentage of work satisfactorily performed up to the effective date of termination. In no event shall

Contractor be entitled to receive more than the amount that would be paid to Contractor for the full performance of the Services required by this Agreement. Contractor shall have no other claim against City by reason of such termination, including any claim for compensation.

13. Force Majeure. Contractor shall not be liable for any failure to perform its obligations under this Agreement if Contractor presents acceptable evidence, in City's sole judgment, that such failure was due to strikes, lockouts, labor disputes, embargoes, acts of God, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Contractor's reasonable control and not due to any act by Contractor.

14. Default.

A. Contractor's failure to comply with the provisions of this Agreement shall constitute a default. In the event that Contractor is in default for cause under the terms of this Agreement, City shall have no obligation or duty to continue compensating Contractor for any work performed after the date of default.

B. If the City Manager or his delegate determines that Contractor is in default in the performance of any of the terms or conditions of this Agreement, City shall serve Contractor with written notice of the default. Contractor shall have ten calendar days after service upon it of the notice in which to cure the default by rendering a satisfactory performance. In the event that Contractor fails to cure its default within such period of time, City may, notwithstanding any other provision of this Agreement, terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

15. Notices. Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Contractor's and City's regular business hours, or (c) three business days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

If to City:
Attn: Prem Kumar, City Engineer
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, California 90266
Telephone: (310) 802-5352
Email: pkumar@citymb.info

If to Contractor:
Brian Anderson, P.E., Group Mgr.
Michael Baker International, Inc.
14725 Alton Parkway
Irvine, CA 92618
Telephone: (949) 472-3505
Email: briananderson@mbakerintl.com

With a courtesy copy to:

Quinn M. Barrow, City Attorney
1400 Highland Avenue
Manhattan Beach, CA 90266
Telephone: (310) 802-5061
Email: qbarrow@citymb.info

16. Non-Discrimination and Equal Employment Opportunity. In the performance of this Agreement, Contractor shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law. Contractor will take affirmative action to ensure that subcontractors and applicants are employed, and that employees are treated during employment, without regard to their race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information or sexual orientation.

17. Prohibition of Assignment and Delegation. Contractor shall not assign any of its rights or delegate any of its duties under this Agreement, either in whole or in part, without City's prior written consent. City's consent to an assignment of rights under this Agreement shall not release Contractor from any of its obligations or alter any of its primary obligations to be performed under this Agreement. Any attempted assignment or delegation in violation of this Section 17 shall be void and of no effect and shall entitle City to terminate this Agreement. As used in this Section 17, "assignment" and "delegation" means any sale, gift, pledge, hypothecation, encumbrance or other transfer of all or any portion of the rights, obligations, or liabilities in or arising from this Agreement to any person or entity, whether by operation of law or otherwise, and regardless of the legal form of the transaction in which the attempted transfer occurs.

18. No Third Party Beneficiaries Intended. This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

19. Waiver. No delay or omission to exercise any right, power or remedy accruing to City under this Agreement shall impair any right, power or remedy of City, nor shall it be construed as a waiver of, or consent to, any breach or default. No waiver of any breach, any failure of a condition, or any right or remedy under this Agreement shall be (1) effective unless it is in writing and signed by the Party making the waiver, (2) deemed to be a waiver of, or consent to, any other breach, failure of a condition, or right or remedy, or (3) deemed to constitute a continuing waiver unless the writing expressly so states.

20. Final Payment Acceptance Constitutes Release. The acceptance by Contractor of the final payment made under this Agreement shall operate as and be a

release of City from all claims and liabilities for compensation to Contractor for anything done, furnished or relating to Contractor's work or services. Acceptance of payment shall be any negotiation of City's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by City shall not constitute, nor be deemed, a release of the responsibility and liability of Contractor, its employees, sub-contractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by City for any defect or error in the work prepared by Contractor, its employees, sub-contractors and agents.

21. Corrections. In addition to the above indemnification obligations, Contractor shall correct, at its expense, all errors in the work which may be disclosed during City's review of Contractor's report or plans. Should Contractor fail to make such correction in a reasonably timely manner, such correction may be made by City, and the cost thereof shall be charged to Contractor. In addition to all other available remedies, City may deduct the cost of such correction from any retention amount held by City or may withhold payment otherwise owed Contractor under this Agreement up to the amount of the cost of correction.

22. Non-Appropriation of Funds. Payments to be made to Contractor by City for services preformed within the current fiscal year are within the current fiscal budget and within an available, unexhausted fund. In the event that City does not appropriate sufficient funds for payment of Contractor's services beyond the current fiscal year, the Agreement shall cover payment for Contractor's services only to the conclusion of the last fiscal year in which City appropriates sufficient funds and shall automatically terminate at the conclusion of such fiscal year.

23. Exhibits. Exhibits A and B constitute a part of this Agreement and are incorporated into this Agreement by this reference. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Contractor's proposal, the provisions of this Agreement shall control.

24. Entire Agreement and Modification of Agreement. This Agreement and all exhibits referred to in this Agreement constitute the final, complete and exclusive statement of the terms of the agreement between the Parties pertaining to the subject matter of this Agreement and supersede all other prior or contemporaneous oral or written understandings and agreements of the Parties. No Party has been induced to enter into this Agreement by, nor is any Party relying on, any representation or warranty except those expressly set forth in this Agreement. This Agreement may not be amended, nor any provision or breach hereof waived, except in a writing signed by both Parties.

25. Headings. The headings in this Agreement are included solely for convenience of reference and shall not affect the interpretation of any provision of this Agreement or any of the rights or obligations of the Parties to this Agreement.

26. Word Usage. Unless the context clearly requires otherwise, (a) the words "shall," "will" and "agrees" are mandatory and "may" is permissive; (b) "or" is not exclusive; and (c) "includes" or "including" are not limiting.

27. Time of the Essence. Time is of the essence in respect to all provisions of this Agreement that specify a time for performance; provided, however, that the foregoing shall not be construed to limit or deprive a Party of the benefits of any grace or use period allowed in this Agreement.

28. Business Days. "Business days" means days Manhattan Beach City Hall is open for business.

29. Governing Law and Choice of Forum. This Agreement, and any dispute arising from the relationship between the Parties to this Agreement, shall be governed by and construed in accordance with the laws of the State of California, except that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applied in interpreting this Agreement. Any dispute that arises under or relates to this Agreement (whether contract, tort or both) shall be resolved in a superior or federal court with geographic jurisdiction over the City of Manhattan Beach.

30. Attorneys' Fees. In any litigation or other proceeding by which a Party seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing Party shall be entitled to recover actual attorneys' fees, experts' fees, and other costs, in addition to all other relief to which that Party may be entitled.

31. Severability. If a court of competent jurisdiction holds any provision of this Agreement to be illegal, invalid or unenforceable for any reason, the validity of and enforceability of the remaining provisions of this Agreement shall not be affected and continue in full force and effect.

32. Counterparts. This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument.

33. Corporate Authority. The persons executing this Agreement on behalf of the Parties warrant that they are duly authorized to execute this Agreement on behalf of the Parties and that by their execution, the Parties are formally bound to the provision of this Agreement.

[SIGNATURE PAGE FOLLOWS]

The Parties, through their duly authorized representatives are signing this Agreement on the date stated in the introductory clause.

City:

City of Manhattan Beach,
a California municipal corporation

By: Nadine Mader
Name: NADINE MADER
Title: ASST City MANAGER

ATTEST:

By: [Signature] 2-1-17
Name: Liza Tamura
Title: City Clerk

APPROVED AS TO FORM:

By: [Signature]
Name: Quinn M. Barrow
Title: City Attorney

APPROVED AS TO CONTENT:

By: [Signature]
Name: Bruce Moe
Title: Finance Director

Contractor:

Michael Baker International Incorporated,
a Pennsylvania Corporation

By: [Signature]
Name: Steve Huff
Title: Assistant Corporate Secretary

By: [Signature]
Name: Michael Bryz
Title: Vice President

EXHIBIT A
SCOPE OF SERVICES

PROPOSAL



**Professional Engineering Services
Aviation Boulevard at
Artesia Boulevard Southbound
to Westbound Right Turn Lane
Improvement Project | 1081-17**



**Michael Baker
INTERNATIONAL**

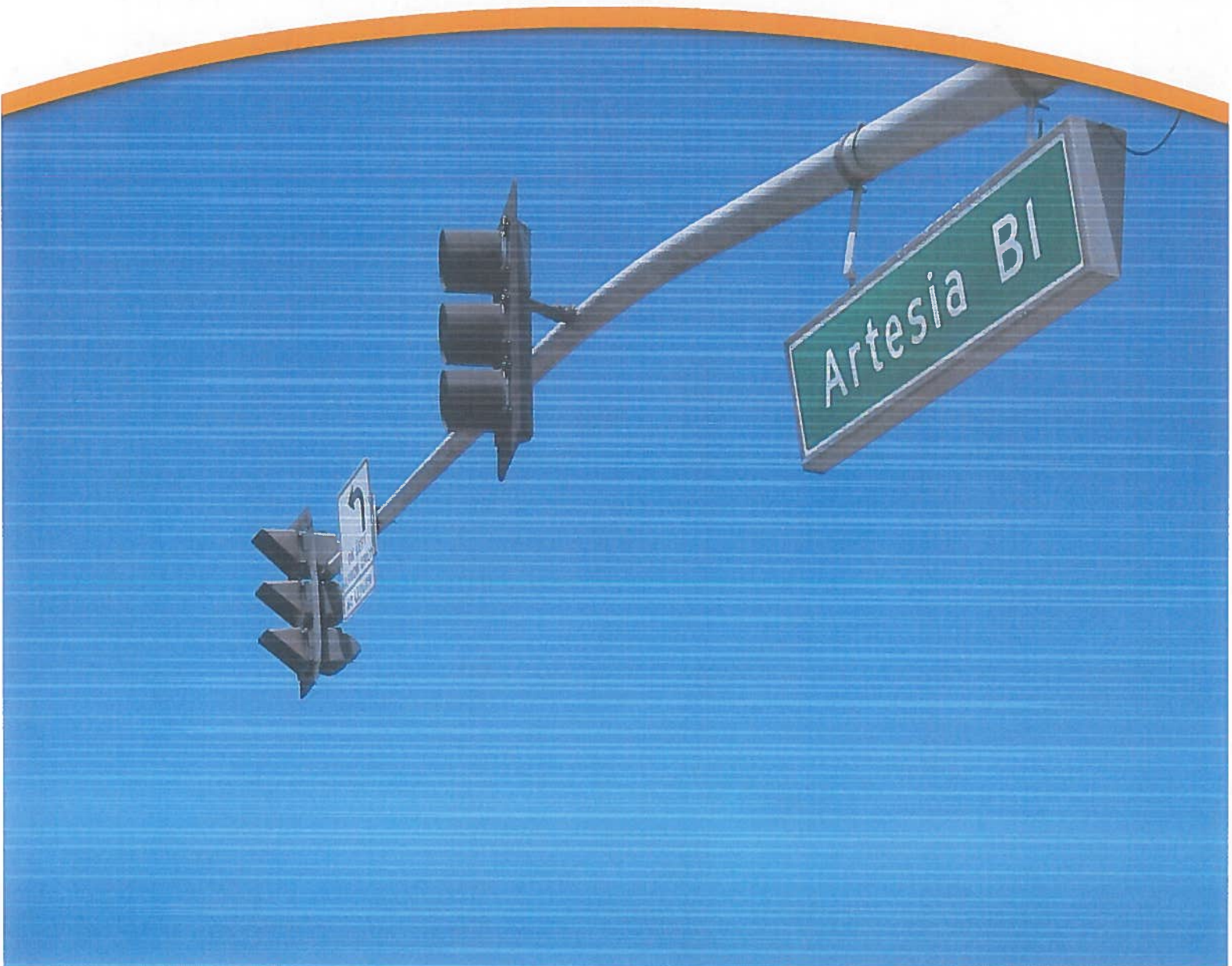
Our Mission

Make the world a better place through the application of the principle of sustainable development by providing professional design services that enhance the quality of life and the environment.

Provide development, infrastructure, planning and environmental services to private and public sector clients in local, regional and global markets.

Lead as professionals specializing in planning, design and construction.

Look forward to the future with a commitment to building opportunities and value for our clients and ourselves.



August 24, 2016

JN: 155207

City of Manhattan Beach
Office of City Clerk
1400 Highland Avenue
Manhattan Beach, CA 90266

SUBJECT: Proposal | Aviation Boulevard at Artesia Boulevard Southbound to Westbound Right Turn Lane Improvement Project #1081-17

Dear Selection Panel Members:

Michael Baker International, Inc. (Michael Baker) is pleased to submit our proposal to the City of Manhattan Beach (City) for design services for the Aviation Boulevard at Artesia Boulevard Southbound to Westbound Right-Turn Lane Improvement Project. As you may know, we are currently completing similar design services for the City of Redondo Beach in southeast quadrant of the Aviation Boulevard / Artesia Boulevard to provide a northbound right-turn lane from Aviation Boulevard to eastbound Artesia Boulevard and as a result we understand this intersection and its opportunities and constraints very well. Artesia Boulevard is shared by the Cities of Manhattan Beach and Redondo Beach and therefore, close coordination with Redondo Beach to align the roadway geometry and verify safe operations, will be paramount to the success of this project.

We have assembled a team of professionals who have the skills and experience needed to successfully deliver this project. Our team includes: **C Below** (utility potholing - currently providing utility potholing services in this intersection for our Redondo Beach project), **Hushmand Associates, Inc.** (geotechnical and pavement design) and **Paragon Partners** (right-of-way Services). Our team is well known for anticipating issues and developing effective strategies to minimize the potential for delays and/or adverse cost impacts.

Key attributes of the Michael Baker Team include:

- ✓ **Experienced Project Manager with a Proven Track Record** - The Michael Baker Team will be led by **Brian Anderson, PE**. Mr. Anderson has 30 years of directly relevant experience and in addition to his strong municipal / public works experience, he is managing the Aviation Boulevard / Artesia Boulevard Northbound Right-Turn Lane project for the City of Redondo Beach.
- ✓ **Depth of Resources** - Our seasoned team of professionals, paired with the resources of our full-service engineering capabilities, position our team to maximize efficiencies and provide added value to the City of Manhattan Beach throughout the project.
- ✓ **Thorough Understanding of the Project Elements** - We have identified key project tasks and strategies to successfully achieve the City's project goals and objectives. Michael Baker and our team of subconsultant firms are prepared to evaluate and discuss cost saving strategies and opportunities with the City.

Michael Baker acknowledges Addendum #1 issued on August 17, 2016 and our proposal is valid for ninety (90) days. Michael Baker is a Pennsylvania Corporation; National Headquarters located at 500 Grant Street, Suite 5400, Pittsburgh, PA 15219. Mr. Michael Tylman, Senior Vice President, has the authority to sign on the behalf of Michael Baker.

The Michael Baker Team sincerely appreciates the opportunity to submit the enclosed proposal and welcomes the opportunity to meet with you to further discuss your project goals. Please feel free to contact Brian Anderson at (949) 330-4145, briananderson@mbakerintl.com to discuss any aspect of this proposal.

Respectfully,

Michael Baker International, Inc.



Brian Anderson, PE | Project Manager



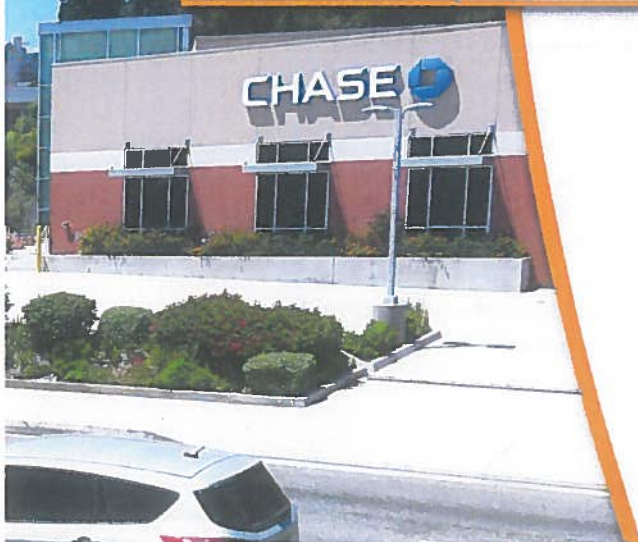
Michael Tylman, PE | Senior Vice President



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01 Understanding Scope of Services



01 UNDERSTANDING SCOPE OF SERVICES

The City of Manhattan Beach is requesting proposals to provide Professional Engineering Services to design a right-turn lane from southbound Aviation Boulevard to westbound Artesia Boulevard near the City's southeastern limits.

Michael Baker's approach to making this project successful is based on our extensive experience with similar projects. **Currently, our team is working with the City of Redondo Beach on the design of a right-turn lane located in the southeast corner of this intersection.** The key to successful delivery of this project is a complete understanding of the design requirements, combined with an effective approach that minimizes construction costs and disruption to the adjacent property owners and the motoring public.

Our primary task includes: Preparation of final plans, specifications, and cost estimates for a new right-turn lane from southbound Aviation to westbound Artesia Boulevard. In general, this effort includes providing the necessary documents required for project approval; including preliminary studies, final plans, specifications, and estimates (PS&E), right-of-way acquisition, and construction support services.

Aviation Boulevard is a major north-south arterial, designated truck and transit route, and is currently operating (in both the AM and PM peak hour operation) at Level of Service F. In addition, Artesia Boulevard is a major east-west arterial, which provides regional access to I-405 and it is also operating at Level of Service F for both the AM and PM peak periods. The limitations for the existing intersection at Aviation Boulevard and Artesia Boulevard are that traffic demands on these arterials exceed capacity, which is further impacted by the inadequate storage queues of the turn movements (left and right). The combined right-turn lanes for Redondo Beach and Manhattan Beach should provide a relief to the intersection for the off-peak hours of operation.



Traffic along Aviation Boulevard

The Aviation Boulevard and Artesia Boulevard project is funded by Los Angeles County Metropolitan Transportation Authority (Metro) utilizing local Measure R funding. For this project, the Manhattan Beach City Council passed Resolution Number 6055 which contained an offer for an eight (8) foot right-of-way dedication to be used for roadway widening for this right-turn lane on the property on the northwest corner of Aviation. **The key issues and our proposed strategies are outlined in the following table:**

KEY PROJECT ISSUES	
ISSUES	STRATEGY
A. Traffic Impacts	Existing traffic volumes exceed capacity at this intersection and the intersection is operating a Level of Service F for peak hour operations. Since Aviation Boulevard is the second most used north-south arterial in Manhattan Beach, it is believed that incremental improvements to traffic flow will be realized during the off-peak hours. Therefore, lane queue length should be based on available right-of-way.
B. Pedestrian and Bicycle Traffic Circulation Analysis	It is understood the project is focused on traffic congestion, however, the South Bay Bicycle Master Plan has designated Aviation Boulevard as a Class II bicycle facility. To examine impacts to accommodate a future Class II bicycle lane, Michael Baker has developed two right-turn lane configurations (See Exhibit A): Option 1 provides a 13.5-foot wide right-turn lane with an 8-foot wide sidewalk, sufficient to accommodate truck turning and provide sidewalk access capacity; Option 2 provides an 11-foot wide right-turn lane and a Class II (5-foot) bicycle lane with a 5-foot wide sidewalk. Pedestrian access is consistent with the L.A. County's "Complete Streets" policies and guidelines. As illustrated on Exhibit A, enhanced cross-walk markings are provided to improve visibility consistent with the City's "Neighborhood Traffic Management Program" design tools. All proposed pedestrian and bicycle facilities will meet or exceed ADA requirements.



KEY PROJECT ISSUES

ISSUES	STRATEGY
C. Right-of-Way Analysis, Acquisition	<p>Based on our research and experience with projects of similar scope and complexity, we have identified the following potential challenges that will be given consideration during the right-of-way acquisition process. Anticipated impacts to the property located at 1727 Artesia Boulevard include removal/relocation of the sidewalk, landscaping, irrigation system, and relocation of public utilities. Depending on the design of the retaining wall, the property acquisition may result in protection or relocation of the monument sign. The area is zoned as General Commercial, Area District 1, with a lot square footage of 22,026 sf. The property was recently sold to Angelen Gendian Trust in 2014 for \$6,250,000. The project does not require relocation of any of the businesses located on the property which include Chase Bank, Chase Mortgage and ATM Express. The area of property that would need to be acquired is limited to a portion of landscaping located along the property frontage on Artesia Boulevard and on Aviation Boulevard. The driveway will need to be modified to match the new elevation of the retaining walls to be constructed on Aviation Boulevard. A mitigation measure would include ensuring that access to all businesses is maintained during construction to avoid any loss of goodwill claims.</p> <p>The Michael Baker team will personally meet and negotiate in good faith with the property owner, their agent, or representative to present offers, explain the acquisition process, and gather information to obtain the required executed documents. Our goal will be to reach a successful acceptance of the offer, or justifiable settlement, with the property owner.</p>
D. Environmental Review	<p>Michael Baker understands that the City has acquired Measure R funds for the proposed project improvements. As such, clearance under the California Environmental Quality Act (CEQA) will be required. Michael Baker will assist the City in streamlining the CEQA process through preparation of a Categorical Exemption under Section 15300 of the CEQA Guidelines. To enhance the defensibility of the use of a Categorical Exemption and to support the expected finding that the project would not result in any significant impacts, the environmental work program also includes preparation of a brief Initial Study. The Initial Study will assess impacts as required under Appendix G of the CEQA Guidelines to a sufficient level of detail to substantiate use of the Exemption. The use of a Categorical Exemption is expected to result in substantial time savings, since the project would not be subject to a mandatory public review period or public hearings for approval of a CEQA document.</p>
E. Utility Coordination	<p>Michael Baker will perform an initial utility records search and notification process to coordinate and identify existing utilities within the project area. This approach will include review of the Underground Service Alert data base, collection of maps, road atlases, and record documents supplied by the utility agencies which will be plotted on the project base map. Michael Baker will request that the utility companies provide information pertaining to new or proposed facilities that are planned for the area, to verify potential impacts with the proposed improvements. A series of notices (3) will be issued to the utility companies during the development process. Four (4) potholes are budgeted for critical utility identification. A correspondence log will be kept containing all notifications and correspondence with the agencies. "Final Notice To Relocate" will be issued to facilities directly in conflict with the project improvements.</p>
F. Construction Staging and Traffic Handling	<p>Construction improvements for this project will be designed to minimize impacts to vehicle, truck, transit, bicyclist, and pedestrian traffic, in addition to the property access and operations, and on-site restoration. We will provide clear direction to the Contractor through our plans and specifications of all critical activities, work hour limitations, maximum lane closure durations, access requirements, coordination, and</p>



KEY PROJECT ISSUES	
ISSUES	STRATEGY
	notification requirements necessary to stage construction and address traffic handling. Michael Baker will utilize our experienced construction managers to perform a constructability review of our design to identify potential gaps in our design and identify appropriate measures to facilitate construction.
G. Drainage and Water Quality	Michael Baker will obtain record information from the County in addition to obtaining private drainage facility records from the adjacent property owners. Currently, the northwest quadrant of this intersection has a low-point which collects nuisance runoff and debris with no apparent outlet. To remedy this issue, Michael Baker will design a storm inlet catch basin to collect this runoff and convey the flow to the existing drainage system within Aviation Boulevard. This work will require coordination and permitting with Los Angeles County Public Works. Although the project is required to comply with the Los Angeles County NPDES requirements, based on our initial review of the area of disturbance, a Standard Urban Stormwater Mitigation Plan (SUSMP) and treatment BMP options would not be triggered. Our strategy is to design appropriate drainage measures specific to the project requirements being mindful of regional NPDES/SUSMP requirements.
H. Design Layout (Right-Turn Lane)	Michael Baker brings to the City the benefit of our current design work at the Aviation Boulevard and Artesia Boulevard intersection including: preliminary investigations, survey, and operational review of the intersection. We are able to provide this benefit due to our current right-turn lane design work for the City of Redondo Beach. Our approach will combine our understanding of the intersection operations and incorporate our knowledge for the design of this project right-turn lane. Specific to the project (northwest) right-turn lane at Artesia Boulevard, we have prepared a concept (Exhibit A) which illustrates the project understanding as described in the RFP. Features such as: travel lane width, shoulders, and ADA compliant parkways all meet or exceed the City's roadway design standards. Although much of the landscaping along Aviation Boulevard will be removed and replaced, a new retaining wall approximately 4 to 5 feet in height is shown which facilitates the protection of on-site improvements. Our proposed curb transition requires modification of the existing driveway, the approach, and the access ramp. The curb transition configuration promotes smooth lane crossing and limits property impacts to the corner property only. Proposed roadway impacts are minimized to the edge of the new right-turn lane and associated curb return improvements, and drainage improvements are identified showing a new conveyance lateral at the low point of the curb flowline. Traffic safety enhancements are illustrated showing the enhanced cross-walk markings and the reconfigured ADA access ramp. To clarify the intersection improvements, we have included the proposed right-turn lane configuration (Exhibit A) that we are designing for the City of Redondo Beach. As identified during the design process for the Redondo Beach right-turn lane, the lane transitions through the intersection for all four (4) roadway legs are skewed due to the angle of approach. The lane transition in the north-south direction on Aviation Boulevard is skewed by more than 8-feet. For this reason, we are coordinating with both Cities to provide "cat track" dashed lane line through the intersection to facilitate clear lane positioning and guidance for the traveling vehicles.
I. Truck Turning Analysis	We have completed a preliminary turn turning analysis (Exhibit A) and a detailed truck turning analysis will be performed at the geometric approval stage to identify potential design issues. Aviation Boulevard is classified as a truck and transit route, therefore, a balanced review of the STAA truck and other smaller trucks should be completed, such that right-of-way impacts and, pedestrian and bicycle impacts are clearly considered throughout the screening of the development process.

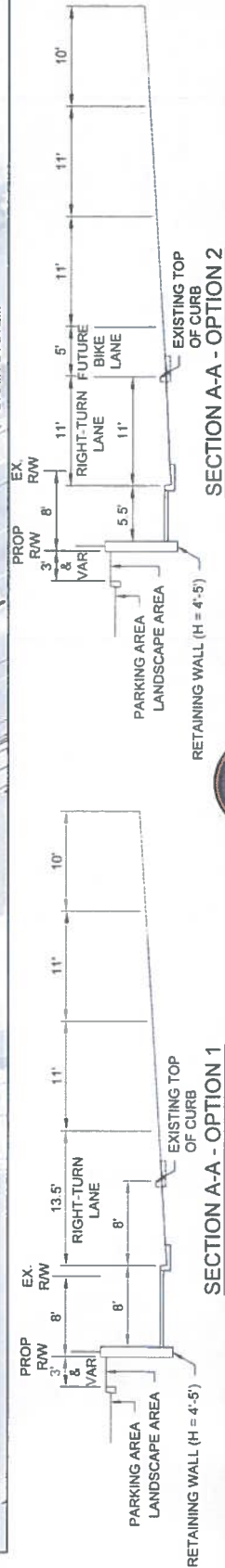
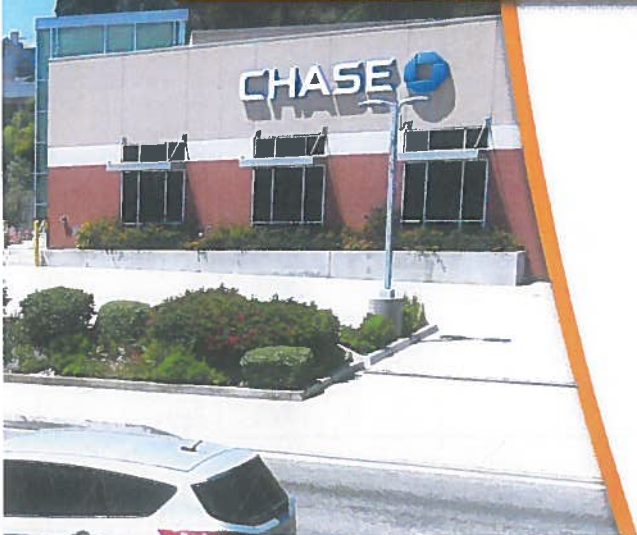
Michael Baker
INTERNATIONAL

EXHIBIT A - LAYOUT & OPTIONS
AVIATION BLVD RIGHT-TURN LANE WIDENING
AUGUST 2016

02 Methodology and Work Plan





02 METHODOLOGY AND WORK PLAN

The work plan to accomplish this project consists of clearly defining the goals of the City and then establishing the appropriate work tasks to meet these goals. Our understanding of the project is based on information obtained from the Request for Proposal, review of the referenced materials and our current work in this intersection. The following table outlines the anticipated work plan required to complete this project. For clarity, Michael Baker has expanded on the scope of work provided with the Request for Proposal. The following items are proposed modifications or clarifications to the Scope of Services:

TASK DELIVERABLE(S)	TASK DESCRIPTION
PRELIMINARY DESIGN	
Task 1: Record Research and Site Investigation Deliverables: <ul style="list-style-type: none"> Site Photo Log 	<p>This task includes a site review, collection and review of relevant documents including previous record drawings, traffic studies, utility maps, and other record information. Perform a site visit to assess the street, traffic, landscape, utilities, drainage, ADA access, driveway access, signage and striping, transit facility, and pavement conditions. Collect photos of the site and site improvements and catalog for reference purposes. Evaluate the City's General Circulation Element and other planning and design reports to anticipate or accommodate current and/or future roadway improvements.</p>
Task 2: Topographic Survey/ Base Mapping Deliverables: <ul style="list-style-type: none"> Project Control (established) Topographic Survey Data CAD Base Mapping 	<p>Michael Baker has established horizontal and vertical control for the intersection of Aviation Boulevard and Artesia Boulevard. Therefore, a supplemental field survey will be performed for the northwest property and adjoining roadway segments of Aviation Boulevard and Artesia Boulevard. Michael Baker will obtain locations, elevations and descriptions of improvements located within 50 feet of the immediate project impact area suitable for final design purposes. Topographic mapping at a plotting scale of 1"=20' with 1' interval contours will be provided. File formats will utilize AutoCAD Civil 3D following the City standards. Topographic Computer Aided (CAD) file of the survey points to show the existing elevations and features of the project will be collected for reference purposes. Standard notes and survey data will be submitted to the City for their records.</p>
Task 3: Utility Research/ Coordination Deliverables: <ul style="list-style-type: none"> Utility Notification Utility Pothole investigation Utility Constraints mapping 	<p>Michael Baker will prepare a series of three (3) utility notification letters for each utility identified in the Project. Michael Baker shall prepare a template letter and submit to the City to print on to City Letterhead. Correspondence and general coordination will be provided to the utility companies to identify impacts and possible relocations. Michael Baker will coordinate with utility owners via email and/or phone calls. Agency supplied maps will be logged and utility mapping data incorporated into our base maps. Utilities believed to be in conflict with the Project will be potholed and verified. Four (4) pothole investigations are budgeted for this project. The pothole field data will be incorporated in the design documents, as appropriate.</p>
Task 4: Environmental Documentation Deliverables: <ul style="list-style-type: none"> CEQA NOE Initial Study (qualitative) 	<p>Based on a review of the proposed improvements and existing setting, it is anticipated that a CEQA Categorical Exemption will apply to the proposed project. As such, Michael Baker will prepare a Notice of Exemption (NOE) as required under CEQA. The NOE will provide a brief project description, a description of the project site and affected area, and substantiation for the exemption. The NOE will be filed with the County Clerk and State Clearinghouse upon approval by the City.</p> <p>To substantiate the use of a Categorical Exemption, Michael Baker will prepare a brief, qualitative Initial Study intended to verify that the project would not result in a potential for significant impacts. The Initial Study will address environmental effects in the same topical manner as Appendix G of the CEQA Guidelines. Since the project would be considered exempt from CEQA as part of the NOE, the Initial Study would remain within City files and would not be subject to public review or a public hearing. This Initial Study would not be intended to serve as a stand-alone, formal CEQA document, but rather, serve as an informational document supporting the NOE. Technical studies and/or quantitative</p>



TASK DELIVERABLE(S)	TASK DESCRIPTION
Task 4: Environmental Documentation Deliverables: <ul style="list-style-type: none">• CEQA NOE• Initial Study (qualitative)	<p>analysis are specifically excluded from this task. This scope includes payment of any County Clerk filing fees required to support the CEQA process.</p> <p>A Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report, are not included in this scope of work. If it is determined that an alternate form of CEQA documentation is required, a separate scope and fee can be provided.</p>
Task 5: Geotechnical Investigation Deliverables: <ul style="list-style-type: none">• Retaining Wall Design• Pavement Structural Section• Pole Foundation Design	<p>The Michael Baker team will provide a geotechnical evaluation and design to support the pavement design, retaining wall design, and light pole foundation design for the project. Services include:</p> <ul style="list-style-type: none">• File Review. We will review readily available information for the area including information in our files and/or available documents at the US Geological Survey and California Geological Survey offices/websites regarding local site conditions. If available, we will review preliminary project plans, as-built project plans and specifications, log of test boring sheets, and existing structure foundation reports.• Field Exploration. To characterize surface and subsurface conditions, we propose drilling two (2) borings to a depth of approximately 15 feet below the existing ground surface (bgs) or to refusal depth, whichever reached first for retaining wall and pavement design, and two (2) borings to a depth of approximately 5 feet bgs or to refusal depth, whichever reached first for pavement design. Boring locations will be selected with the City. <p>We will mark boring locations and notify the City and Underground Service Alert (USA) prior to beginning fieldwork so that public or private underground utilities can be identified.</p> <p>For the purpose of this proposal, it is the responsibility of utility owners to mark their utilities. We are not responsible for utilities not properly marked at the ground surface. We will obtain soil samples from our borings for visual classification and laboratory testing. Borings will be backfilled with soil cuttings and patched to restore its original condition and/or with cold asphalt concrete. Traffic control will be provided during our field investigation per the WATCH manual.</p> <p>This proposal specifically excludes the assessment of environmental characteristics, particularly those involving hazardous substances at the site. In the event that obviously suspicious subsurface materials are encountered visually or by odor in the geotechnical test boring, such boring will be immediately terminated until we receive direction from the City. Michael Baker will notify the City as soon as possible of such an occurrence, and we will both mutually decide whether to continue, modify, or cease the remainder of the drilling program and whether an environmental assessment should be conducted. All added costs incurred because of suspected hazardous substances will be charged on a time-and-expense basis over and above the established fees for the site investigation.</p> <ul style="list-style-type: none">• Laboratory Testing. We will conduct laboratory testing on the sampled soils to evaluate their engineering properties. Laboratory testing may include: 1) Natural Moisture Content, 2) Atterberg Limits, 3) Grain Size Analysis, 4) Expansion Index, 5) Direct Shear, 6) R-value, and 7) Corrosion Potential.• Office Studies. We will review the field and laboratory data, and perform engineering analysis for retaining wall and pavement design recommendations. We will prepare a report that includes the results of our investigation, and our conclusions and



TASK DELIVERABLE(S)	TASK DESCRIPTION
Task 5: Geotechnical Investigation (Continued) Deliverables: <ul style="list-style-type: none">Retaining Wall DesignPavement Structural SectionPole Foundation Design	<p>geotechnical recommendations. Our report will include a site plan, boring logs, and laboratory test data, in addition to the following information.</p> <p>Site Conditions: We will review the surface, subsurface and groundwater conditions information, and the engineering properties of the soils encountered during the site investigation and obtained from the existing data review and our field investigation and laboratory tests.</p> <p>Earthwork: We will present earthwork criteria, including recommendations for clearing and site preparation, subgrade preparation, compaction, materials for fill, temporary cut and fill slopes, utility trench backfill, surface drainage, and landscaping considerations, as necessary.</p> <p>Retaining Walls: Where applicable, we will present retaining wall design criteria, including recommended foundation type, lateral static and dynamic earth pressures, drainage, and backfill.</p> <p>Temporary Excavations: We will provide geotechnical construction recommendations for temporary excavations for shoring design and excavation slope stability evaluation.</p> <p>Earthwork: We will present earthwork criteria, including recommendations for clearing and site preparation, subgrade preparation, compaction, materials for fill, temporary cut and fill slopes, utility trench backfill, surface drainage and landscaping considerations, as necessary.</p> <p>Corrosion: Site soils will be tested for sulfate and chloride content, pH, and resistivity for preliminary screening of corrosion potential.</p> <p>Pavements: We will perform flexible pavement design for new sections and/or flexible pavement overlay based on results of R-value tests and traffic index values provided by the Client/City.</p> <p>We will provide three (3) copies of the final report to the City. A final color, signed, wet-stamped report copy will be emailed to the City in Adobe Acrobat (pdf) format, if desired, so that you have report copies available for distribution at all times.</p>
Task 6: Geometric Approval Drawings (GAD) 35% Roadway Deliverables: <ul style="list-style-type: none">Geometric Approval Drawing (1"=20'scale)	<p>An initial design workshop will be held with the City to review the proposed project design. The Geometric Approval Drawing (GAD) shall incorporate the concept right-turn lane alignment, existing topographic, proposed improvements, and planimetric mapping, right-of-way, centerlines, geometric layout, and typical section. The Plan will be prepared at 1"=20' scale with title border. The project will not advance until approval by the City of the GAD.</p>
Task 7: Hydrological/Hydraulic Analysis Deliverables: <ul style="list-style-type: none">Drainage Design Report	<p>Michael Baker will perform Hydraulic and Hydrologic calculations to properly size the proposed drainage inlet required to intercept surface stormwater flow for this project. Based on our initial review, no permanent BMP measurements nor a SUSMP will be required due to the minimal area of project disturbance. This meets both LA Region NPDES and the Construction General permits requirements.</p>
Task 8: Preliminary Cost Estimate Deliverable: Preliminary Cost Estimate	<p>Prepare a preliminary estimate of construction quantities and costs based upon the approved geometric approval drawings utilizing the current information from Caltrans Contract Cost Data and recent construction bid data from the City and surrounding areas.</p>



TASK DELIVERABLE(S)	TASK DESCRIPTION
Task 9: Project Report 35% Design Deliverables: Compiled Project Issues and Preliminary Design Report	<p>Michael Baker will prepare a Project Report which compiles the preliminary study information, field data, and record information. The Report will be submitted with the 35% GAD drawings. Design recommendations, strategies, and property acquisition processing will be addressed identifying the design approach. The Report will address the following:</p> <ul style="list-style-type: none">• Project Background• Exiting Facilities• Right of Way• Traffic Information (Available)• Deficiencies and Justification• Project Costs and Funding• Scheduling• Environmental Clearance• Conclusions and Recommendations <p>This task assumes that any City comments will be incorporated into the final design and at maximum, there will only be one round of comments.</p>
Task 10: Right of Way Appraisal and Acquisition Deliverables: <ul style="list-style-type: none">• Coordination and Meetings• Legal Exhibit and Plat• TCE Exhibit• Title Report• Site exhibit presentation• Appraisal• Agent Services	<p>Michael Baker will provide right-of-way appraisal, acquisition, and/or vacation services as requested in the RFP. The following tasks will be performed for the Right of Way Acquisition and Appraisal for 1727 Artesia Boulevard Manhattan Beach, CA:</p> <ul style="list-style-type: none">• One (1) plat and legal description describing permanent parcel acquisition of said property will be prepared• One (1) Temporary Construction Easement document showing limits of proposed construction beyond the permanent parcel acquisition• A title report will be order for this parcel• A presentation exhibit illustrating the proposed improvements, limits of work, and conceptual visualization will be prepared• A fair market appraisal will be performed for the parcel• Michael Baker will provide property owner coordination and chair meetings• Michael Baker will present an offer letter(s) and appraisal summary to the property owner• Michael Baker will conduct negotiations and act as the City's agent
Task 11: (OPTIONAL) Phase I Hazardous Materials Assessment Deliverable: <ul style="list-style-type: none">• Phase I ESA	<p>Michael Baker will prepare a Phase I Environmental Site Assessment (ESA) for the proposed project (optional service). The Phase I ESA will be prepared, using methods consistent with the ASTM International (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments, which complies with 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule). Primary components of the work program will include:</p> <ul style="list-style-type: none">• Site Visit. Michael Baker will perform a site visit, which will consist of a visual examination of the project site for visual evidence of potential environmental concerns, including existing or potential soil and groundwater contamination as evidenced by soil or pavement staining or discoloration; stressed vegetation; indications of waste dumping or burial; pits; ponds; or lagoons; containers of hazardous substances or petroleum products; electrical and hydraulic equipment that may contain PCBs, such as electrical transformers and hydraulic lifts; and underground and aboveground storage tanks. Michael Baker will examine the physical characteristics of the property (i.e., apparent runoff directions, location of paved areas, etc.). It should be noted that the site visit specifically excludes any subsurface investigation including, but not limited to, sampling and/or laboratory analysis. A preliminary visual examination of immediately adjacent property conditions and their general nature will be conducted.• Historical Use Investigation. An investigation of historical uses of the project site by examining locally available aerial photographs (including historical aerial photos),



TASK DELIVERABLE(S)	TASK DESCRIPTION																																										
Task 11: (OPTIONAL) Phase I Hazardous Materials Assessment (Continued) Deliverable: <ul style="list-style-type: none">Phase I ESA	<p>historical topographic maps, and other available documentation for evidence of potential environmental concerns associated with prior land uses. This analysis will be provided in table format within the ESA report. Other past investigations will also be considered, if provided by the City.</p> <ul style="list-style-type: none">Interviews. Michael Baker will interview knowledgeable persons (i.e., current property owners, operators, occupants, adjacent residents, as well as applicable public agencies, if available) to identify operations conducted on the project site and neighboring properties, if any. Michael Baker will also identify the uses of all adjoining properties (i.e., those contiguous to the project site). If such operations are likely to affect the project site by contamination with hazardous substances or petroleum products, Michael Baker will describe the concerns presented to the project site within the ESA.Physical Setting Documentation. A review of information available on general geology and topography of the project site and local groundwater conditions will be conducted.Regulatory Database Search. Michael Baker will include a review of the commercial database summaries, provided by Environmental Data Resources, Inc. (EDR), regarding public agency records for the project site and surrounding area. Due to the length of the proposed alignment, this scope of work assumes that a 0.25-mile corridor radius will be searched by EDR.Other Documentation. A review of available property data for the project site, if applicable and available, will be conducted. <p>The results of the analysis will be compiled within a formal Phase I ESA report. This task assumes one round of City review, and one associated round of revisions by Michael Baker.</p>																																										
FINAL DESIGN – PLANS, SPECIFICATIONS, & ESTIMATE																																											
Task 12: Final Design Drawings Deliverables: <ul style="list-style-type: none">65% PS&E95% PS&EFinal Signed PS&E	<p>All plan types shall be completed in conformance with City of Manhattan Beach standards. Plans will be submitted to the City for review and approval for each specified percent submittal. A comment/response matrix will be prepared and submitted with each successive submittal. The following plans are included:</p> <p>We estimate that each submittal shall include an update to the cost estimate and special provisions.</p> <table><tr><th>Description</th><th># Sheets</th><th>Scale</th></tr><tr><td>Title Sheet</td><td>1</td><td>NTS</td></tr><tr><td>Site Plan</td><td>1</td><td>NTS</td></tr><tr><td>General Construction Notes</td><td>1</td><td>NTS</td></tr><tr><td>Horizontal Control Plan</td><td>1</td><td>1"=20'</td></tr><tr><td>Typical Sections</td><td>1</td><td>1"=20'</td></tr><tr><td>Construction Details</td><td>2</td><td>Varies</td></tr><tr><td>Roadway Plans & Profiles</td><td>1</td><td>1"=20'</td></tr><tr><td>Offsite Improvements</td><td>1</td><td>1"=20'</td></tr><tr><td>Drainage Plans/ Profile</td><td>1</td><td>1"=20'H, 1"=2'V</td></tr><tr><td>Electrical Plans</td><td>1</td><td>NTS</td></tr><tr><td>Landscape and Irrigation Plans</td><td>2</td><td>1"=20'</td></tr><tr><td>Striping and Signing Plans</td><td>1</td><td>1"=40'</td></tr><tr><td>TOTAL PLAN SHEETS</td><td>14</td><td></td></tr></table>	Description	# Sheets	Scale	Title Sheet	1	NTS	Site Plan	1	NTS	General Construction Notes	1	NTS	Horizontal Control Plan	1	1"=20'	Typical Sections	1	1"=20'	Construction Details	2	Varies	Roadway Plans & Profiles	1	1"=20'	Offsite Improvements	1	1"=20'	Drainage Plans/ Profile	1	1"=20'H, 1"=2'V	Electrical Plans	1	NTS	Landscape and Irrigation Plans	2	1"=20'	Striping and Signing Plans	1	1"=40'	TOTAL PLAN SHEETS	14	
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TASK DELIVERABLE(S)	TASK DESCRIPTION
Task 13: Specifications (Greene Book Format) Deliverables: <ul style="list-style-type: none">• 95% PS&E• Final Signed PS&E	Technical Specifications will be prepared following Standard Plans for Public Works Construction format, 2015 edition. A final electronic copy of the specifications will be submitted in Microsoft Word format.
Task 14: Preliminary Cost Estimate Deliverables: <ul style="list-style-type: none">• 95% PS&E• Final PS&E	Final design construction cost estimate will be prepared including construction quantities. Costs will be based utilizing the current information from Caltrans Contract Cost Data and recent construction bid data from the City and surrounding areas.
Task 15: Structural Calculations and Details Deliverables: <ul style="list-style-type: none">• Design Calculations• Design Details	Michael Baker will perform structural calculations utilizing the geotechnical parameters provided from Task 5. Design details will be generated for the retaining wall.
Task 16: Project Management/ Coordination/ Administration Deliverables: <ul style="list-style-type: none">• Project Management• Meeting Attendance• Project Scheduling• QA/QC	This task includes overall project management, liaison with affected agencies, meeting leadership, project meetings, scheduling, and maintenance of project files, quality control and quality assurance. An important consideration is to keep City staff well informed of project development and schedules. Meetings will be led by Michael Baker and include other stakeholders, as needed, to facilitate project delivery. Michael Baker will monitor and review design for conformance with City Standards, policies and procedures. A total of six (6) meetings have been budgeted.
BID SUPPORT/ CONSTRUCTION SUPPORT	
Task 17: Bid/ Construction Support Services Deliverables: <ul style="list-style-type: none">• Bid/ Construction Meeting• Shop Drawing Review• RFI Response	<p>Provide bid support services by addressing RFI's; attending the pre-bid meeting; prepare a single bid addendum; review contractor bids.</p> <p>Provide construction support services including attending the pre-construction and periodic construction meetings; address RFI's; review revisions.</p>



TECHNICAL WORK APPROACH

Michael Baker fully understands the design policies, standards, and procedures required to allow completion of the PS&E within the approved schedule and budget. This Project will include a variety of design tasks that are related to the alignment, profile, and construction sequencing of the project. These tasks must be performed in a logical sequence to complete the project improvements efficiently. The Michael Baker work approach divides this process into two (2) distinct Design Phases of Preliminary Engineering and Final PS&E as noted below:

Preliminary Design Phase

- Research of existing data regarding the proposed project
- Meeting with the City and reviewing agencies to discuss design criteria and known constraints
- Obtaining field and aerial topographic survey data including cross sections
- Perform right-of-way / boundary analysis and create property constraint map.
- Develop Environmental Clearance Documents.
- Conducting a geotechnical investigation and preparing the foundation report (by sub-consultant)
- Prepare the Precise Alignment and Geometric Approval Drawing and verify right-of-way requirements.
- Completing a hydrologic analysis of the site
- Prepare preliminary landscape plan
- Coordinate with utility companies for locations of existing and proposed facilities
- Prepare a Basis of Design Memorandum for review and approval of the City prior to final design
- Develop preliminary cost estimate

Final Plans, Specifications and Estimate Phase

- Prepare final improvement plans for roadway, wall structures, drainage, signals, signing, striping, traffic control, interconnect, landscaping and other related improvements
- Develop hydrology / hydraulics design report
- Develop Water Quality Management Plan / Best Management Practices (BMP's) as appropriate
- Prepare Project Specifications
- Develop final cost estimate
- Prepare legal descriptions and right-of-way maps for required right-of-way or construction easements
- Coordinate utility relocation agreements
- Submit complete PS&E for City review
- Prepare and process applicable regulatory permit agency applications
- Meet with the City and reviewing agencies to discuss review comments and make appropriate revisions
- Prepare construction bid documents
- Provide services during construction



03 Project Management



03 | PROJECT MANAGEMENT

In this section we will describe our management and technical approach to the successful delivery of this important project. The Michael Baker Team stands ready to provide to the City of Manhattan Beach with planning, engineering, and coordination services necessary for the successful completion of the Aviation Boulevard at Artesia Boulevard Southbound to Westbound Right Turn Lane Improvement Project. The approach outlined below demonstrates Michael Baker's commitment to developing a thorough work plan, identifying issues early, performing a detailed assessment of the various options to solve these issues, and then delivering a cost effective solution.

MANAGEMENT APPROACH

Michael Baker's management approach has been proven on past projects to be effective in meeting or exceeding client goals for completing projects on or ahead of schedule and within or below budget. The basic components of our approach to this project are as follows:

PROJECT MANAGEMENT

Leadership is important to the successful management of any project, even more so on projects that involve right of way acquisition. Successful project delivery starts with assigning a skilled manager who is responsive to the needs of the client and builds an effective team. Michael Baker has selected **Brian Anderson, PE**, to serve as Project Manager based upon his strong management abilities, comprehensive background with similar contracts, and familiarity with the project area (he is leading Michael Baker's efforts for the City of Redondo Beach on the Northbound Aviation Boulevard to Eastbound Artesia Boulevard Right Turn Lane for the City of Redondo Beach). Brian has an unmatched understanding of the intersection and its opportunities and constraints. Combining his 29-years of experience with a proactive leadership style and multitasking abilities means that his design team will effectively and efficiently deliver high quality products. Brian will be supported by highly qualified task leaders who will lead the technical work performed under Brian's direction. Quality Control will be performed throughout all phases of the project and specifically prior to each milestone (65%, 95%, final) submittal to ensure accuracy of the deliverables, and to ensure budget and schedule goals are met.

MANAGEMENT APPROACH

The Michael Baker Team will utilize the same techniques (which have proven to be successful on similar roadway improvement projects throughout Southern California) that require the resources of an experienced team that has the technical "know-how" and proven management skills necessary to successfully deliver this project. Subsequent to contract negotiations and upon notice to proceed, our Project Manager will schedule a "kick-off" meeting with the City staff to discuss (in detail) the project objectives, scope of work, schedule and budget.

Michael Baker's management approach has been proven to be effective in meeting or exceeding client goals on or ahead of schedule and within or below budget. With an effective management approach and continuous close coordination between City of Manhattan Beach staff and our project team, this project should logically progress through the various work tasks. **Continuous close coordination, communication and a focused project development process are the keys to successful completion of this project.**

Understanding Stakeholder Objectives | Prior to initiating our efforts, a thorough understanding of the various Stakeholder (City, Utility Owners, Property Owners) objectives is essential in order to successfully design and obtain timely approval of the project. Michael Baker will work closely with the various Stakeholders involved to identify specific goals, objectives and critical issues. This initial project scoping and understanding of the various Stakeholders needs is very important, since any changes can have an adverse impact to the schedule and budget for the project.

Project Scoping | A critical key to ensuring that an effective project schedule can be developed and maintained is preparing (and agreeing upon) a comprehensive scope of work that clearly identifies the various project tasks and the deliverables expected from those tasks. Michael Baker has developed a very detailed scope of work for this project (refer to the Scope of Work Section of this Proposal) that sequences the design process and identifies assumptions that are critical for understanding the intent of the project delivery process. Development of such a comprehensive scope



of work minimizes the chances of miscommunications or misdirection between all Project Team members, including Client / Consultant, Consultant / Subconsultant and amongst the various functional leaders for the Consultant.

Critical Path Method Scheduling | Michael Baker understands that the project schedule is a key communication tool in the management of a project. There are several key elements that maximize the effectiveness of a project schedule, including:

- Information should be easily communicated and understood
- Commitment is obtained from each functional design leader and the project team
- Inter-relationship of tasks is shown, including internal QA / QC and agency review periods
- Easy and flexible to update
- Office wide correlations of staffing and project commitments are considered

We have prepared a detailed Project Schedule (refer to the Project Schedule Section of this Proposal) that identifies the critical path items and key critical decisions that may affect plan production. The schedule will be updated on a regular basis to ensure the project schedule is met. Michael Baker will promptly notify the City of any changes in anticipated project progress and will submit an updated and detailed schedule to the City as appropriate. This approach also allows the City to schedule staffing for its reviews in advance and avoid any rescheduling that could delay other projects.

Our Project Manager will promote and maintain a sense of urgency with his Project Team to ensure that his team understands the importance of on-time delivery.

Project Initiation | Our Project Manager will develop a plan for “The First 30 Days” and deliver that to the City for concurrence. This plan will include tasks, expected outcomes and responsible parties. Our “First 30 Days” plan is included in the Schedule section of this proposal. The purpose of this plan is to jumpstart project initiation and maintain project momentum by outlining and following the establishing tasks, expected outcomes and responsible parties at the onset of the project. Project meetings will be scheduled and documented on a regular basis. Meeting documentation will include preparation of an agenda to provide structure for the participants. Decisions regarding items of discussion and critical issues requiring resolution are documented in meeting minutes that become part of the project file.

Basis of Design | A thorough understanding of the City’s design standards is required to design a successful project. Michael Baker regularly works with other affected Agencies, which also include utility companies and other regulatory agencies, to establish design criteria at the outset of a project that will serve as the basis of design. Specific critical elements will be considered at the beginning of a project to develop a comprehensive work plan.

Critical Issues | Every project involves matters that require discussion and agreement between the affected parties. Michael Baker works to foster a partnership between all members of the Project Team to achieve “buy-in” so that the stakeholder expectations are met. Early identification, resolution and documentation of critical issues is imperative to keeping each task order assignment on schedule and within budget.

Preliminary Design | To build a solid foundation of accurate scheduling, budgeting and funding of subsequent phases of project development, a thorough preliminary evaluation and comprehensive engineering analysis is essential. Michael Baker will conduct and document our field reviews and strongly encourage that at-least one Project Team Meeting is held in the field to provide a better understanding of project issues for all members of the Project Team. Our approach is two-fold to building this foundation for the preliminary development: 1) Preparation of a Geometric Approval Drawing (GAD) to illustrate the design improvements and clearly identify limits of proposed work. The GAD will be used to provide design information to the City and the property owner. The drawings will be design accurate, and after acknowledgement of acceptance, the GAD will be utilized to establish our final design documents; our second preliminary design tool is the development of a Project Issues Report which capsule our field investigation, correspondence and meeting discussions, supplemental reports, and preliminary cost estimate associated with the accepted design. Both these tools are key to advancing the project forward and to supplemental to final design.

Contract Administration | Control of project costs and unnecessary design changes is an important element of Contract Administration. Our goal is to deliver the project within the budget and schedule agreed at the initiation of the project. However, the design process is in some ways a “voyage of discovery” and unforeseen conditions and/or delays are



often encountered. With that said, we are committed to informing the City as soon as possible of any potential or proposed design revisions that will affect the established budget. Michael Baker's adherence to the original scope of work and initial construction cost budget is achieved through timely, open/honest and continuous communications with City Staff.

Budget Control | Frequent monitoring and early identification of any design change affecting project costs will control engineering costs. This monitoring is accomplished easily through Michael Baker's comprehensive Work Breakdown Structure. Construction costs will be controlled with a cost-trending technique, which uses as a starting baseline the original construction cost estimate prepared for the project. This cost estimate will then serve as the final baseline upon which any changes are measured. For all items that potentially may increase the baseline cost, careful analysis of lower cost options will be undertaken. These techniques will keep the baseline construction estimate up to date and will allow members of the project team to monitor the cost impacts of their decisions.

Project Progress and Design Review Meetings | On a monthly or as-needed basis, Michael Baker will attend and chair Project Team meetings with the City and other involved agencies. The purpose of these meetings will be to discuss the project objectives, review schedule and work progress to date, to resolve critical issues promptly, to address budget issues and concerns and discuss other related items. This meeting format is used effectively by Michael Baker through the use of Action Item Matrices (which identify issues, responsible parties and deadlines) and detailed, timely meeting minutes.

There are often several ways to implement a project and Michael Baker has found that small meetings, conducted in workshop settings encourages dialogue and creativity more easily than larger regular Project Team meetings. This proactive approach avoids costly surprises when preparing the final PS&E package. Other design review meetings are held at key points throughout the development of PS&E to review specific design features, such as stage construction, traffic handling, drainage alignments and hydraulic controls, as well as plan format and presentation issues.

Coordination and Communication with Public Agencies | Michael Baker's proactive, spirited approach to building positive team relationships while maintaining the mutual respect of all parties has been paramount to our success. Maintaining open lines of communication and having the entire Project Team develop a commitment to fostering cooperative teamwork will result in the resolution of critical issues in a timely manner.

Project Delivery and Coordination | Design of a project may bring forth a variety of issues that could require interface with jurisdictional agencies and other affected entities. Michael Baker is proud of its recent accomplishments in maintaining and accelerating project delivery in partnership with our agency team members. Michael Baker's management approach has been tested by numerous agencies.

QUALITY CONTROL/QUALITY ASSURANCE

The Michael Baker Team's Quality Assurance / Quality Control Program is a continuous process used not just at project milestones but also on a daily basis as work flows from desk to desk, discipline to discipline, and consultant to client. Michael Baker utilizes this QA / QC program on each and every project undertaken to ensure that a high quality product is delivered on schedule and within budget. Our approach ensures that deliverables are free of errors in accordance with the standard of care in the industry. Michael Baker's key organizational elements for QA / QC are adaptable to any project as evidenced by our performance on the Transportation Corridor Agencies Tollbooth Removal (Phase 1) Project, Eastern Transportation Corridor (SR-241, SR-261) Design-Build, and the SR-57 Widening Projects, which had strictly defined QA / QC processes to be followed. Michael Baker has developed project specific QA / QC plans for other clients such as Caltrans, Santa Barbara County Association of Governments and the Orange County Transportation Authority. Recognizing the design consultant's responsibility for the accuracy and completeness of the plans and other design documents, Michael Baker is dedicated to its established program of strict quality assurance and control. This program assigns specific individuals to, and defines the requirements for, quality control activities. This program consists of the following key elements:

Quality Control Key Elements

Project Manager Supported by Permanent Design Team | The Michael Baker staff assigned to this project will be an integral part of this project from inception through approval of the final plans, specifications and estimates. This is a crucial first step in delivering a high quality project, as quality truly suffers when a project does not maintain staff and



leadership continuity. Michael Baker has an outstanding record of maintaining Design Team leaders and design staff throughout our projects.

Design Discipline Scope of Work / Responsibilities | This component of our QA / QC program ensures “buy-in” from Michael Baker’s Discipline Leaders on the scope of work, project responsibilities, schedule and budget. Discipline Leaders are involved throughout the development of the scope of work, schedule and budget during the proposal process. Internal kick-off meetings are then held to review scope, schedule and budget to ensure that the project gets started on the right path. This process improves accountability for each leader and reinforces the detailed elements of the scope of work that must be adhered to in order to maintain a high quality project approach.

Design Criteria Establishment | Critical to the success of any project is developing a clear understanding of design criteria, guidelines and standards up-front that will be used for the project. Depending on the complexity of the project, Michael Baker develops Basis of Design Reports, or other less involved documentation for non-complex projects, that clearly identify key design criteria for a project and obtain concurrence from the appropriate Agency personnel. In addition, Michael Baker and our key Discipline Leaders have a long history of performing similar work, thus our team is intimately familiar with all aspects of the project development process including design standards and design manuals for roadway, rail, traffic and drainage, and preparation of specifications and bid documents.

“Over the Shoulder” Reviews | Michael Baker’s project development process is a dynamic, interactive process between the Project Manager, Discipline Leaders, and engineering design staff. Regular “over the shoulder” reviews occur throughout the design process through internal discussions in the engineering staff’s work areas at various points during plan preparation. This approach maintains discipline leadership involvement throughout design and avoids misdirection and re-design efforts.

In-House Project Team Meetings / Coordination | The Project Manager will hold regular in-house project team meetings with design Discipline Leaders to coordinate project interface issues and ensure that a “cause and effect” analysis of design decisions that involve multiple design disciplines is completed. In addition, these meetings are utilized to discuss staffing needs and project schedule and budget status. These in-house meetings serve as a forum for regular communication within the entire Michael Baker Consultant Team that fosters development of a cohesive teamwork environment and builds accountability within the Project Team.

Project Communication / Documentation | One critical element for a quality project is to carefully document project decisions and direction, and the general project development history. Preparation of clear, concise letters, phone logs, meeting minutes and action item resolutions avoid costly re-direction during design that could also have an impact on the project schedule. In addition, Michael Baker prepares detailed “Response to Comment” letters for all Agency milestones submittal review comments that show both the comment itself and a complete response to each comment.

Milestone Submittal Reviews | All submittals to the City will meet the project schedule agreed to with the City and will comply with the standards and procedures established by the City and other approving agencies for development of PS&E. Each deliverable item will be developed, checked, revised, and verified through a continuous process prior to submittal. The Project Manager, other Design Discipline Leaders, and the assigned Quality Control reviewer, will perform a complete quality control review of the Final PS&E at each milestone.

Constructability Reviews | Staff from Michael Baker’s Construction Management department will be included on an independent review team for constructability reviews. The experience of these staff members will be used in the project design to identify design and construction methods that could expedite construction, decrease construction costs, and improve traffic handling during construction. The constructability review will facilitate identification and correction of items that may have caused difficulty in other similar construction projects.

Utility Location Cross Check | A composite plot of all underground utility and drainage facilities will be developed to cross check horizontal and vertical clearances between facilities using available record drawings, new pothole data to be obtained and final plans for new and / or relocated underground facilities.



04 Statement of Qualifications



04 STATEMENT OF QUALIFICATIONS

MICHAEL BAKER INTERNATIONAL

Founded in 1940, Michael Baker International, Inc. (Michael Baker) is a recognized leader in providing planning, engineering and construction management services with a local focus and global expertise. Our firm has been doing business in Southern California for over 70 years and is comprised of nearly 260 local staff who have a strong reputation for innovation and excellence. Additionally, Michael Baker has over 600 professionals throughout California and 6,000 professionals globally.

Michael Baker's myriad of services includes transportation planning and engineering; traffic signal system design and analysis; civil and structural engineering; mechanical and electrical engineering; survey and right-of-way mapping; Geographic Information Technology (GIT); water and wastewater engineering; environmental planning; architecture and landscape architecture; public outreach; as well as construction management and inspection.

The Michael Baker team understands the City of Manhattan Beach's desire for cost-effective, efficient and effective project delivery. Overlapping work efforts with experienced personnel and obtaining timely approvals of key project stages will allow the project to be delivered in a streamlined manner. Based on our extensive work history on projects exactly like this one, the City will benefit from our team's proven management approach, technical expertise as well as our creativity in developing sensible and context-sensitive solutions.

SUBCONSULTANT PARTNERS

Michael Baker has assembled an excellent team of professionals who have the skills and experience needed to successfully deliver this project. Our team includes: **C Below** (Utility Potholing - currently providing utility potholing services in this intersection for our Redondo Beach project), **Hushmand Associates, Inc.** (Geotechnical and Pavement Design) and **Paragon Partners** (Right-of-Way Services). Relevant project experience from each of our subconsultants can be found beginning on page 25.

C Below | Utility Potholing



Utility Potholing services will be provided by C Below, Inc. (C Below). Their highly-experienced technicians utilize the most advanced equipment in the industry and locate horizontal and vertical locations of underground utilities including water, gas power, waste, communications, and cable/TV. Many different methods are used to locate these utilities including GPR, CCTV, utility locators, electromagnetic locators, and potholing.

Paragon Partners, Inc. | Right-of-Way



Paragon Partners Ltd. (Paragon) will provide right-of-way appraisal and acquisition services for this project. Founded in 1993, Paragon specializes in providing comprehensive and professional land rights consulting services and among others, serves local municipalities, whose operations require a full range of comprehensive land rights services to build and improve public infrastructure. Paragon offers a full range of services designed to meet client's right-of-way and land rights requirements, calling upon their depth and breadth of experience, qualified staff and best-in-class solutions.

Hushmand Associates, Inc. | Geotechnical/Pavement Design



HAI will provide be providing Geotechnical and Pavement Design services for this project. Hushmand Associates, Incorporated (HAI) is a professional engineering consulting firm with more than 25 years of successful experience in offering geotechnical engineering and specialized geotechnical earthquake engineering consulting, and soil and material testing and inspection services for both private and public sectors throughout southern California and elsewhere in the country and overseas. HAI's services cover the entire spectrum of geotechnical engineering from conventional foundation engineering to geotechnical earthquake engineering.



CONSULTANT TEAM AND PROPOSED DUTIES

Michael Baker is pleased to present our team of highly-qualified professionals to provide the City of Manhattan Beach with engineering design services for the Aviation Boulevard at Artesia Boulevard Southbound to Westbound Right Turn Lane Improvement project. The Michael Baker Team brings extensive experience in executing work programs with tasks identical to those identified in the City's RFP. **Our project manager, Brian Anderson, PE, is currently leading our efforts with the City of Redondo Beach on the Artesia/Aviation Boulevard Northbound Right-Turn Lane project and has an unparalleled understanding of the intersection and the opportunities and constraints associated with this project.**

Organization Chart





KEY PERSONNEL

BRIAN ANDERSON, PE | PROJECT MANAGER

Mr. Brian Anderson, PE, will serve as Project Manager and as a primary contact to the City on a day-to-day basis.

Brian has 30 years of experience in transportation/public works engineering, Brian supervises engineering and design staff, and specializes in roadway rehabilitation, multidiscipline projects and subconsultant coordination. His management role is concentrated in the final design and development of transportation and public works facilities; complex roadway and highway system development; and various Caltrans permit and oversight projects.

He is a knowledgeable and confident team leader who delivers on a commitment to excellence and offers the right balance of experience and technical insight needed to successfully deliver each project assignment on time and within budget.

Brian is uniquely qualified to manage this project due his experience working with the City of Redondo Beach on the Artesia/Aviation Boulevard Northbound Right-Turn Lane Project, Edinger Avenue Eastbound Right-Turn Lane, and Widening project in Huntington Beach, and his experience with Caltrans District 7 project development and encroachment permit processes. Brian's relevant experience includes:

- Alton Parkway Extension, Irvine, CA
- Alessandro Boulevard Median, Moreno Valley, CA
- Sand Canyon Avenue Grade Separation at Metrolink/BNSF Railroad Crossing, Irvine, CA
- Washington Boulevard Reconstruction, Commerce, CA



Years of Experience: 30

Education:

B.S., Civil Engineering, California
State University at Long Beach

Registrations:

Professional Engineer, CA, #55298;
Also in CO

Professional Affiliations:

American Public Works Association
American Society of Civil Engineers
(ASCE), Member
American Association of Airport
Executives

BRENDAN DUGAN, PE | CIVIL / ROADWAY

Mr. Dugan is experienced in civil and transportation engineering. He has worked extensively with Caltrans, Orange County Public Works, LA County Sanitation District, and various municipalities on numerous projects throughout Southern California. Mr. Dugan's experience includes pavement rehabilitation, intersection widening, ADA compliance, field reviews, horizontal and vertical geometrics, project coordination and management, agency coordination, project specification document preparation, and development of construction cost estimates. A sampling of Brendan's recent experience includes:

- Sepulveda Boulevard (SR-1) and Mariposa Avenue Intersection Improvements, El Segundo, CA
- Cow Camp Road Design Phase 1A and 1B, Mission Viejo, CA
- Tustin Avenue/La Palma Avenue Intersection Widening, Anaheim, CA
- Citywide Street Rehabilitation Project, San Juan Capistrano, CA



Years of Experience: 10

Education:

B.S., 2007, Civil Engineering,
California State University at
Fullerton

Registrations:

Professional Engineer, CA, #79075

Professional Affiliations:

American Public Works Association
American Society of Civil Engineers
Los Angeles City & County Engineers
Association
Structural Engineering Association of
Southern California – Young
Members
Women's Transportation Seminar



STAFF QUALIFICATIONS

Name Role	Education / Training Licenses / Registration	Relevant Experience
Alan Ashimine <i>Environmental</i>	<i>B.A., Environmental Analysis and Design</i>	<ul style="list-style-type: none"> Del Amo Boulevard Extension Los Angeles Avenue CEQA Initial Study
Michael Bruz, PE <i>Project Principal/QA Reviewer</i>	<i>B.S., Civil Engineering</i> Professional Engineer, CA, #536198 Also in AZ, MI, NV, VT	<ul style="list-style-type: none"> MacArthur Boulevard Foothill Parkway Westerly Extension
Ricky Chan, PE TE, PTOE <i>Traffic</i>	<i>B.S., Civil Engineering</i> Professional Engineer, CA, #71389 Traffic Engineer, CA, #TR2673 Professional Traffic Operations Engineer, D.C., #3685	<ul style="list-style-type: none"> Sepulveda Boulevard (SR-1) and Mariposa Avenue Intersection Improvements Pacific Coast Highway (SR-1) and 2nd Street Intersection Widening
Bill Cox, PLS <i>Survey</i>	<i>B.S., Business Administration</i> Professional Land Surveyor, CA, #6673	<ul style="list-style-type: none"> Topanga Canyon Boulevard Alton Parkway Construction Support
Brendan Dugan, PE <i>Civil/Roadway</i>	<i>B.S., Civil Engineering</i> Professional Engineer, CA, #79075	<ul style="list-style-type: none"> Sepulveda Boulevard (SR-1) and Mariposa Avenue Intersection Improvements Technology Drive
Jeremy Franzini, PLA <i>Landscape/Irrigation</i>	<i>M.L.A., Landscape Architecture</i> <i>B.S., Environmental Studies</i> Landscape Architect, CA, # 4514	<ul style="list-style-type: none"> Lincoln Boulevard Bicycle System Gap Closures and Improved Los Angeles River Bike Path Access
Laura Larsen, PE, CPESC, QSD/P <i>Water Quality</i>	<i>M.S., Environmental Engineering</i> <i>B.S., Civil Engineering</i> Professional Engineer, CA, #63265; Also in NV Qualified SWPPP Developer/ Practitioner, CA, #23529	<ul style="list-style-type: none"> Grand Avenue at S.R. 57/S.R. 60 Interchange University Drive Widening Project
DaCheng Lee, PE <i>Drainage & Hydrology</i>	<i>M.B.A., Business</i> <i>M.E., Construction Management</i> <i>M.S., Geotechnical Engineering</i> Professional Engineer, CA #75150 Also in AZ, TX	<ul style="list-style-type: none"> S.R. 303L Roadway and Traffic Engineering and Design El Mirage Road Design Concept Report and Environmental Assessment,



Name Role	Education / Training Licenses / Registration	Relevant Experience
Tony Rai <i>ROW/Mapping</i>	<i>Vocational/Technical, Civil Engineering</i>	<ul style="list-style-type: none"> Grand Avenue at S.R. 57/S.R. 60 Interchange El Camino Real and Avenida Pico Intersection Improvements
Arshad Rashedi, PE, PMP <i>Technical Advisor – Constructability Review</i>	<i>B.S., Civil Engineering (Construction Management)</i> Professional Engineer, CA, #48521 Project Management Professional #307115 Qualified SWPPP Practitioner (QSP)/Developer (QSD), CA, 2013, #24488	<ul style="list-style-type: none"> Park Avenue Over Grand Canal Bridge Replacement Port of Los Angeles, C Street and Interstate 110/Harry Bridges Blvd. and John S. Gibson Improvements
Cirian Stelea <i>Retaining Wall Design</i>	<i>M.S., Civil Engineering/ Structures</i> <i>B.S., Civil Engineering</i> Professional Engineer, CA, #73379	<ul style="list-style-type: none"> Interstate 5 / Jamboree Road Interchange Improvement Interstate 15 / California Oaks Road Interchange Modification
Chris Leora (C Below) <i>Utility Potholing</i>	<i>East L.A. Skills Center, Construction Inspection</i> Ground Penetrating Radar Technician- Level III Utility Locator- Level III	<ul style="list-style-type: none"> Durfee Avenue Potholing, Pico Rivera Port of Long Beach (On-Call)
Ben Husmand, PE, PhD (Hushmand Associates, Inc.) <i>Geotechnical / Pavement Designs</i>	<i>Ph.D. Civil (Geotechnical & Earthquake)</i> <i>M.S., Civil Engineering</i> <i>B.S., Structural Engineering</i> Professional Engineer, CA, #44777	<ul style="list-style-type: none"> Lakewood Boulevard Improvements, Phase 3B Florence Avenue to Gallatin Road and Phase 3C Gallatin Road to Telegraph Road Brookshire Avenue Pavement Rehabilitation
Thomas Boyle (Paragon Partners) <i>Right-of-Way – Acquisitions</i>	<i>B.A., Business Administration</i> Commercial Tax Assessor Level Two Certification, Department of Revenue, Arizona	<ul style="list-style-type: none"> Durfee Avenue Grade Separation Imperial Avenue/Telegraph Road
John Penner, MAI (Paragon Partners) <i>Right-of-Way – Appraisals</i>	<i>B.S., Business Administration Finance and Investments</i> Certified General Appraiser, CA @AG001720 Real Estate Broker's License, CA #00976229	<ul style="list-style-type: none"> Senior Appraiser for various residential and commercial properties in Southern California Performed valuation and advising for commercial real estate with a specialty in medical office, and industrial properties.

Resumes of our entire team are included in the Appendix.



RECENT SIMILAR PROJECTS | MICHAEL BAKER INTERNATIONAL

Artesia/Aviation Boulevard Northbound Right-Turn Lane | Redondo Beach, CA

Client: City of Redondo Beach | **Dates:** 2014-Ongoing

Contact: Mr. Didar Khandker, P.E. MSCE Associate Civil Engineer

P. (310) 318-0661 x2456 | **E.** Didar.Khandker@Redondo.Org

Michael Baker is preparing final PS&E for the northbound right-turn lane from Aviation Boulevard to Artesia Boulevard for the City of Redondo Beach. The project design is being completed in compliance with the Standard Specifications for Public Works Construction "Greenbook" and Caltrans Standards. Project requirements include acquiring right-of-way from the adjacent gas station property to accommodate a new right-turn lane and 8-foot wide parkway; legal descriptions and plats; field survey; grading; drainage improvements; roadway layout; traffic signal modification; striping and signage; stage construction; utility protection; ADA compliance; and replacement/ relocation of private property improvements.



Alessandro Boulevard Median (Indian Street to Perris Boulevard | Moreno Valley, CA

Client: City of Moreno Valley | **Dates:** 2012-2015

Contact: Mr. Michael Lloyd, Land Development Division Manager

P. (951) 413-3146 | **E.** Michaell@moval.org

Michael Baker evaluated, designed, and constructed raised medians and turn pockets along Alessandro Boulevard at the Perris Boulevard intersection. The project was funded by the Federal Highway Safety Improvement Program (HSIP) under Caltrans District 8 Local Assistance, requiring close agency coordination of environmental, traffic, and civil transportation services. The design and construction required modification of a traffic signal, ADA-compliant pedestrian ramps, and signing and striping. The enhancements were intended to provide improved safety for both vehicles and pedestrians in the project area. Michael Baker recommended alternative median types considering immediate cost versus anticipated future cost if the client desired a landscaped median.



Michael Baker also assisted with the preparation and processing of National Environmental Policy Act (NEPA) documentation for the project. The client utilized Highway Safety Improvement Program (HSIP) funding, which required the processing of NEPA documentation through the California Department of Transportation's (Caltrans) Office of Local Assistance. The environmental analysis was supported by a Preliminary Environmental Study (PES) Form, with key technical areas consisting of hazardous materials, temporary access and construction easements, and traffic circulation.



Date Palm Drive Widening | Cathedral City, CA

Client: Cathedral City | **Dates:** 2012-Ongoing

Contact: Bill Simons, Senior Engineer

P. (760) 770-0360 | **E.** bsimons@cathedralcity.gov

Michael Baker prepared final PS&Es for street and storm drain improvements, modification of two traffic signals, traffic signal interconnect system, signing and striping, and stage construction and traffic control for the widening of Date Palm Drive and the Date Palm Drive Bridge (757' in length) over the Whitewater River. Michael Baker worked closely with a large number of stakeholders and numerous utility owners to obtain several necessary permits. Since the project is partially funded using Highway Bridge Program monies, there has been significant involvement with Caltrans in preparing the documentation necessary to secure funding for design, ROW acquisition, and construction. The bridge work consisted of widening the bridge from four to six lanes; seismically retrofitting the structure to meet current design standards and rehabilitating the bridge deck to extend the service life. Other work included widening Date Palm Drive to accommodate the widened bridge, access and on-site modifications to several businesses, traffic signal modifications and extensive traffic handling/construction phasing plans. The project also included coordination with several utility owners and plans were prepared for utility relocations including water, sewer, cable television, electric, telephone, and natural gas facilities. Michael Baker was also responsible for the ROW clearance process including appraisals and acquisition negotiations for four (4) privately owned parcels plus two (2) tribal owned parcels.



Sand Canyon Avenue Grade Separation at the Metrolink/BNSF Railroad | Irvine, CA

Client: City of Irvine | **Dates:** Completed 2016

Contact: Mr. Tom Perez, Capital Improvement Program Administrator

P. (949) 724-6442 | **E.** tperez@ci.irvine.ca.us

The City of Irvine constructed a grade separation for Sand Canyon Avenue, a major arterial paralleling S.R. 133 between I-5 and I-405, at the Southern California Regional Rail Authority (SCRRA)/Orange County Transportation Authority (OCTA)/Metrolink railroad tracks.

The goal was to realign Sand Canyon Avenue to the northwest and depress the roadway below the Metrolink Railroad. The project consisted of a two-span steel and concrete structure supporting Metrolink, Amtrak, and BNSF trains. The structure included a steel deck and steel plate girder bridge superstructure with two sacrificial exterior concrete girders, abutments, wing walls, temporary shoring, temporary double-track shoofly alignment southwest of the new bridge structure and elimination of the existing at-grade crossing. The grade separation required raising the existing track elevations approximately 1.5 feet to allow roadway clearance.



The project lowered Sand Canyon Avenue under the railroad tracks and widened the roadway from four lanes to six lanes. Key challenges included:

- Complex construction staging for maintenance of operations, including cars, bicycle, pedestrian traffic, rail, and trucks
- Coordination with multiple utility agencies for major transmission and distribution facility relocations, including oil-transmission lines, high pressure gas, electric transmission lines, fiber-optic facilities, domestic water transmission, and multiple distribution facilities
- Landscaped medians and parkways, including "heritage" oak tree preservation
- Relocations of SCRRA maintenance-of-way site
- Traffic signal design, interconnect, queue cutter signal design, and street lighting



Edinger Avenue Eastbound Right-Turn Lane and Widening | Huntington Beach, CA

Client: City of Huntington Beach | **Dates:** 2015-2016

Michael Baker is preparing final PS&E for widening of Edinger Avenue to accommodate lengthening the eastbound right-turn lane to Beach Boulevard. The project design was performed in compliance with the Standard Specifications for Public Works Construction "Greenbook" and Caltrans Standards. Project requirements include acquiring right-of-way from adjacent properties between Parkside Lane to Beach Boulevard. In general, the engineering services include roadway design, layout and grading to reconstruct driveway aprons and restore private property improvements. Other design services included parkway improvements of sidewalk, curb, and gutter and landscaping; asphalt pavement replacement; traffic striping and signing; traffic control; design of new LED street lighting; utility coordination; and obtaining an encroachment permit from Caltrans for work associated with their facilities (traffic loops, signal interconnect and signing/striping).

Sepulveda Boulevard (SR-1) and Mariposa Avenue Intersection (In-N-Out Burger) | El Segundo, CA

Client: In-N-Out Burger | **Dates:** 2013-2014

Michael Baker was responsible for preparing signing and striping plans, traffic signal plans, and traffic control plans for intersection improvements. In-N-Out Burger developed and occupied the northeast corner of the intersection at Sepulveda Boulevard (SR-1) and Mariposa Avenue. The intersection needed to be updated to meet the current ADA standards, while adding a second left turn lane on westbound Mariposa Avenue turning onto southbound Sepulveda Boulevard. The project included: field investigation; review of existing signal operation; review of existing cabling and conduits capacity; review of existing signal communication interconnect; signal design; signing and striping; and traffic control design.

RECENT SIMILAR PROJECTS | C BELOW

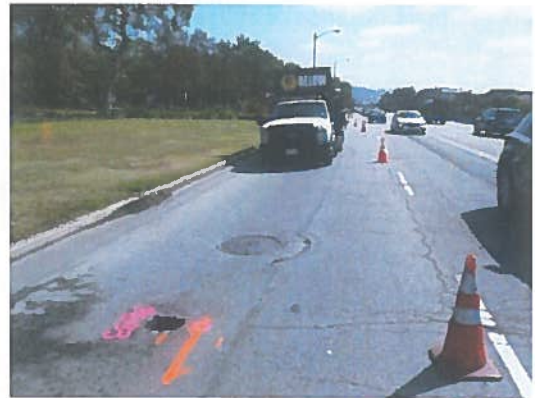
North Santa Monica Boulevard Reconstruction | Beverly Hills, CA

Client: City of Beverly Hills | **Dates:** May 2016 – June 2016

Contact: Samer Elayyan

P. (310) 285-2524

The Santa Monica Boulevard Reconstruction Project is planned to break ground in September 2016. The City Council approved project design includes reconstruction the roadway and upgrading the century old- drainage system. C Below was contracted by PSOMAS LA to clear and mark out existing utilities for multiple utility upgrade alignments in the road. Our crews worked on the street, performing their own approved Traffic Control, during rush hour traffic and weekends to complete our investigation and to accommodate the cities' traffic congestion. In one (1) month we performed over 120 pothole locations, including the pothole of ramp footings that are to be excavated during the reconstruction. Our CCTV crews also used the robotic camera to video approximately 1,260 linear feet of storm drain lines in multiple locations. C Below's final reporting was sent to our client in the form of a CCTV video report, and detailed pothole report.





Wilshire Bus Rapid Transit Project | Los Angeles, CA

Client: PSOMAS | **Dates:** January 2013

Contact: Ken Berkman, Project Manager

P. (213) 223-1460

C Below potholed 10 locations at various destinations of the Wilshire Bus Rapid Transit Project. C Below's Project Engineer constructed City approved Traffic Control plans that were utilized by the technicians in the field to ensure safety and efficiency. We also attained all appropriate permits from the City. C Below was able to verify locations of water, electric, and gas lines, after which we provided a Pothole report of the findings.



RECENT SIMILAR PROJECTS | HUSHMAND ASSOCIATES, INC.

La Paz Road Sidewalk Widening Project | Laguna Hills, CA

Client: City of Laguna Hills | **Dates:** 2016

Contact: Kenneth H. Rosenfield, Director of Public Services

P. (949) 707-2655

The City of Laguna Hills plans to widen some portions of the pedestrian sidewalk on both the north and south sides La Paz Road to provide improved access for school-age pedestrians to Valencia Elementary School. Segment 1 of the project consists of the approximately 400 feet of pedestrian sidewalk along the north side of La Paz Road from Paseo de Valencia to Grissom Road. Segment 2 is located on the south side of La Paz Road from Paseo de Valencia easterly, across the frontage of Valencia Elementary School, to a point westerly of Champlain Road (an approximate distance of 800 feet). The expansion of the La Paz Road right of way into the four private properties and into the Saddleback Valley Unified School District (SVUSD) will require the construction of retaining walls in Segments 1 and 2. Hushmand Associates, Inc. (HAI) conducted a geotechnical investigation to assess the geotechnical engineering characteristics of the site and develop geotechnical recommendations for the project including type selection and foundation design of the proposed retaining walls and other site improvements.



Gardendale Street Pavement Rehabilitation Project | Downey, CA

Client: City of Downey | **Dates:** 2013

Contact: Ed Norris, Deputy Director of Public Works/City Traffic Engineer

P. (562) 904-7109

Street improvements are planned along Gardendale Street between Lakewood Boulevard and Garfield Avenue in Downey, California. The approximate total length of the project is 9,200 linear feet. The project alignment is located within the jurisdiction of the cities of Downey (north bound of Gardendale Street between Lakewood Boulevard and Garfield Avenue), Paramount (south bound of Gardendale Street between Lakewood Boulevard and Paramount Boulevard), and South Gate (south bound of Gardendale Street between Paramount Boulevard and Garfield Avenue).



HAI conducted a field exploration (consisting of drilling seventeen (17) exploratory borings to a maximum depth of approximately five (5) feet below the existing ground surface and coring at two (2) locations to measure the thickness of the existing AC), laboratory testing of the subgrade soils to determine the Resistance "R" Value for designing pavement structural sections (including 1) Remove and Replace, 2) Overlay, 3) Mill and Overlay, and 4) Full-Depth Reclamation).



RECENT SIMILAR PROJECTS | PARAGON PARTNERS, INC.

La Paz Road Widening Project | Laguna Hills, CA

Client: CNC Engineering | **Dates:** February 2016-Ongoing
Contact: Sean Nazarie, PE, Director of Engineering
P. (949) 863-0588

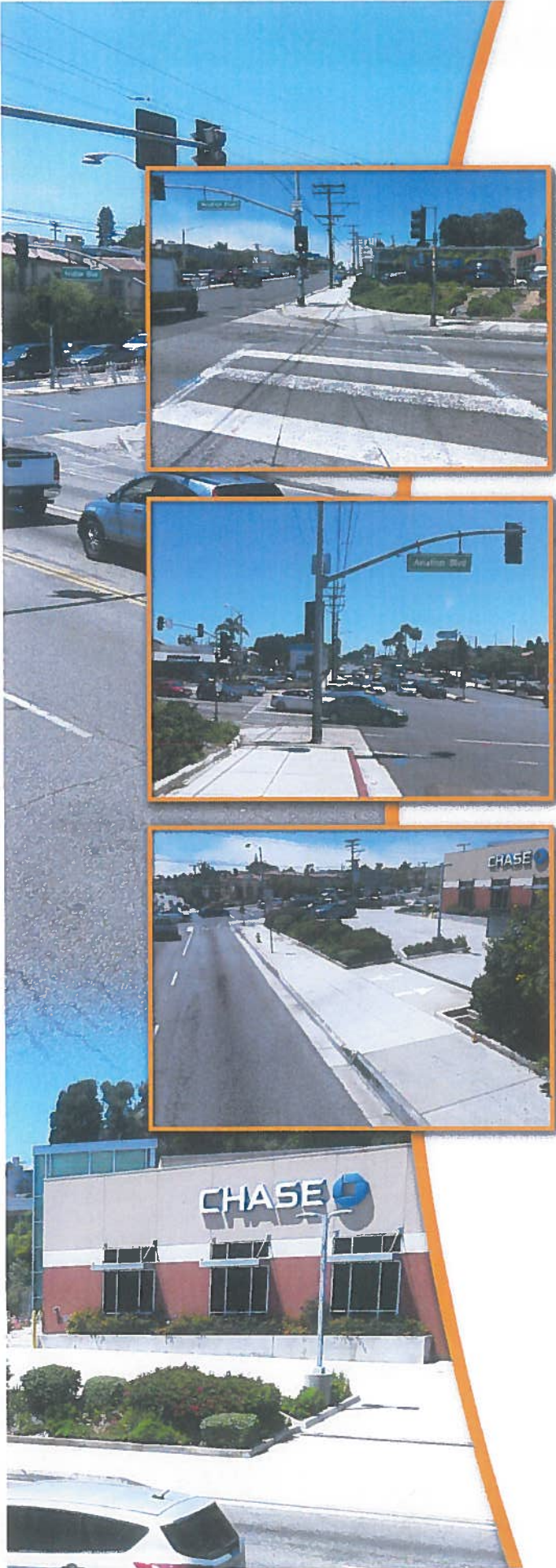
Paragon's team is partnering with CNC Engineering (CNC) to support the La Paz Road Widening and Sidewalk Project for the City of Laguna Hills. For this project, our team is providing right of way acquisition, appraisal and title services to acquire easements and temporary construction easements from four private property owners and a right of way easement and temporary construction easements from the Saddleback Valley Unified School District (SVUSD). The City of Laguna Hills (City) is requiring these services in order to widen the pedestrian sidewalk on portions of La Paz Road, easterly of Paseo de Valencia. The expansion will also require the construction of retaining walls. Early communications with property owners is essential in this project. Paragon is meeting with the property owners to provide them with conceptual designs prior to appraisals being performed. Paragon is working closely with CNC to ensure the City's accelerated schedule is met with no setbacks and that all efforts are compliant with local, state, federal and City of Laguna Hills regulations.



Crenshaw/LAX Transit Corridor (LA Metro) – Right-of-Way Services | Los Angeles, CA

Client: Los Angeles County Metropolitan Transportation Authority (Metro) | **Dates:** 2012-2016
Contact: Carol Chiodo, Director of Real Property Management and Development
P. (213) 922-2404

This FTA and L.A. County Measure R-funded design/build project is a major north-south light rail system that will connect LAX to the Metro Green Line to the south and the Expo line to the north. Paragon provided right of way support to for the 8.5-mile project that includes eight stations, a maintenance facility, park-and-ride lots, street improvements and intersection widenings. Acquisition and relocation services encompass a variety of small businesses with good street exposure and accessibility. Due to the diversity of impacted businesses and organizations, the lack of comparable relocation sites and the unique management structures of some of the organizations, in several instances Metro opted for quick settlements rather than protracted negotiations or eminent domain proceedings. In order to facilitate services Cheryl DeMucci was embedded in the Metro Real Estate department for over 2 years, working side-by-side with Metro staff to ensure project success.



05 Resource Allocation Matrix



05 RESOURCE ALLOCATION MATRIX

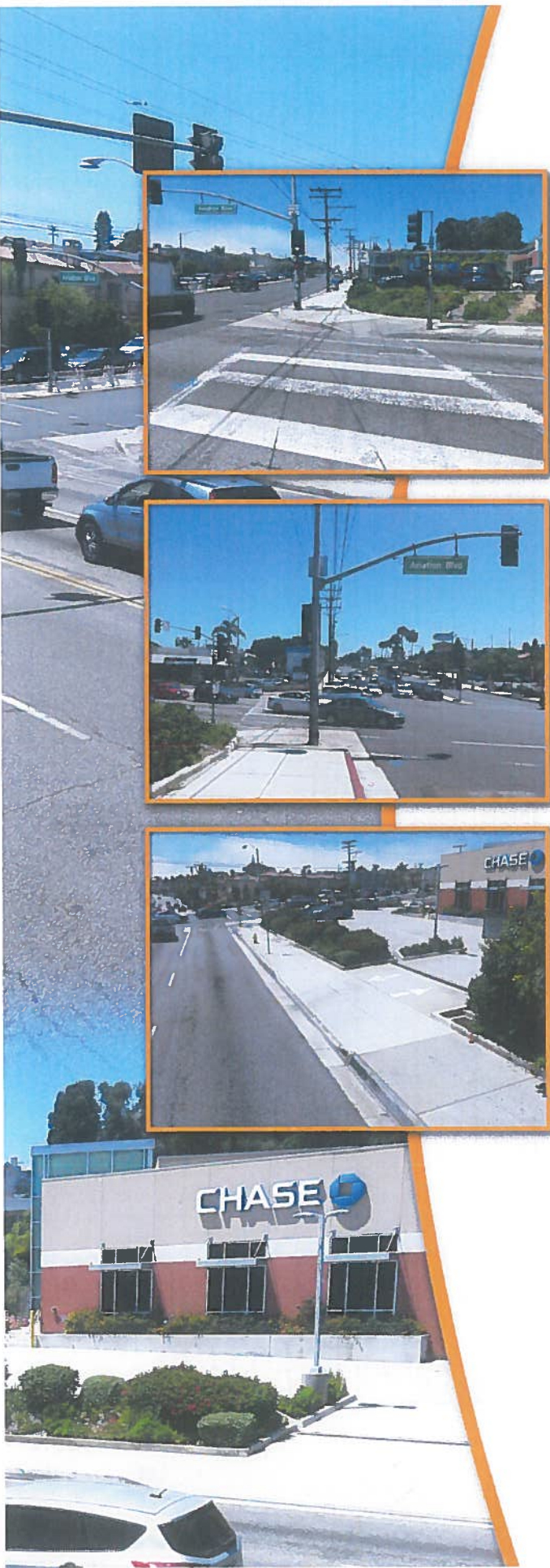
Michael Baker International, Inc.																			
Task Description		Project Manager		Project Engineer		Landscape Architect		Designer/Planner		2-Person Survey Crew		Licensed Surveyor		Michael Baker Hours		Subconsultant		Total Hours	
		Hours		Hours		Hours		Hours		Hours		Hours		Hours		Hours			
Preliminary Design																			
Task 1	Record Research and Site Investigation	2		2				8						12				12	
Task 2	Topographic Survey / Base Mapping			2				8		8		2		20				20	
Task 3	Utility Research / Coordination			16										16				16	
Task 4	Environmental Documentation	12		8				86						106				106	
Task 5	Geotechnical Investigation			8				4						12		100		112	
Task 6	Geometric Approval Drawings(s) (GAD) 35% Roadway	4		16				24						44				44	
Task 7	Hydrological / Hydraulic Analysis	4		4				24						26				26	
Task 8	Preliminary Cost Estimate			4				12						16				16	
Task 9	Project Report 35% Design	4		24				8						36				36	
Task 10	Right of Way Appraisal and Acquisition	4						12		8		2		18		68		86	
Preliminary Design Subtotal		30		80				186		8		4		308		168		476	
Final Design PS&E / Coordination																			
Task 11	Final Design Drawings			12		16		206						234				234	
Task 11.1	Title Sheet			1				8						9				9	
Task 11.2	Site Plan			1				8						9				9	
Task 11.3	General Construction Notes			1				12						13				13	
Task 11.4	Horizontal Control Plan			1				10						11				11	
Task 11.5	Typical Sections			1				24						25				25	
Task 11.6	Construction Details			1				20						21				21	
Task 11.7	Roadway Plan & Profile			1				32						33				33	
Task 11.8	Off-Site Improvements			1				20						21				21	
Task 11.9	Drainage Plan & Profile			1				20						21				21	
Task 11.10	Electrical Plan			1				16						17				17	
Task 11.11	Landscape & Irrigation Plan			1		16		20						37				37	
Task 11.12	Signing and Striping			1				16						17				17	
Task 12	Specifications	8		16										24				24	
Task 13	Cost Estimate			4				12						16				16	
Task 14	Structural Calculations			12				8						20				20	
Task 15	Project Management	40		12										52				52	
Task 15.1	Management & QA/QC	16												16				16	
Task 15.2	Meetings	24		12										36				36	
Task 16	Bid / Construction Support	8		24				20						52				52	
PS&E Coordination Subtotal		56		80		16		246		8		4		398		168		398	
Total Design Hours		86		160		16		432		8		4		706		168		874	

OPTIONAL TASK																
Task 17	Phase I ESA		4		16		40		62							62
Total Optional Task Hours			4		18		40		62							62

Total Hours (with Optional Task)		130		178		16		472		8		4		768				936	
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06 Project Schedule





06 PROJECT SCHEDULE

We have prepared a preliminary schedule for the project that includes the major project activities and milestones. Although the proposal was prepared using weeks as the time basis, for presentation purposes in the proposal, the schedule depicts activities on a monthly basis. Please note that we have included start and finish dates for each activity so that the City can easily review the activities and durations beginning with the Notice to Proceed.

THE FIRST 30 DAYS - ESTABLISHING DIRECTION AND MOMENTUM

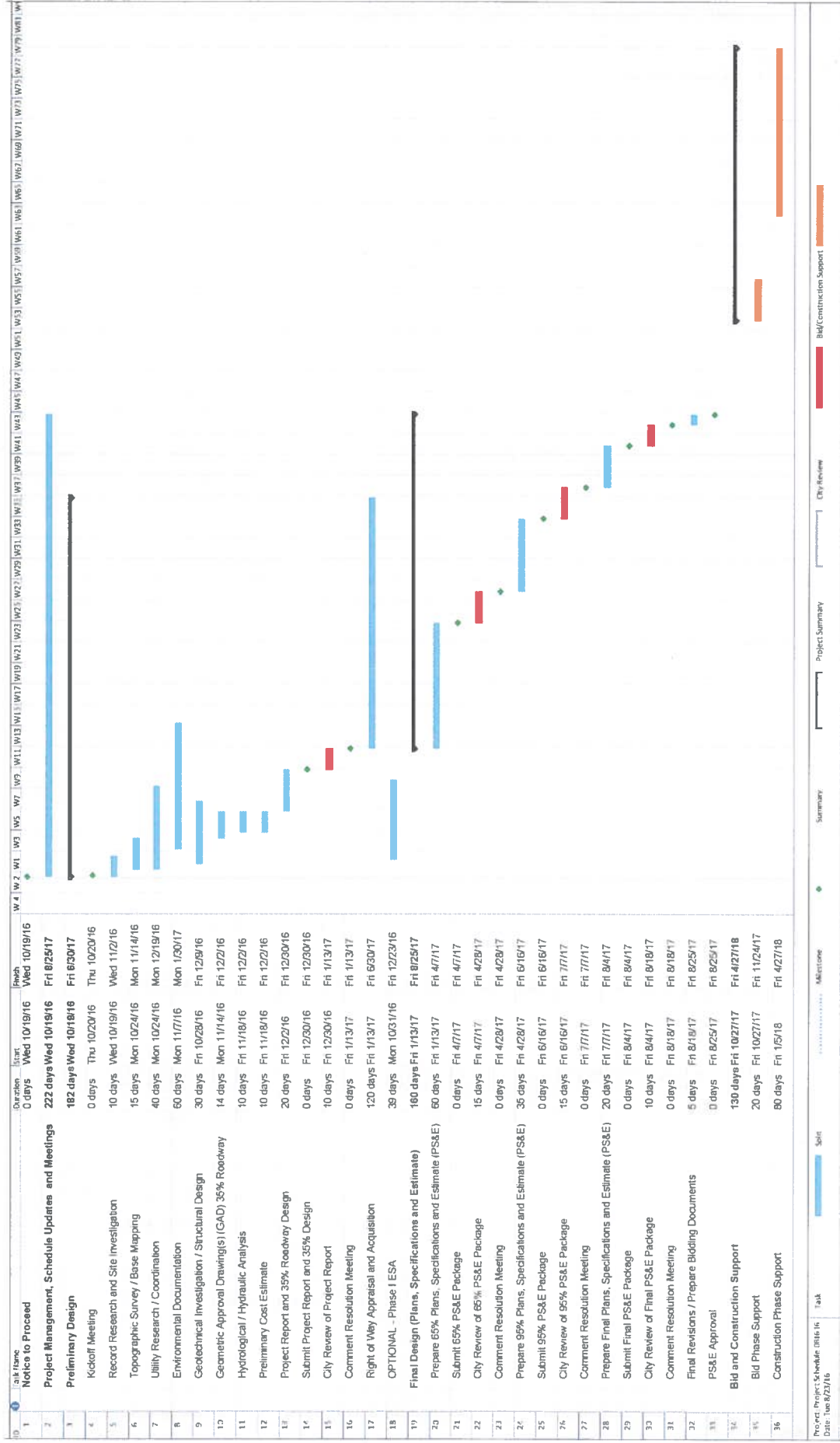
The key to our past success in project delivery has been establishing solid direction and momentum in the first 30 days. We place an emphasis on harnessing the value of all previous planning investments, as well as utilizing the technical and organizational command the Michael Baker Team has at its disposal. Quite simply, it is about being very well organized and effectively “planning the plan.” Select representative elements of the Michael Baker Team’s first 30 days are presented in table below.

First 30 Days - Establishing Direction & Momentum

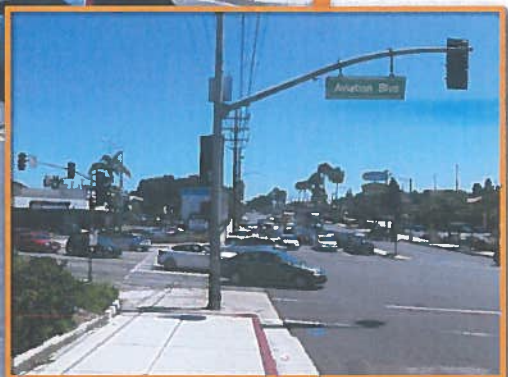
TASK	EXPECTED OUTCOME
Preliminary Planning & Design	
<ul style="list-style-type: none"> Collect relevant project data 	<ul style="list-style-type: none"> Update previous record data
<ul style="list-style-type: none"> Complete survey work consistent with previous survey work completed in the intersection / prepare base map 	<ul style="list-style-type: none"> Surveys to be completed consistent with the ongoing intersection work for Redondo Beach
<ul style="list-style-type: none"> Perform field review and photo log 	<ul style="list-style-type: none"> Detailed record of existing conditions for reference
<ul style="list-style-type: none"> Develop utility contact list and prepare information request letters 	<ul style="list-style-type: none"> Updated utility contact list and utility records
<ul style="list-style-type: none"> Initiate pavement and geotechnical investigation 	<ul style="list-style-type: none"> Serves as a guide for pavement and foundation strategies
<ul style="list-style-type: none"> Refine the preliminary geometric drawing prepared for the proposal 	<ul style="list-style-type: none"> Serves as reference for City review and concurrence of the geometrics
<ul style="list-style-type: none"> Initiate Basis of Design Report detailing the roadway alignment and, strategy for right of way acquisition and improvements to public and private property 	<ul style="list-style-type: none"> Serves as a record of the approved geometrics and approach to the design and right of way acquisition.
<ul style="list-style-type: none"> Order Title Reports 	<ul style="list-style-type: none"> Define property ownership and encumbrances
<ul style="list-style-type: none"> Convene a project kick-off meeting 	<ul style="list-style-type: none"> Initiate a dialogue, provide a briefing of past work, review City goals and expectations, and overview the First 30 Day Work Plan
Environmental	
<ul style="list-style-type: none"> Initiate and complete the Initial Study 	<ul style="list-style-type: none"> Avoids delays by documenting any impacts
<ul style="list-style-type: none"> Initiate the Categorical Exemption 	<ul style="list-style-type: none"> Establishes the environmental approval documentation
Management	
<ul style="list-style-type: none"> Develop the overall work plan, baseline schedule and QA/QC Plan 	<ul style="list-style-type: none"> Establishes overall management plan and approach
<ul style="list-style-type: none"> Hold internal team kick-off meeting and establish weekly Michael Baker Team coordination meetings 	<ul style="list-style-type: none"> Defines internal team expectations, sets standing agenda, and ensures First 30 Day Plan is adhered to
<ul style="list-style-type: none"> Initiate PDT Meetings 	<ul style="list-style-type: none"> Orients all new team members to past work and builds relationships early
<ul style="list-style-type: none"> Secure signed subconsultant agreements 	<ul style="list-style-type: none"> All firms have properly executed agreements to avoid project start up delay



PROJECT SCHEDULE



07 Contract Exceptions





07 CONTRACT EXCEPTIONS

Michael Baker does not have any exceptions or proposed deviations to the City of Manhattan Beach's Sample Professional Services Agreement.



08 Fee Proposal



08 FEE PROPOSAL

Michael Baker has prepared our Fee Schedule (see following page) based on the City's Request for Proposals, discussions with City Staff, field investigations and records research. Together, these efforts and record information has helped us clearly understand the project and its opportunities and constraints. We are ready to discuss any aspect of our fee proposal with the City. Also enclosed, please find our fee schedule for reimbursable items.



Michael Baker International, Inc.																						
Task Description		Project Manager		Project Engineer		Landscape Architect		Designer/Planner		2-Person Survey Crew		Licensed Surveyor		Michael Baker Hours		Michael Baker Cost		Sub-consultant		Number of Sheets	Total Hours	Total Cost
		Hours	\$185.00	Hours	\$155.00	Hours	\$164.00	Hours	\$130.00	Hours	\$265.00	Hours	\$186.00	Hours	\$	Hours	\$					
Preliminary Design																						
Task 1		2	\$370.00	2	\$310.00			8	\$1,040.00					12		\$1,720.00				12	\$1,720.00	
Task 2					\$310.00			8	\$1,040.00	8	\$2,120.00	2	\$376.00	20		\$3,846.00				20	\$3,846.00	
Task 3				16	\$2,480.00									16		\$2,480.00		\$5,000.00		16	\$7,480.00	
Task 4		12	\$2,220.00	8	\$1,240.00			86	\$11,180.00					106		\$14,640.00				106	\$14,640.00	
Task 5				8	\$1,240.00			4	\$520.00					12		\$1,760.00	100	\$9,440.00		112	\$11,200.00	
Task 6		4	\$740.00	16	\$2,480.00			24	\$3,120.00					44		\$6,340.00				44	\$6,340.00	
Task 7		4	\$740.00					24	\$3,120.00					28		\$3,860.00				28	\$3,860.00	
Task 8				4	\$620.00			12	\$1,560.00					16		\$2,180.00				16	\$2,180.00	
Task 9		4	\$740.00	24	\$3,720.00			8	\$1,040.00					36		\$5,500.00				36	\$5,500.00	
Task 10		4	\$740.00					12	\$1,560.00			2	\$376.00	18		\$2,676.00	68	\$15,805.00		86	\$10,481.00	
Preliminary Design Subtotal		30	\$5,558.00	80	\$12,480.00			186	\$24,180.00	8	\$2,120.00	4	\$732.00	388		\$45,892.00	168	\$38,245.00		478	\$75,247.00	
Final Design PS&E / Coordination																						
Task 11				12	\$1,860.00	16	\$2,624.00	206	\$26,780.00					234		\$31,264.00			13	234	\$31,264.00	
Task 11.1				1	\$165.00			8	\$1,040.00					9		\$1,195.00			1	9	\$1,195.00	
Task 11.2				1	\$165.00			8	\$1,040.00					9		\$1,195.00			1	9	\$1,195.00	
Task 11.3				1	\$165.00			12	\$1,560.00					13		\$1,715.00			1	13	\$1,715.00	
Task 11.4				1	\$165.00			10	\$1,300.00					11		\$1,455.00			1	11	\$1,455.00	
Task 11.5				1	\$165.00			24	\$3,120.00					25		\$3,275.00			1	26	\$3,275.00	
Task 11.6				1	\$165.00			20	\$2,600.00					21		\$2,755.00			2	21	\$2,755.00	
Task 11.7				1	\$165.00			32	\$4,160.00					33		\$4,315.00			1	33	\$4,315.00	
Task 11.8				1	\$165.00			20	\$2,600.00					21		\$2,755.00			1	21	\$2,755.00	
Task 11.9				1	\$165.00			20	\$2,600.00					21		\$2,755.00			1	21	\$2,755.00	
Task 11.10				1	\$165.00			16	\$2,080.00					17		\$2,235.00			1	17	\$2,235.00	
Task 11.11				1	\$165.00	16	\$2,624.00	20	\$2,600.00					37		\$5,379.00			1	37	\$5,379.00	
Task 11.12				1	\$165.00			16	\$2,080.00					17		\$2,235.00			1	17	\$2,235.00	
Task 12		8	\$1,480.00	16	\$2,480.00									24		\$3,960.00				24	\$3,960.00	
Task 13				4	\$620.00			12	\$1,560.00					16		\$2,180.00				16	\$2,180.00	
Task 14				12	\$1,860.00			8	\$1,040.00					20		\$2,900.00				20	\$2,900.00	
Task 15		40	\$7,400.00	12	\$1,860.00									52		\$9,260.00				52	\$9,260.00	
Task 15.1		16	\$2,960.00											16		\$2,960.00				16	\$2,960.00	
Task 15.2		24	\$4,440.00	12	\$1,860.00									36		\$5,300.00				36	\$5,300.00	
Task 16		8	\$1,480.00	24	\$3,720.00			20	\$2,600.00					52		\$7,800.00				52	\$7,800.00	
Task 16		8	\$1,480.00	80	\$12,480.00	16	\$2,624.00	248	\$31,988.80					388		\$57,384.00				388	\$77,384.00	
PS&E / Coordination Subtotal		90	\$16,588.00	160	\$24,480.00	16	\$2,624.00	432	\$56,188.80	8	\$2,120.00	4	\$732.00	786		\$102,386.80	168	\$38,245.00	13	874	\$132,611.80	
Total Design Hours		126	\$15,910.00	160	\$24,480.00																\$132,611.80	
Sub-Total Labor Costs																					\$132,611.80	
Total Design Costs			\$15,910.00		\$24,480.00		\$2,624.00		\$56,188.80		\$2,120.00		\$732.00			\$102,386.80					\$132,611.80	

OPTIONAL TASK																					
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
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Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
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Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,730.00
Task 17	4	\$740.00	18	\$2,760.00			40	\$6,200.00					62		\$8,730.00					62	\$8,7

MICHAEL BAKER INTERNATIONAL PRICING HANDOUT

Pricing for the Xerox Printers (per side) is as follows:

Color Copy 8.5x11 **.40**

Color Copy 8.5x14 **.60**

Color Copy 11x17 **.80**

Network Print 8.5x11 Color **.40**

Network Print 8.5x14 Color **.60**

Network Print 11x17 Color **.80**

Color Laser Cover Stock 8.5 x 11 **.75**

Color Laser Cover Stock 11x17 **1.25**

Color Laser Cover Stock 12x18 **1.75**

Color Laser Gloss Cover Stock 8.5x11 **.85**

Color Laser Gloss Cover Stock 11x17 **1.75**

Digital Output/Color Laser Print 8.5x11 **.40**

Digital Output/Color Laser Print 8.5x14 **.60**

Digital Output/Color Laser Print 11x17 **.80**

Paper Laser Print 8.5x11 Premium White **.06**

Paper Laser Print 8.5x14 Premium White **.10**

Paper Laser Print 11x17 Premium White **.12**

Pricing for the HP Laser Jets and Konica Minolta Printers (per side) is as follows:

BW Copy 8.5x11 **.055**

BW Copy 8.5x14 **.09**

BW Copy 11x17 **.11**

Laser Color Print 8.5x11 **.22**

Laser Color Print 8.5x14 **.33**

Laser Color Print 11x17 **.44**

Fax

Laser BW 8.5x11 **.12**

Pricing for the OCE Colorwave 360 (Large Format Color) is as follows:

Print Color on Bond 20lb up to 18x24	5.85
Print Color on Bond 20lb 20x30	9.75
Print Color on Bond 20lb 24x36	11.70
Print Color on Bond 20lb 30x40	17.55
Print Color on Bond 20lb 36x48	23.40
Print Color on Bond 20lb per sqft	1.95

Pricing for Prints & Scanning on the OCE Plotwave 340's (Large Format BW) is as follows:

Scanning:

Scan BW Large Format to 200dpi per sqft	0.20
Scan Color Large Format to 200dpi 24X36	0.75

Printing:

Print BW on Bond 20lb up to 18x24	.60
Print BW on Bond 20lb 20x30	1.00
Print BW on Bond 20lb 24x36	1.20
Print BW on Bond 20lb 30x40	1.80
Print BW on Bond 20lb 36x48	2.40
Print BW on Bond 20lb per sqft	.20

Pricing for HP DesignJet T1300 Mylar Printer:

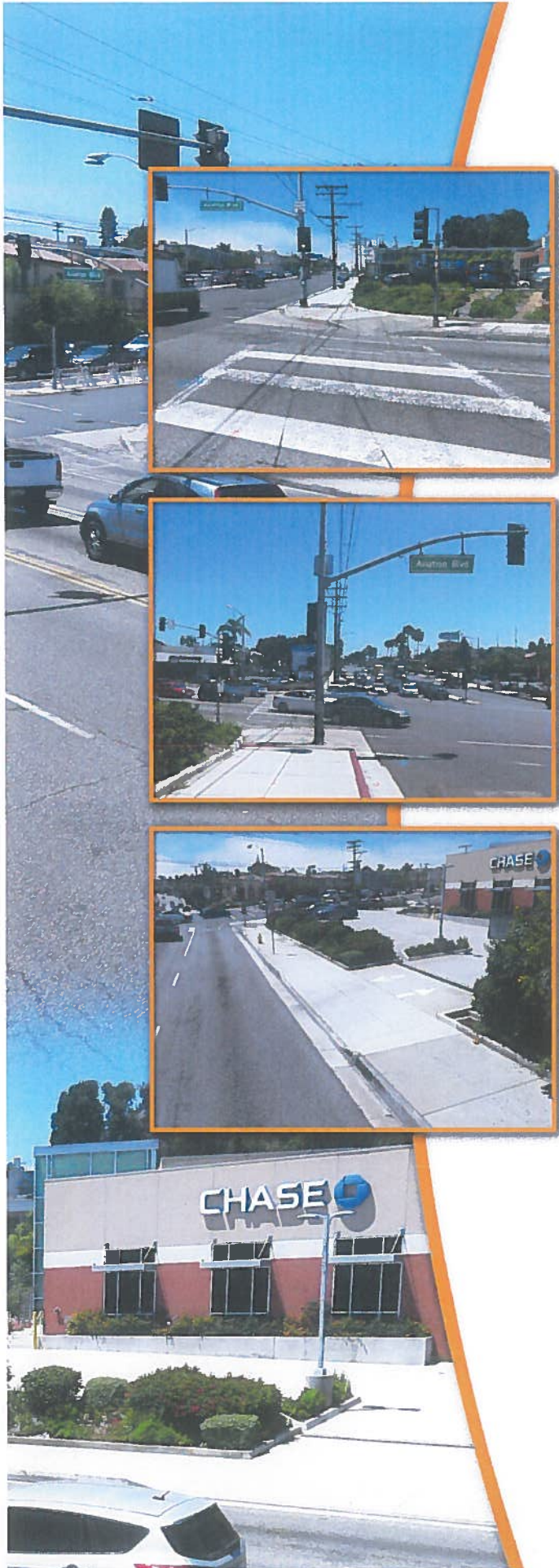
Color Plot on Mylar per sqft	3.95
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Pricing for HP6200

Print on <u>ANY</u> material per sqft	3.95
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Plotwave BW Mylar Printing:

BW Plots Mylar Up To 18x24	11.25
BW Plots Mylar 24x36	13.50
BW Plots Mylar 30x42	20.25
BW Plots Mylar 36x48	27.00
BW Plots Mylar per sqft	2.25

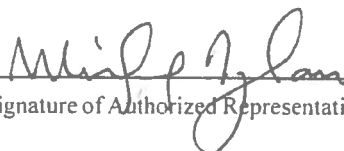


Appendix-Forms

APPENDIX B- Non-Collusion Affidavit

The undersigned declares states and certifies that:

1. This Proposal is not made in the interest of, or on behalf of any undisclosed person, partnership, company, association, organization or corporation.
2. This Proposal is genuine and not collusive or sham.
3. I have not directly or indirectly induced or solicited any other Proposer to put in a false or sham proposal and I have not directly or indirectly colluded, conspired, connived, or agreed with any other Proposer or anyone else to put in sham proposal or to refrain from submitting to this RFP.
4. I have not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal price or to fix any overhead, profit or cost element of the proposal price or to secure any advantage against the City of Manhattan Beach or of anyone interested in the proposed contract.
5. All statements contained in the Proposal and related documents are true.
6. I have not directly or indirectly submitted the proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay any fee to any person, corporation, partnership, company, association, organization, RFP depository, or to any member or agent thereof to effectuate a collusive or sham proposal.
7. I have not entered into any arrangement or agreement with any City of Manhattan Beach public officer in connection with this proposal.
8. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards.


Signature of Authorized Representative

Michael Tylman, PE
Name of Authorized Representative

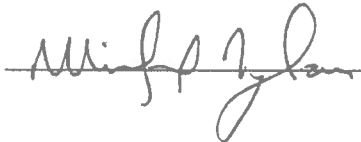
Sr. Vice President
Title of Authorized Representative

APPENDIX C – Consultant's Acknowledgement of Compliance with Insurance Requirements for Agreement for Professional/Consultant Services

Consultant agrees, acknowledges and is fully aware of the insurance requirements as specified in the Request for Proposal and accepts all conditions and requirements as contained therein.

Michael Baker International, Inc.

Consultant: Michael Tylman, PE Name (Please Print or Type)

By:  Consultant's Signature

Date: 08/22/2016

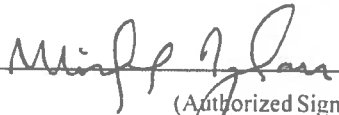
This executed form must be submitted with Scope of Work proposal.

APPENDIX D - CERTIFICATION OF PROPOSAL

The undersigned hereby submits its proposal and agrees to be bound by the terms and conditions of this Request for Proposal (RFP) NO. 1081-17.

- 1) Proposer declares and warrants that no elected or appointed official, officer or employee of the City has been or shall be compensated, directly or indirectly, in connection with this proposal or any work connected with this proposal. Should any agreement be approved in connection with this Request for Proposal, Proposer declares and warrants that no elected or appointed official, officer or employee of the City, during the term of his/her service with the City shall have any direct interest in that agreement, or obtain any present, anticipated or future material benefit arising therefrom.
- 2) By submitting the response to this request, Proposer agrees, if selected to furnish services to the City in accordance with this RFP.
- 3) Proposer has carefully reviewed its proposal and understands and agrees that the City is not responsible for any errors or omissions on the part of the Proposer and that the Proposer is responsible for them.
- 4) It is understood and agreed that the City reserves the right to accept or reject any or all proposals and to waive any informality or irregularity in any proposal received by the City.
- 5) The proposal response includes all of the commentary, figures and data required by the Request for Proposal
- 6) The proposal shall be valid for 90 days from the date of submittal.

Name of Proposer: Michael Baker International, Inc.

By: 
(Authorized Signature)

Type Name: Michael Tylman, PE

Title: Vice President

Date: 08/22/2016



Appendix-Resumes



BRIAN ANDERSON, PE

PROJECT MANAGER

Summary

Mr. Anderson has 30 years of experience in transportation/public works engineering and design. He supervises engineering staff and designers in specialty projects for arterial roadway widening and rehabilitation, and multimodal "Complete Streets" design projects. His work experience includes projects in the South Bay utilizing Measure R Funding, and he is currently serving as project manager for the City of Redondo Beach on the right-turn lane improvement project at the southwest corner of Aviation Boulevard and Artesia Boulevard.

Project Experience

Artesia/Aviation Boulevard Northbound Right Turn Lane, Redondo Beach, California. *City of Redondo Beach.* Project Manager. Michael

Baker is preparing final PS&E for the northbound right-turn lane from Aviation Boulevard to Artesia Boulevard for the City of Redondo Beach. The project design was performed in compliance with the Standard Specifications for Public Works Construction "Greenbook" and Caltrans Standards. Project requirements include acquiring right-of-way from the adjacent gas station property to accommodate a new right-turn lane and 8-foot wide parkway; right-of-way and mapping to generate legal descriptions and plats; field survey; grading; drainage improvements; roadway layout; traffic signal modification; striping and signage; stage construction; utility protection; ADA compliance; and replacement/relocation of private property improvements.

Edinger Avenue Eastbound Right Turn Lane and Widening, Huntington Beach, California. *City of Huntington Beach.* Project Manager. Michael Baker is preparing final PS&E for widening Edinger Avenue to accommodate lengthening the eastbound right-turn lane to Beach Boulevard. The project design was performed in compliance with the Standard Specifications for Public Works Construction "Greenbook" and Caltrans Standards. Project requirements include acquiring right-of-way from adjacent properties between Parkside Lane to Beach Boulevard. In general, the engineering services include roadway design, layout and grading to reconstruct driveway aprons and restore private property improvements. Other design services included parkway improvements of sidewalk, curb, and gutter and landscaping; asphalt pavement replacement; traffic striping and signing; traffic control; design of new LED street lighting; utility coordination; and obtaining an encroachment permit from Caltrans for work associated with their facilities (traffic loops, signal interconnect and signing/stripping).

190th Street Rehabilitation, Torrance, California. *Torrance, City of.* Project Manager. Responsible for project management. Michael Baker developed final design of pavement rehabilitation for approximately one mile of 190th Street in the City of Torrance. The project consisted of developing pavement repair methods that would maximize pavement life yet limit traffic operational disruptions. Coordination with the City of Redondo Beach was necessary to ensure proper centerline control. Michael Baker provided plans, specifications, and estimates (PS&E) for pavement rehabilitation, curb and gutter repair, sidewalk, and access ramps. Striping and traffic control plans were also provided.

Sand Canyon Avenue Grade Separation at the Metrolink/BNSF Railroad, Irvine, California. *City of Irvine.* Project Manager. Technical Project Manager. Oversaw design and construction services for Sand Canyon Avenue/Undercrossing at SCRRA/OCTA/Metrolink Grade Separation. The primary project elements included: relocation and widening of Sand Canyon Avenue from Oak Canyon/ Laguna Canyon Avenue to the Interstate 5 freeway crossing; realignment and shoo-fly construction of approximately 1500 feet of dual track construction; temporary pedestrian and traffic at-grade crossing; rail bridge and retaining wall structures design; storm water pump station design, shoring and utility coordination and relocation design; Traffic Signal, Queue-Cutter design, roadway striping, street lighting, and extensive traffic handling and detour design; Development and relocation of a Maintenance of Way (MOW) for Metrolink; railroad permitting, coordination, survey/right-of-way engineering, community outreach, landscape/irrigation, geotechnical engineering services; and extensive multi-agency coordination and Caltrans

Years of Experience: 30

Education/Training:

B.S., 1986, Civil Engineering,
California State University at Long
Beach

Licenses/Certifications:

Professional Engineer - Civil,
California, 1996, 55298



Encroachment processing. Michael Baker provided design services for the Sand Canyon Avenue undercrossing at the Southern California Regional Rail Authority, Orange County Transportation Authority, and Metrolink grade separation. Michael Baker was responsible for roadway layout, structures design, pump station design, railroad permitting and coordination, railroad shoofly design, drainage design, utility relocation coordination, survey and right-of-way engineering, community outreach, landscape and irrigation, identification of funding, and geotechnical engineering services.

Washington Boulevard Reconstruction Project, Commerce, California. *Commerce, City of.* Transportation Engineer. Responsible for day-to-day management of the project's design. Michael Baker is designing the widening and reconstruction of Washington Boulevard from Interstate 5 to the western City boundary, a distance of 2.8 miles. Washington Boulevard project is to improve traffic circulation and increase efficiency of goods movement. The Route provides for traffic volumes over 30,000 Vehicles-Per-Day with approximately 25-percent commercial truck usage. The primary project elements include: widening and reconstructing Washington Boulevard from two through lanes to three through lanes in each direction; replacing existing Asphalt Concrete (AC) with Portland Cement (PCC) pavement; PCC pavement repairs at existing PCC intersections; reconstruction of sidewalks, curbs, gutters, curb drains, curb returns, driveways, medians, and ADA ramps for the 2.8 mile roadway segment; upgrade traffic signals, signs, street lighting, and lane striping; construct new landscape planters, and median landscape improvements; facilitate Caltrans encroachment processes for both I-5 and I-710 ramp interface; and provide public outreach services. The project roadway to remain open during the construction process, therefore, requiring extensive traffic handling and traffic detour coordination, specifically addressing the extensive phasing required for PCC construction. Work items included extensive coordination with utility agencies, Caltrans Local Assistance, BNSF and UPRR coordination, and multiple private property and business coordination.

Alton Parkway Extension, Orange County, California. *County of Orange.* Project Manager. Mr. Anderson served as technical design manager for the design production of roadway and grading design documents, and coordination lead for all design tasks, permitting, and coordination for this multiagency design project. Duties included preparation of work plans, scheduling, directing project coordination meetings, evaluating staff availability, clarification of standards, and coordination with adjacent project developments. Michael Baker provided preliminary design for a one-mile extension of Alton Parkway from its easterly terminus at Irvine Boulevard to the City of Lake Forest limits. This six-lane arterial is a vital link in the Foothill Corridor Phasing Plan and will facilitate traffic flow through the former Marine Corps Air Station El Toro property between the communities of Baker Ranch, Foothill Ranch, Pacific Commercentre, and the City of Irvine, and provide a connection between I-5 and the Foothill Transportation Corridor (S.R. 241).

Alessandro Boulevard Median (Indian Street to Perris Boulevard), Moreno Valley, California. *City of Moreno Valley.* Project Manager. Responsible for project management. Michael Baker provided environmental clearance, final design, and construction support services for Alessandro Boulevard Median improvements. The project was funded under federal Highway Safety Improvement Program (HSIP) as a Local Assistance project overseen by Caltrans. The safety improvement project addressed traffic and pedestrian safety issues. Work items included design of raised median, turn pockets, traffic signal modifications, striping and signage, landscaping, new lane configurations, Americans with Disabilities Act (ADA) compliance, and environmental CEQA and NEPA documents.

John Wayne Perimeter Road Improvements, Costa Mesa, California. *John Wayne Airport.* Project Manager. Responsible for transportation engineering. Michael Baker provided engineering and design services for the perimeter service road, which included the reconstruction of approximately 4,000 linear feet of a 24-foot-wide asphalt concrete bi-directional roadway. Key to design development was providing continued access through the work site while maintaining security, access control, and monitoring. Phase I had evaluated, by use of a feasibility study, construction of a new parallel perimeter service road system along the western property limit between the fuel farm and the northwest gate at Airport Loop Road. Phase II design included preparation of the final plans, specifications, and estimates (PS&E) documents for the service road, including the new parallel roadway, if determined to be feasible, based on the results of the Phase I study.



BRENDAN DUGAN, PE

CIVIL/ROADWAY

Summary

Mr. Dugan is experienced in civil and transportation engineering. He has worked extensively with Caltrans, Orange County Public Works, LA County Sanitation District, and various municipalities on numerous projects throughout Southern California. Mr. Dugan's experience includes pavement rehabilitation, intersection widening, ADA compliance, field reviews, horizontal and vertical geometrics, project coordination and management, agency coordination, project specification document preparation, and development of construction cost estimates. Mr. Dugan is efficient in MicroStation, MicroStation InRoads, Bentley Descartes, AutoCad Civil 3D, and AutoTURN.

Years of Experience: 10

Education/Training:

B.S., 2007, Civil Engineering,
California State University at
Fullerton

Licenses/Certifications:

Professional Engineer - Civil,
California, 2011, 79075

Project Experience

Sepulveda Boulevard (SR-1) and Mariposa Avenue Intersection

Improvements, El Segundo, California. *In-N-Out Burger.* Project Engineer. Leading the design effort on the improvements of Sepulveda Boulevard and Mariposa Avenue in the City of El Segundo. Mr. Dugan was tasked with managing a team to complete the intersection improvements as a "condition of approval" for the client, In-N-Out Burger to construct their new store on the adjacent site. Responsibilities include permit coordination, ADA compliance, traffic plan coordination, utility coordination, cost estimates and project specification documents. The plans were approved in mid-2015. Michael Baker was responsible for preparing signing and striping plans, traffic signal plans, and traffic control plans for intersection improvements. In-N-Out Burger developed and occupied the northeast corner of the intersection at Sepulveda Boulevard (SR-1) and Mariposa Avenue. The intersection needed to be updated to meet the current ADA standards, while adding a second left turn lane on westbound Mariposa Avenue turning onto southbound Sepulveda Boulevard. The project included: field investigation; review of existing signal operation; review of existing cabling and conduits capacity; review of existing signal communication interconnect; signal design; signing and striping; and traffic control design.

Technology Drive, Irvine, California. *Irvine Community Development Company.* Project Engineer. Tasked to manage and design the Technology Drive extension project in Irvine, California. This project connected the existing segment of Technology Drive North with Laguna Canyon Road. Microstation InRoads was used to build a three dimensional model of the proposed roadway alignment. The roadway geometrics were implemented using Caltrans standards due to a large portion of the road being within State Right-of-Way. Coordination for utility design, a bridge abutment tie back wall design, a retaining wall design and various agencies was critical in the completion of the layout plans. ADA compliance was achieved throughout the project as well. Mr. Dugan also completed the quantity calculations and cost estimate for the completion of the project.

S.R. 241 / S.R. 91 Express Lanes Connector Project Study Report and Environmental Document, Orange County,

California. *Transportation Corridor Agencies.* Project Engineer. Responsible for implementing the roadway geometrics to accommodate the proposed median to median direct connector ramp from the S.R. 241 to the S.R. 91 using current Caltrans standards. With Microstation InRoads, the existing facilities were re-aligned and upgraded to facilitate the new overhead median to median direct connector ramps. Autoturn was used to run truck turning templates to validate that the proposed ramp design and the redesign of the existing facilities would accommodate all vehicles allowed in the State of California. The Transportation Corridor Agencies (TCA) proposes to construct a new median to median direct connector ramp from S.R. 241 to S.R. 91 in the City of Anaheim. The proposed connector ramp would provide additional access to SR-91 east of SR-241. The proposed median to median connector ramp that will connect S.R. 241 and the S.R. 91 Express Lanes, which are tolled facilities, is also proposed to be a tolled facility.



S.R. 241 Wildlife Protection Fence Project, Anaheim, California. *Transportation Corridor Agencies.* Project Engineer. Provided design support for the implementation of the wildlife protective fencing along the S.R. 241 corridor. Using Microstation, we were able to implement a layout concept that worked for both the agencies and biologist involved in the project. The terrain located adjacent to the S.R. 241 provided numerous challenges for actually constructing the fences, and our design had to take this into account. Michael Baker prepared complete plans, specifications and estimate (PS&E) for the Transportation Corridor Agencies (TCA), to construct unique wildlife fencing and wildlife crossings along the State Route 241 from Santiago Creek to State Route 91.

Cow Camp Road Design – Phases 1A and 1B, Rancho Mission Viejo, California. *Rancho Mission Viejo, LLC.* Project Engineer. Responsible for the design support of Phase 1B of Cow Camp Road. Provided QA/QC of the existing design and quantities.

Cow Camp Rd. PH II PSR. *Rancho Mission Viejo, LLC.* Project Engineer. Responsible for the County Approved Conceptual Geometric Approval Drawing (vertical and horizontal alignment, bridge locations, etc...) for the future extension of Cow Camp Road, in the City of Rancho Mission Viejo. Upon the approval of the Conceptual Alignment, the Project is now in the Project Study Report Phase. Also responsible for writing and coordinating the completion of the Project Study Report with multiple sub consultants and Orange County Public Works, on behalf of Rancho Mission Viejo. The Project Study Report is scheduled for approval in November of 2015.

Non-Michael Baker Project Experience

Pioneer Road Rehabilitation Project (from Imperial Highway to Lakeland Road), Norwalk, California. Project Engineer. Responsible for the design, coordination, bid documents and construction support of one mile of Pioneer Road in the City of Norwalk. The City of Norwalk worked with a limited budget and provided them a scope of work that could accomplish the goals of the project while staying within the budget available. Responsibilities included ADA compliance, pavement design, traffic control, traffic signing and striping plans, design plans, utility coordination, cost estimate and project specifications documents. Coordination between Caltrans was required as the project included joining current freeway on ramps, as well as coordination with the City of Santa Fe Springs as the project limits extended into their jurisdictional boundaries.

Citywide Street Rehabilitation Project, San Juan Capistrano, California. Coordinated the proposal effort that lead to the design and management of the pavement rehabilitation of twelve local residential streets in the City of San Juan Capistrano. The project required the field analysis of the pavement conditions of the roadways and the design of the rehabilitation of the asphalt, as well as ensuring ADA compliance on all adjacent pedestrian curb ramps. Responsibilities also included utility coordination, homeowner correspondence, Project Specification documents, cost estimates, and construction support.

Laguna Canyon Road (S.R. 133) and Pacific Coast Highway (S.R. 1) Sidewalk Repairs and ADA implementation, Laguna Beach, California. Project Engineer. Responsible for the evaluation and modification of nearly five-miles of sidewalk and eight curb ramps in the City of Laguna Beach, California. The condition of many of the cities sidewalks were poor and the replacement was broken down by area and priority of repair needs. Many of the cities curb ramps were not up to current ADA code and were redesigned to the proper guidelines. The topography of the City of Laguna Beach required special details when designing the ADA curb ramps to ensure proper slope requirements were met. Responsibilities also included the removal and replacement of curb and gutter, roadway asphalt, and street light poles.



ALAN Y. ASHIMINE

ENVIRONMENTAL ANALYSIS

Summary

As a Project Manager and Environmental Analyst at Michael Baker, Mr. Ashimine prepares environmental and planning studies for public and private sector clients under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). He has extensive experience in the research, analysis, and writing of environmental documentation for a variety of projects involving infrastructure, redevelopment, residential, and industrial uses. Using his broad background and understanding of environmental constraints, Mr. Ashimine provides defensible CEQA/NEPA compliance review and environmental documentation. He utilizes the skills developed in each of his specialized disciplines to prepare and process environmental documents for a diverse range of projects and land uses.

Years of Experience: 16

Education/Training:

B.A., 2000, Environmental Analysis and Design, University of California at Irvine

Mr. Ashimine utilizes his experience to manage and author environmental documentation, often incorporating the results of complex technical documentation to substantiate conclusions within the document. Mr. Ashimine has also successfully prepared environmental documentation for a range of highly controversial projects subject to scrutiny by the general public, environmental organizations, and public agencies. Using his broad background and understanding of environmental constraints, Mr. Ashimine provides detailed, legally sound CEQA/NEPA compliance review and environmental documentation. Mr. Ashimine also has expertise related to processing environmental documentation for local and regional transportation projects. He has managed a range of highly technical CEQA/NEPA studies for locally-funded roadways, Federally-funded roadways through Caltrans Local Assistance, and projects on the State Highway System.

Project Experience

Brookhurst Street / Adams Avenue Intersection Improvement EIR, Huntington Beach, California. *City of Huntington Beach.* Project Manager. Responsible for environmental documentation. Michael Baker prepared an Environmental Impact Report (EIR) for the Brookhurst Street/Adams Avenue Intersection Improvements project for the City of Huntington Beach. The project proposed improvements along Brookhurst Street approximately 1,000 feet north of Adams Avenue and 800 feet south of Adams Avenue, and along Adams Avenue approximately 1,300 feet west of Brookhurst Street and 1,200 feet east of Brookhurst Street. The project also resulted in two northbound right-turn lanes, one southbound right-turn lane, one eastbound through lane, and one westbound through lane. Approximately 31,230 square feet of right-of-way from the adjoining parcels was acquired. One bus turnout was added to an existing bus stop. The project was part of a multi-jurisdictional approach to alleviating traffic congestion along arterials in Huntington Beach, Fountain Valley, and Costa Mesa. Key environmental impact areas analyzed in the EIR included land use/planning, air quality, traffic and circulation, hazards and hazardous materials, noise, and greenhouse gas emissions.

El Camino Real and Avenida Pico Intersection Improvements, San Clemente, California. *City of San Clemente.* Environmental Manager. Responsible for environmental documentation. Michael Baker provided design, construction management, and inspection services for an intersection improvement project consisting of 1,350 feet of roadway widening on El Camino Real, median island improvements, traffic signal improvements, pavement restoration on Avenida Pico, and a small bridge structure crossing over existing protected wetlands on the north side of El Camino Real. Michael Baker provided bid analysis; contract administration; construction management; inspection; quality control and quantity verification; value engineering; public relations, construction schedule, and material testing monitoring; utility coordination; web-based document control system maintenance; and control documents processing for submittals, progress payments, daily reports, digital photos, and the final punch list.

Alessandro Boulevard Median (Indian Street to Perris Boulevard), Moreno Valley, California. *City of Moreno Valley.* Environmental Manager. Responsible for environmental documentation. Michael Baker provided environmental



clearance, final design, and construction support services for Alessandro Boulevard Median improvements. The project was funded under federal Highway Safety Improvement Program (HSIP) as a Local Assistance project overseen by Caltrans. The safety improvement project addressed traffic and pedestrian safety issues. Work items included design of raised median, turn pockets, traffic signal modifications, striping and signage, landscaping, new lane configurations, Americans with Disabilities Act (ADA) compliance, and environmental CEQA and NEPA documents.

20th Street/Walnut Avenue/Alamitos Avenue Intersection Improvements – NEPA Compliance, Long Beach, California. *City of Long Beach.* Project Manager. Responsible for project management. Michael Baker assisted with preparation of National Environmental Policy Act (NEPA) compliance documentation for the 20th Street/Walnut Avenue/Alamitos Avenue Intersection Improvement Project, in the southern/central portion of the city. A small portion also extended into the southern portion of the City of Signal Hill. It involved construction of a new four-way signalized intersection, which included the realignment of Alamitos Avenue, removal of a diagonal portion of East 20th Street, and realignment of East Wesley Drive. In consultation with city staff, Michael Baker processed NEPA clearance documentation through Caltrans District 7, including the preparation of several technical studies for a categorical exclusion (CE) document.

University Drive Widening Project, Irvine and Newport Beach, California. *City of Irvine.* Task Manager. Managed preparation of the Initial Study/Mitigated Negative Declaration for the project. Michael Baker prepared the initial study and Mitigated Negative Declaration and the Project Report and Environmental Document (PR/ED) for proposed improvements to University Drive. Three design alternatives were analyzed in the PR/ED that included widening the roadway from a four to six lane arterial, adding a sidewalk to improve pedestrian access to UC Irvine and the San Diego Creek Trail, improving bicycle and pedestrian connectivity, adding retaining walls along the UC Irvine property line, and improved water quality treatment. The IS/MND addressed technical issues, primarily air quality/greenhouse gas, biological resources (due to proximity to San Diego Creek), cultural resources, hazards and hazardous materials, water quality, and traffic.

Ball Road / Sunkist Street Intersection Improvements, Anaheim, California. *City of Anaheim.* Environmental Manager. Responsible for environmental documentation. Michael Baker prepared a preliminary environmental checklist and performed an initial study for the Ball Road/Sunkist Street Intersection Improvements Project. The study examined primary impacts related to air quality, noise, and construction-related impacts, such as hydrology, water quality, and aesthetics.



MICHAEL J. BRUZ, PE

PROJECT PRINCIPAL | QA REVIEWER

Summary

Mr. Bruz has over three decades of experience providing project delivery and oversight for transportation planning and design projects. Representative projects include freeway widenings and interchanges, arterial roadways, local street improvements, complete streets, streetscape improvements, bicycle facilities and utilities (water and sewer). He is well versed in all project phases including preliminary engineering (PA/ED), PS&E preparation, environmental planning, construction management, value analysis and dispute resolution. Mr. Bruz has managed numerous multi-discipline teams and has great knowledge and background working with state DOT's, local municipalities and other governmental agencies. He is an experienced leader who is known as a pro-active, client service oriented manager who fosters effective partnering relationships with his clients.

Years of Experience: 36

Education/Training:

B.S., 1979, Civil Engineering,
Michigan State University

Licenses/Certifications:

Professional Engineer - Civil,
California, 1983, 36198;
Also in AZ, MI, NV, VT

Project Experience

43rd Avenue Intersection Improvements, Glendale, Arizona. Project Manager. Responsible for capacity enhancements at five intersections (Peoria Avenue, Olive Avenue, Northern Avenue, Glendale Avenue and Bethany Home Road) on one of the busiest north-south corridors in the City. The intersections are at one mile intervals and improvements included: additional turn lanes, bus bays, traffic signal modifications, raised medians, utility relocations and construction (water, sewer, irrigation, electrical, gas, telephone, cable television), landscaping and signing and striping.

Date Palm Drive Bridge over Whitewater River, Cathedral City, California. *City of Cathedral City.* Project Engineer. Deputy Project Manager. Responsible for transportation engineering. Michael Baker provided environmental documentation and final engineering for a 760-foot-long bridge project that consisted of widening from four lanes to six lanes of traffic; seismic retrofit; and roadway improvements, including pedestrian and bike lane enhancements. The original 1981 bridge consisted of nine spans, precast P/S I-girder supported on pier walls, and pile foundations. The symmetrical widening matched the existing superstructure type on a 45 degree skew. Scour protection countermeasures were used for protecting existing piles while new pile foundations were placed at sufficient depth to resist high scour conditions. Other features included retrofitting with the existing bridge with girder cable restrainers, hinge retrofit, and deck repairs. The HBR project complied with Caltrans latest 2010 Amendments, including SDC and LRFD criteria, and Local Assistance Procedures Guide in District 8.

Rodeo Drive Improvements, Beverly Hills, California. Project Manager. Responsible for the reconstruction of landscaped median islands and pavement for a three-block reach along what is commonly considered to be the most famous stretch of roadway in the world. The project was designed and constructed on a very tight schedule in order to be complete prior to the 1994 World Cup Soccer Tournament. The project included extensive coordination with the Rodeo Drive Merchants Association and special construction requirements were included in the contract to minimize disruption to business.

16th Street Glendale Avenue Intersection Improvements Design Concept Report and Final Design. Project Manager. Responsible for the preparation of a Design Concept Report and final design for the improvements to add additional westbound left turn capacity on Glendale Avenue at the 16th Street Intersection. Extra lane capacity was needed to smooth the flow of traffic through the intersection due to turn lane traffic backing-up the through lanes during heavy volume periods.

Intersection Improvements, Berkeley Avenue at Verano Way University of California, Irvine. Civil Engineer. Responsible for the preparation of intersection improvement plans to accommodate a new traffic signal and to accommodate handicapped access improvements.



Rio Vista Neighborhood Circulation Improvements Design and Post-Design Services, Peoria, Arizona. Project Manager. Responsible for this project and provided professional consultant services including survey, drainage design, waterline and sewerline design, street improvement plans, signing and striping plans, traffic control, cost estimating, and construction inspection/oversight.

Sasco Road Improvements, Pinal County, Arizona. Principal-in-Charge. Responsible for one mile of detour improvements, including drainage analysis, roadway design, signing and striping, and traffic control aspects. Other services for this project included infrastructure paving plans, drainage report, survey services, water and sewer plans, channel design, NOI and SWPPP, Wastewater Master Plan, and effluent plans for this project.

Bradshaw Mountain Road Bridge over the Agua Fria River, Prescott Valley, Arizona. Project Manager. Responsible for mile of major arterial roadway improvements, including a 300' bridge, major channel protection, drainage analysis/plans, signing/striping plans and coordination with several state and local agencies.

McLellan Road, Mesa, Arizona. Project Manager. Responsible for the widening of approximately one-half mile of arterial roadway. This project is being completed on a short schedule and includes roadway widening, storm drainage analysis/plans, utility relocations (water, sewer, electrical and irrigation) and signing/striping plans. Extensive coordination with City Staff and utility owners was required to assure on-time project completion.

79th Avenue Widening, Peoria, Arizona. Project Manager. Responsible for the street improvements required to widen 79th Avenue to its ultimate width as a collector street. The 79th Avenue Widening Project included: roadway widening (curb, gutter, access, and sidewalk), storm drainage analysis/plans, utility relocations (water, sewer, electrical, and irrigation), a 1,000'-8' high CMU wall with emergency access gate, signing/striping plans, construction plans, specifications, bidding schedules, cost estimates, and coordination with City staff and utility owners.

Terminal 3 Traffic Lane Expansion at Sky Harbor International Airport, Phoenix, Arizona. Project Manager. Responsible for providing preliminary engineering design alternatives and analysis for adding a 3rd through lane to Sky Harbor Boulevard at Sky Harbor International Airport at Terminal 3. Worked with the project team to provide the City of Phoenix's Aviation Staff with an analysis matrix presenting the various impacts associated with each of the proposed alternatives for the installation of the 3rd lane to aid in their decision making on which alternative to select.

McCulloch Boulevard "Main Street" Streetscape, Lake Havasu City, Arizona. Project Manager. Responsible for providing urban design, landscape architectural, and civil engineering services to Main Street/Uptown Lake Havasu. The project area was centered on approximately two-thirds of a mile of McCulloch Boulevard; the "main street" of Lake Havasu City. The work included the review of existing conditions and the development of a comprehensive streetscape enhancement program to help bring the uptown area back to a vibrant pedestrian-oriented shopping area. Investigated streetscape enhancements including parking improvements, street furniture, pedestrian lighting, decorative sidewalk, and decorative/enhanced pedestrian crosswalks. He also worked closely with the Main Street/Uptown Association to develop plant, furniture, and color palettes for aesthetically enhancing the area. Prepared schematic streetscape plans, street improvement plans, lighting and electrical plans, and landscape planting/irrigation plans.



RICKY CHAN, PE, TE, PTOE

TRAFFIC ENGINEERING

Summary

Mr. Chan has years of experience in transportation, traffic, and municipal engineering projects. He has worked on a variety of roadway and traffic related projects. His experience includes intersection widening, traffic signal operations, traffic signal design, retaining walls, hydrology and hydraulic reports and computer simulations, drainage design, and Caltrans PS&E.

Project Experience

Sepulveda Boulevard (SR-1) and Mariposa Avenue Intersection Improvements, El Segundo, California. *In-N-Out Burger.* Task Manager. Responsible for preparing signing and striping plans, traffic signal plans and traffic control plans for requesting a Caltrans encroachment permit. Michael Baker was responsible for preparing signing and striping plans, traffic signal plans, and traffic control plans for intersection improvements. In-N-Out Burger developed and occupied the northeast corner of the intersection at Sepulveda Boulevard (SR-1) and Mariposa Avenue. The intersection needed to be updated to meet the current ADA standards, while adding a second left turn lane on westbound Mariposa Avenue turning onto southbound Sepulveda Boulevard. The project included: field investigation; review of existing signal operation; review of existing cabling and conduits capacity; review of existing signal communication interconnect; signal design; signing and striping; and traffic control design.

Pacific Coast Highway (S.R. 1) and 2nd Street Intersection Widening, Long Beach, California. Prior to joining Michael Baker, Lead Project Engineer for the preparation of the plans, specifications, and estimates of the project. The project widened southbound Pacific Coast Highway to allow for the installation of a dual left turn lane and a widened shoulder to allow for right turns. The project followed the Caltrans criteria for project development and PS&E. It required Caltrans coordination and plan approval.

Adolfo Road at Santa Rosa Drive Intersection Widening, Camarillo, California. Prior to joining Michael Baker, Project Engineer for the concept development and final PS&E and Construction Manager for the project construction. The project includes widening the eastbound leg to allow the installation of dual left turn lanes and a right turn lane in a confined right-of-way. The project included a traffic analysis, concept plan, traffic signal and interconnect design, drainage design, CEQA development, and geotechnical investigations.

Avenue 42 and Monroe Street Traffic Signal and Interconnect, Indio, California. *City of Indio.* Engineer. Responsible for preparing traffic signal and fiber optic communication interconnect plans for the intersections of Avenue 42 and Monroe Street, Avenue 42 and Street "B", and Monroe Street and Showcase, and installing a protective traffic signal head, countdown ped heads, and interconnect system. Also responsible for field investigation, review of cabling and conduits capacity, signal communication interconnect design, signal design, signing and striping, new signal heads, poles, and coordination with utility companies.

Walker Street and Delong Street Traffic Signal and Interconnect, Cypress, California. *Warmington Residential Communities.* Project Engineer. Responsible for traffic engineering. Michael Baker was responsible for preparing traffic signal plans for the intersection of Walker Street and Delong Street and communication interconnect plans for Walker Street from Crescent Avenue to Delong Street and from Delong Street to Lincoln Avenue. Traffic signal plans included installing protective traffic signal head and countdown ped heads. The project included field investigation, review of existing cabling and conduits capacity, signal communication interconnect design, signal design, signing and striping, new signal heads, poles, and coordination with utility companies.

Years of Experience: 15

Education/Training:

B.S., 2000, Civil Engineering,
University of California at Irvine

Licenses/Certifications:

Professional Engineer, California,
2007, 71389

Traffic Engineer, California, 2013,
TR2673

Professional Traffic Operations
Engineer, Washington, D.C., 2014,
3685



Newport Boulevard at Hospital Road Widening, Newport Beach, California. Prior to joining Michael Baker, Design Engineer for the widening of Newport Boulevard at Hospital Road. This project consisted of the addition of a right turn lane, traffic signal relocation, drainage head wall, signing and striping, drainage, hydrology and hydraulic studies and grading. The project required coordination with the City of Newport Beach and Caltrans.

20th Street and Cherry Avenue Traffic Signal Project, Signal Hill, California. Prior to joining Michael Baker, Assistant Project Manager for preparing traffic signal plans for the offset intersection and installing protective traffic signal head, countdown ped heads, and ADA curb ramp. The project included field investigation, review cabling and conduits capacity, review existing signal communication interconnect, signal design, roadway improvements, signing and striping, new signal heads, poles, and coordination with utility companies.

Orange Avenue and Willow Street Traffic Signals Upgrade Project, Signal Hill, California. Prior to joining Michael Baker, Project Engineer for preparing traffic signal plans to upgrade the intersection to current standards and installing protective-permissive traffic signal heads, countdown ped heads, ADA curb ramp upgrades, and relocating poles for ADA compliance. The project required documenting the existing conditions since the initial installation occurred in early 1970's and the project plans were unreadable. In addition, the project included field investigation, review signal operations, review cabling and conduits capacity, review existing signal communication interconnect, signal design, roadway improvements, signing and striping, new signal heads, poles, and coordination with utility companies.

Orange Avenue Traffic Signals Upgrade and Signal Interconnect Project Phase I, Signal Hill, California. Prior to joining Michael Baker, Project Engineering in preparing traffic signal plans to upgrade two intersections (33rd and 32nd) to current standards and installing interconnect from Wardlow Avenue to Spring Street. The project required an encroachment permit to install a communication line across I-405. Project coordination included Caltrans and the City of Long Beach. The project included field investigation at each intersection, review signal operations, review cabling and conduits capacity, review existing signal communication interconnect, signal design, roadway improvements, signing and striping, new signal heads, poles, radio system, and coordination with utility companies.



WILLIAM G. COX, PLS

SURVEY

Summary

Mr. Cox has years of surveying experience including office management and field crew coordination. He is responsible for construction staking of roadways, highways, major land development projects, aerial and conventional topographic mapping, surface modeling, earth volume analysis, and field-to-finish data collection. He has worked in numerous disciplines of land surveying, including boundary, profile staking and verification, static and mobile LiDAR applications, control networks, settlement and deformation, airport runway staking, tunnel alignment, cadastral mapping, and geophysical surveys. Mr. Cox has managed projects within both the public and private sectors and brings together the most relevant surveying technologies and personnel to complete each project on time and within budget.

Project Experience

State Route 60 / Grand Avenue Interchange Improvements, Industry, California. *Wei Koo & Associates, Inc.* Survey Manager. Responsible for all field surveying. Michael Baker worked with the City of Industry on improvements to the S.R. 60/Grand Avenue interchange. The S.R. 60/Grand Avenue project includes construction of a new interchange with a new eight-lane overcrossing. Michael Baker was responsible for the surveying and mapping tasks and was involved in preparation of the project environmental document, project report, and roadway design. Michael Baker also performed a traffic impact analysis for multiple design alternatives under consideration. The traffic impact analysis included level-of-service calculations at study intersections and freeway mainline weaving-transition analysis to identify the potential benefits associated with the various interchange design alternatives and to support the project study report, project report, and environmental documentation.

Interstate 10 / State Route 118 Emergency Response Services, Los Angeles County, California. *Caltrans - District 7.* Surveyor. Responsible for emergency topography for heavily damaged S.R. 18 and I-10 freeways for design and reconstruction. Michael Baker provided survey crews and geodetic specialists to Caltrans District 7 the day after the Northridge Earthquake in January 1994. The quake severely damaged buildings and infrastructure for several square miles in a heavily populated area. Among the roadway casualties were the I-10 and S.R. 118 freeways, including several bridges that suffered major damage, forcing complete closure of portions of these heavily used transportation arteries. Caltrans District 7 engineers required immediate survey data for the assessment and repair of I-10 and S.R. 118. Working around the clock, crews performed topography of the damaged road surface and processed the survey data. Michael Baker then met with Caltrans District 7 survey managers to review required work on damaged portions of I-10. With a tight project deadline of four calendar days, Michael Baker mobilized two survey crews within hours. Michael Baker delivered the completed topography, including electronic data files, within 60 hours of receiving the initial request; one full day ahead of schedule.

El Camino Real and Avenida Pico Intersection Improvements, San Clemente, California. *City of San Clemente.* Survey Manager. Responsible for all field surveying. Michael Baker provided design, construction management, and inspection services for an intersection improvement project consisting of 1,350 feet of roadway widening on El Camino Real, median island improvements, traffic signal improvements, pavement restoration on Avenida Pico, and a small bridge structure crossing over existing protected wetlands on the north side of El Camino Real. Michael Baker provided bid analysis; contract administration; construction management; inspection; quality control and quantity verification; value engineering; public relations, construction schedule, and material testing monitoring; utility coordination; web-based document control system maintenance; and control documents processing for submittals, progress payments, daily reports, digital photos, and the final punch list.

Years of Experience: 37

Education/Training:

B.S., 1977, Business Administration,
Colorado State University

Licenses/Certifications:

Professional Land Surveyor,
California, 1992, 6673

Transportation Worker
Identification Credential (TWIC),
California, 2011



Alton Parkway Construction Support, Orange County, California. *County of Orange.* Survey Manager. Responsible for all field surveying. Michael Baker provided construction support for the extension of Alton Parkway from the current easterly terminus at Irvine Boulevard to the City of Lake Forest limits. Michael Baker provided full construction staking support for a 1.25-mile segment of roadway, including mass grading, major regional drainage and utility infrastructure, and roadway improvements. Michael Baker's team worked closely with County survey and inspection staff to develop a protocol of deliveries and transparent operations to insure the highest quality of service with no disruptions to the construction schedule.

On-Call Surveying and Mapping Contract, Various Locations in CA, CO, NM, NV, UT and WY. *Federal Highway Administration.* CADD Technician. Responsible for providing surveying and mapping services under an on-call contract with FHWA covering 13 western states. Michael Baker provided surveying and mapping services under an on-call contract with the Federal Highway Administration covering 13 western states. The projects support development and improvements for federal roadways in national parks, national forests, and other federal facilities. Michael Baker's surveying services included global positioning system (GPS) control surveys, conventional and photogrammetric mapping, right-of-way surveying, and research and development for laser scanning and airborne GPS positioning.

Atlantic Avenue Cast Iron Main Replacement, Long Beach, California. *Long Beach Water Department.* Survey Manager. Responsible for all field surveying. Michael Baker provided engineering services for approximately 10,000 linear feet of new eight-inch ductile iron pipe to replace the cast iron water main on Atlantic Avenue between the intersections with 405 Freeway/Spring Street and Pacific Coast Highway. Michael Baker's services included design, permitting, and traffic control.

Grand Avenue at S.R. 57/S.R. 60 Interchange, Diamond Bar, California. *PBS&J.* Survey Manager. Responsible for all field surveying. Michael Baker provided environmental support for the S.R. 57/S.R. 60 confluence at Grand Avenue in Los Angeles County, within the Cities of Industry and Diamond Bar. The interchange is located approximately at the midpoint of the two-mile common alignment of the S.R. 57/S.R. 60. Michael Baker assisted in managing the preparation of technical studies anticipated to support a joint environmental impact report/environmental assessment (EIR/EA).

Interstate 405 / Jamboree Road Interchange Improvements, Irvine, California. *City of Irvine.* Survey Manager. Responsible for all field surveying. Michael Baker prepared a permit engineering evaluation report (PEER) for the I-405/Jamboree Road Interchange southbound exit ramp widening. The existing intersection experienced congestion from the high volume of vehicles on Jamboree Road and turning volumes at the southbound I-405 ramp intersection. Project improvements were designed to widen the ramp to the outside to provide an additional left-turn lane at the intersection with Jamboree Road, construct a retaining wall along the right edge of shoulder, remove and reconstruct an overhead sign structure, modify the existing traffic signal at the intersection, make minor drainage improvements, and protect and relocate existing utilities. Michael Baker prepared new aerial topographic mapping, traffic analysis, preliminary improvement plans, cost estimates, and environmental technical studies in support of a California Environmental Quality Act (CEQA) categorical exemption.

Baldwin Park Transit Center Parking Structure, Baldwin Park, California. *Watry Design.* Survey Manager. Responsible for all field surveying. Michael Baker assisted with civil site work and utility coordination tasks for the design of a new 506-stall parking structure and related transit facilities to service City Hall. The parking structure required new utility service with Southern California Edison (SCE). Creative solutions were employed to avoid the addition of an entirely new transformer unit. Michael Baker's survey experts facilitated alteration of existing lot lines to meet the SCE requirements for service, saving thousands of dollars in new service costs.

Western Avenue and Rolling Hills Water Main Replacement / Rehabilitation, Torrance, California. *Torrance, City of.* Survey Manager. Responsible for all field surveying. Michael Baker provided engineering services for the replacement of 4,200 feet of 12-inch water main on Western Avenue between 190th Street and Del Amo Boulevard and 700 feet along Rolling Hills Road, and the replacement of approximately 2,500 square feet of pavement in two locations along Western Avenue due to damage from water main breaks. Michael Baker's services included topographic surveys and traffic control plans.



JEREMY P. FRANZINI, PLA

LANDSCAPE AND IRRIGATION

Summary

Mr. Franzini is a Landscape Architect with extensive experience managing and designing landscape architectural projects throughout southern California. His expertise includes landscape design, conceptual and schematic design, construction documents, specifications, urban design, master plans, site planning, cost estimates, and project management for public and private projects. His ability to creatively balance artistic and scientific principles results in projects that are beautiful, safe, and enjoyable. Many of his projects incorporate sustainable and green design principles that create lasting benefits for both the Client and the environment.

Project Experience

Lincoln Boulevard, Los Angeles, California. Playa Vista. Landscape Architect. Prepared conceptual landscape plans, construction documents, specifications, and estimates in Microstation format to the design standards of the California Department of Transportation. The project is located next to wetland habitat that required special landscape treatment and bioswales to improve water quality. Only California native plant material is being used because of the special biological conditions. The plans required approval from the City of Los Angeles, Caltrans, and the California Coastal Commission. Michael Baker prepared conceptual design and landscape construction documentation for this high-profile six-lane road that separates a high-density urban development from a newly established fresh-water marsh. Michael Baker facilitated design solutions that allowed the private developer, Caltrans, the City of Los Angeles, and the California Coastal Commission, to jointly support the landscape design. The landscape concept features California native plants indigenous to the Ballona Wetlands and water-efficient irrigation systems.

Alessandro Boulevard Median (Indian Street to Perris Boulevard), Moreno Valley, California. City of Moreno Valley. Landscape Architect. Responsibilities included landscape architecture. Michael Baker provided environmental clearance, final design, and construction support services for Alessandro Boulevard Median improvements. The project was funded under federal Highway Safety Improvement Program (HSIP) as a Local Assistance project overseen by Caltrans. The safety improvement project addressed traffic and pedestrian safety issues. Work items included design of raised median, turn pockets, traffic signal modifications, striping and signage, landscaping, new lane configurations, Americans with Disabilities Act (ADA) compliance, and environmental CEQA and NEPA documents.

Foothill Parkway Westerly Extension, Corona, California. City of Corona. Landscape Architect. Responsible for preparing plans, specifications, and estimates for the decorative hardscape, planting, and irrigation improvements. Michael Baker prepared 12 initial concept plans and developed a comprehensive basis of design report based upon design and environmental studies for the westerly extension of Foothill Parkway as a four-lane roadway from approximately 250 feet west of Trudy Way to Green River Road, a distance of approximately two miles. Michael Baker began a public outreach program, designed a comprehensive website, prepared illustrative communications materials, and organized a large-scale, interactive open house focused on details for the roadway extension. Michael Baker also provided engineering services for the preparation of roadway plans, bridge and retaining wall plans, right-of-way engineering, storm drain plans, roadway grading plans, traffic signal plans, landscape and irrigation plans, water line plans, and construction cost estimates.

Palomar Airport Road Right Turn Lane, Carlsbad, California. City of Carlsbad. Supervisor. Responsible for preparing plans, specifications, and estimates for planting and irrigation improvements. Michael Baker provided professional design services for the preparation of planting and irrigation plans associated with the addition of a 14-foot-wide right-

Years of Experience: 20

Education/Training:

M.L.A., 1996, Landscape
Architecture, Texas A&M University

B.S., 1993, Environmental Studies,
University of California at Santa
Barbara

Licenses/Certifications:

Landscape Architect, California,
2001, 4514



turn lane from Palomar Airport Road to Melrose Avenue for the City of Carlsbad. The project required the irrigation system to be modified to accommodate the new planting along Palomar Airport Road.

Pacific Electric Bike Trail Connection and Park, Long Beach, California. *City of Long Beach.* Project Manager. Responsible for project management and overall trail design. Michael Baker managed the preparation of a master plan and construction documents for two-thirds of a mile of Class 1 bikeway in a portion of the former Pacific Electric right-of-way in the City of Long Beach. As part of an as-needed landscape architectural services contract with the city, Michael Baker designed the bike trail, drainage facilities, an intersection modification with a new alignment and traffic signals, bike trail lighting, and planting areas with drought-tolerant plant material, and a water-efficient irrigation system. The bike trail will connect Chittick Field to a transit stop on Martin Luther King Avenue.

Long Beach Boulevard Rehabilitation and Pedestrian Improvements, Long Beach, California. *City of Long Beach.* Landscape Architect. Responsible for preparing plans, specifications, and estimates for the street furniture, including decorative lighting, bus shelters, and benches; decorative paving; planting; and irrigation. Michael Baker assisted the City of Long Beach with the development of the Virginia Village theme as a part of the ongoing Long Beach Boulevard rehabilitation. With the oversight of the redevelopment Agency, Michael Baker prepared pavement overlay plans along with a portion of parkway improvement plans. The improvements consisted of new bus shelters, pedestrian lighting, replacement street lighting, street trees, and decorative traffic signals. Coordination with the agency for the needed sidewalk easements and traffic re-direction continued throughout the design. Michael Baker developed plans, specifications, and engineering estimates (PS&E); designs for modification of three existing traffic signals; signing and striping plans; and stage construction/traffic handling details.

Yale Street Improvement Project, Santa Monica, California. *City of Santa Monica.* Landscape Architect. Responsible for preparing plans, specifications, and estimates for planting and irrigation improvements. Michael Baker provided professional engineering and landscape architectural services for the preparation of final plans, specifications, and estimates, bidding documents, and cost estimates for the Yale Street Improvement project. Design elements included parkway widening, roadway resurfacing, and landscape and irrigation improvements in conjunction with the immediate and phased removal of the invasive Ficus trees. Overall services for the project included surveying, design development, community outreach, landscape concept development, utility research and coordination, construction cost evaluation, construction plan preparation, bidding services, and engineering support services during construction.

Long Beach Boulevard Medians, Long Beach, California. *City of Long Beach.* Landscape Architect. Responsible for preparing landscape design concepts, construction drawings, cost estimates, and specifications for the creation of raised, landscaped medians. Michael Baker assisted the City of Long Beach with a median project on Long Beach Boulevard between Del Amo Boulevard and San Antonio Drive to blend with the theme of the ongoing Long Beach Boulevard rehabilitation. The improvements consisted of new asphalt pavement overlay and landscaped medians. The project involved the preparation of plans, specifications, and engineering estimates for the modification of three existing traffic signals; signing and striping plans; stage construction/traffic handling details; and median hardscaping, landscaping, and irrigation.

Bicycle System Gap Closures and Improved Los Angeles River Bike Path Access, Long Beach, California. *City of Long Beach.* Landscape Architect. Responsible for preparing plans, specifications, and estimates for planting and irrigation improvements. Michael Baker provided preliminary engineering services, community outreach, final engineering services, and preparation of forms to request authorization to proceed with construction for the addition of 9.4 miles (18.8 lane-miles) of bicycle infrastructure on the western side of the City of Long Beach, including Pacific Avenue, San Antonio Drive, Del Amo Boulevard, Harding Street, and Deforest Avenue. The project also consisted of bikeway signage improvements along several corridors in the City of Long Beach in order to improve connectivity to the Class I facility along the Los Angeles River. The project included Class II and Class III bicycle facilities, roadway rehabilitation, signage and striping improvements, and traffic signal improvements with bicycle detection.



LAURA LARSEN, PE, CPESC, QSD/QSP

WATER QUALITY

Summary

Ms. Larsen is experienced in stormwater management projects including water quality analysis, BMP design, and NPDES permit implementation. She has extensive experience in transportation and municipal NPDES stormwater permit compliance assistance, water quality monitoring, Best Management Practices (BMP) research, design and implementation including Low Impact Development, construction oversight, erosion and sediment control, Total Maximum Daily Load (TMDL) development and implementation, BMP design and implementation, BMP operation and maintenance, and BMP performance data analysis. She has worked with Caltrans for many years, performing data analysis, monitoring, site inspections, permit implementation assistance and developed BMP operation and maintenance guidance.

Project Experience

S.R. 57/Lambert Road Interchange Improvements Project, Brea, California. *City of Brea.* Engineer. Responsibilities included water quality. Michael Baker led the preparation of a project report and environmental document (initial study/mitigated negative declaration) for a project to mitigate existing and forecast traffic congestion for the S.R. 57/Lambert Road interchange. Two build alternatives were engineered and evaluated: a modified tight diamond and a combined partial cloverleaf/diamond. Critical design aspects included coordination of project design with two other freeway improvement projects: the S.R. 57/Northbound Widening Project (under construction), and the S.R. 57 Northbound Climbing Lane Project (future M2 Freeway Program project). The project included the widening of two bridge structures, retaining walls, sound walls, drainage improvements, and acquisition of right-of-way.

Date Palm Drive Bridge over Whitewater River, Cathedral City, California. *City of Cathedral City.* Engineer. Responsibilities included water quality. Michael Baker provided environmental documentation and final engineering for a 760-foot-long bridge project that consisted of widening from four lanes to six lanes of traffic; seismic retrofit; and roadway improvements, including pedestrian and bike lane enhancements. The original 1981 bridge consisted of nine spans, precast P/S I-girder supported on pier walls, and pile foundations. The symmetrical widening matched the existing superstructure type on a 45 degree skew. Scour protection countermeasures were used for protecting existing piles while new pile foundations were placed at sufficient depth to resist high scour conditions. Other features included retrofitting with the existing bridge with girder cable restrainers, hinge retrofit, and deck repairs. The HBR project complied with Caltrans latest 2010 Amendments, including SDC and LRFD criteria, and Local Assistance Procedures Guide in District 8.

Interstate 5 Widening - Project Report/Environmental Document (S.R. 73 to El Toro Road), Orange County, California. *Caltrans - District 12.* Engineer. Responsibilities included water quality. Michael Baker, in a subconsultant role, prepared a project report and environmental document (Initial Study and Environmental Assessment) for 6.5 miles of mainline widening of I-5 from S.R. 73 to El Toro Road. The project included widening of four bridge structures; replacement of the bridge structures at Avery Parkway, La Paz Road, El Toro Overhead off-ramp, and Aliso Creek Road; retaining walls; sound walls; drainage improvements; and an extensive public outreach effort focused on gaining citizen input and community support. Michael Baker led the geometric development of the southern project segment, developed two alternatives for reconstruction of the Avery Parkway interchange, and prepared 11 structural advance planning studies. To support the environmental document, Michael Baker prepared the visual impact assessment, air quality assessment, water quality assessment, and location hydraulic study.

Years of Experience: 16

Education/Training:

M.S., 2000, Environmental Engineering, University of California at Los Angeles

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

Licenses/Certifications:

Professional Engineer - Civil, California, 2002, 63265; Also in NV
Qualified SWPPP Developer (QSD), California, 2012, 23529
Qualified SWPPP Practitioner (QSP), California, 2012, 23529



University Drive Widening Project, Irvine and Newport Beach, California. *City of Irvine.* Engineer. Responsible for water quality management plan. Michael Baker prepared the initial study and Mitigated Negative Declaration and the Project Report and Environmental Document (PR/ED) for proposed improvements to University Drive. Three design alternatives were analyzed in the PR/ED that included widening the roadway from a four to six lane arterial, adding a sidewalk to improve pedestrian access to UC Irvine and the San Diego Creek Trail, improving bicycle and pedestrian connectivity, adding retaining walls along the UC Irvine property line, and improved water quality treatment. The IS/MND addressed technical issues, primarily air quality/greenhouse gas, biological resources (due to proximity to San Diego Creek), cultural resources, hazards and hazardous materials, water quality, and traffic.

Interstate 15 / California Oaks Road Interchange Modification, Murrieta, California. *City of Murrieta.* Engineer. Responsibilities included water quality. Michael Baker prepared final plans, specifications, and cost estimate (PS&E) for the Interstate 15/California Oaks Road interchange modification project. The improvements included reconfiguring the existing diamond interchange into a modified partial cloverleaf configuration; widening and lowering California Oaks Road to accommodate three through lanes in each direction, and the required vertical clearance to the mainline undercrossing structures; bridge widening of two separate undercrossing structures; retaining walls (one Type 1 wall and two tie-back walls); drainage improvements, including an infiltration basin; utility relocations; traffic signal improvements at two intersections; and electrical improvements to lighting and ramp metering equipment.

S.R. 91 Westbound Widening - Final PS&E, Orange County, California. *Orange County Transportation Authority (OCTA).* Engineer. Responsibilities included water quality. Michael Baker provided plans, specifications, and estimates (PS&E) for the S.R. 91 widening project. The project consisted of 3.8 miles of freeway widening to convert the westbound auxiliary lanes into through mixed flow lanes between Brookhurst Street and Euclid Street, Euclid Street and Harbor Boulevard, and Raymond Avenue and State College Boulevard. The project also added two-lane exit ramps and associated auxiliary lanes at three interchange locations at the westbound exit ramps to Raymond Avenue, Lemon Street, and Brookhurst Street.



DA-CHENG LEE, PE

DRAINAGE AND HYDROLOGY

Summary

Mr. Lee is a licensed engineer with 14 years of experience. His major skills include drainage and roadway design, site development, project budgeting, cost estimating, numerical Analysis (FDM & FEM), and land surveying. A sampling of this duties on numerous public and private projects include roadway design, pavement drainage integration calculations, on-site hydrology and hydraulic analysis, drainage quantity, and drainage report. He has a bachelor's degree in Civil Engineering, master's degrees in Geotechnical Engineering and Construction Management, and an MBA in Business.

Project Experience

S.R. 303L Roadway and Traffic Engineering and Design, Glendale Avenue to Peoria Avenue, Glendale and Surprise, Arizona. *Arizona Department of Transportation.* Civil Engineer. Responsible for roadway design, and pavement drainage Integration calculation method and VBA workbook development. Michael Baker provided roadway and traffic engineering for improvements to S.R. 303, including design of a six-lane divided highway with provisions for a future fourth lane and high-occupancy vehicle (HOV) lane in each direction between Glendale Avenue and Peoria Avenue. Michael Baker analyzed an interim interchange configuration to ensure its compatibility with constructibility of the ultimate (future) design. Additionally, Michael Baker's traffic group prepared signing and marking, traffic control, construction sequencing, and traffic signal designs for the project.

101L HOV Lane Design and Environmental Studies, Maricopa County, Arizona. *Arizona Department of Transportation.* Civil Engineer. Responsible for on-site hydrology and hydraulic analysis, drainage quantity, and drainage report. Michael Baker provided engineering design and environmental documentation services for the incorporation of high occupancy vehicle (HOV) lanes to a 30-mile portion of SR 101L (Loop 101) between I-10 and Tatum Boulevard and three miles of additional general purpose (GP) lanes between 31st and 15th Avenues. Michael Baker prepared initial and final design concept reports for the addition of GP lanes, HOV lanes, and connector ramps; analyzed traffic impacts of the GP lanes; showed bridge lay-outs for the ramp connections; identified potential stormwater drainage issues; and developed alternatives for analysis. In addition, Michael Baker conducted environmental studies per the National Environmental Policy Act (NEPA) to identify impacts from the project, compare alternatives, and address any potential fatal flaws. Throughout the process, Michael Baker facilitated public involvement and agency coordination efforts to build consensus among local communities and affected agencies.

Design of Loop 303, Lake Pleasant Parkway to I-17, Peoria, Arizona. *Arizona Department of Transportation.* Civil Engineer. Responsible for on-site drainage and off-site channel hydrology and hydraulic analysis, drainage structure design, and drainage quantity. Michael Baker completed the first of many projects to design Loop 303: a brand new interim four-lane divided expressway constructed from Lake Pleasant Parkway to I-17. This project includes the final design and preparation of construction plans, specifications and estimate (PS&E) for constructing the interim SR 303L from Lake Pleasant Parkway to I-17. This design will also accommodate the future freeway to freeway connection to SR74, service interchanges to local streets as well as the SR 303L/I-17 system interchange.

Arizona Border Check Point Design, Tucson Sector, Arizona. *U.S. Army Corps of Engineers, Fort Worth District.* Civil Engineer. Responsible for hydrology and hydraulic analysis, meeting with clients, and documenting drainage memos. Michael Baker provided final design and environmental studies required for three interim Tucson Sector Border Patrol checkpoints and conceptual design and environmental studies required for one permanent Tucson Sector

Years of Experience: 14

Education/Training:

M.B.A., 2009, Business, University of Arizona

M.E., 2001, Construction Management, State University of New York at Buffalo

M.S., 1999, Geotechnical Engineering, National Taiwan University of Science and Technology

B.S., 1997, Civil Engineering, National Taiwan University

Licenses/Certifications:

Professional Engineer - Civil, California, 2009, 75150
Also in AZ, TX



Border Patrol checkpoint located on state and interstate highways. The interim checkpoints required large canopies to be installed along with temporary Border Patrol facilities needed to support operations adjacent to the existing state or interstate highways. In order to allow traffic to access the canopy, Michael Baker re-aligning the existing highway traffic lanes, designed the necessary traffic control, and coordinated with the Arizona Department of Transportation to acquire permits for construction. Design of the interim checkpoint sites required placement of temporary facilities, parking, inspection lanes, and lighting. To support bidding of the interim checkpoints, Michael Baker provided final specifications, request for proposals, and construction cost estimates along with bidder inquiry support. Michael Baker's work on the conceptual design of the permanent I-19 checkpoint included nine building/structures, eight inspection lanes, four canopies, on-site utilities, on-site drainage control, and a construction cost estimate.

Reconstruction of Cosey Beach Avenue, East Haven, Connecticut. *Town of East Haven, East Haven, CT.* Design Engineer. Responsible for storm drainage calculation, roadway design, AutoCAD drafting, construction cost estimating, and bidding documents preparation. This project included the survey, planning design and construction administration for the construction of over 4,000 linear feet of coastal roadway. This project involved the reconstruction of a roadway which had deteriorated over the years from the effects of coastal flooding and poor roadway base. The roadway elevation was raised to provide safe escape for residents during coastal flooding.

El Mirage Road Design Concept Report and Environmental Assessment, El Mirage and Surprise, Arizona. *Maricopa County DOT.* Civil Engineer. Responsible for preliminary drainage study. Michael Baker was responsible for a design location study and the preparation of 40% design plans for a regional transportation project in El Mirage, Arizona. The project involves the relocation of over 100 homes and numerous commercial properties and an extensive public involvement program.



SUKHDEV “TONY” RAI

ROW/MAPPING

Summary

Mr. Rai’s responsibilities consist of preparing numerous types of maps from record calculations to finished product, i.e., legal descriptions, right-of-way maps, final maps, boundary survey analysis, ALTA surveys, lot line adjustments, condominium plans, and annexation plats. In addition, Mr. Rai has extensive experience in the analysis of architectural plans.

Project Experience

Grand Avenue at S.R. 57/S.R. 60 Interchange, Diamond Bar, California.

PBS&J. Technician. Responsibilities included surveying and mapping.

Michael Baker provided environmental support for the S.R. 57/S.R. 60

confluence at Grand Avenue in Los Angeles County, within the Cities of Industry and Diamond Bar. The interchange is located approximately at the midpoint of the two-mile common alignment of the S.R. 57/S.R. 60. Michael Baker assisted in managing the preparation of technical studies anticipated to support a joint environmental impact report/environmental assessment (EIR/EA).

MacArthur Boulevard / Red Hill Avenue Intersection Improvements, Irvine, California. *City of Irvine.* Technician.

Responsibilities included surveying and mapping. Michael Baker prepared a project report and environmental document for proposed improvements to the intersection of MacArthur Boulevard and Red Hill Avenue in the Irvine Business Complex area of the City of Irvine. The project report work program analyzed alternative concepts for providing dual left-turn lanes and three through-lanes in each direction of travel. The selected alternative maximized compatibility with the ultimate planned intersection improvements.

El Camino Real and Avenida Pico Intersection Improvements, San Clemente, California. *City of San Clemente.* Technician.

Responsibilities included surveying and mapping. Michael Baker provided design, construction management, and inspection services for an intersection improvement project consisting of 1,350 feet of roadway widening on El Camino Real, median island improvements, traffic signal improvements, pavement restoration on Avenida Pico, and a small bridge structure crossing over existing protected wetlands on the north side of El Camino Real. Michael Baker provided bid analysis; contract administration; construction management; inspection; quality control and quantity verification; value engineering; public relations, construction schedule, and material testing monitoring; utility coordination; web-based document control system maintenance; and control documents processing for submittals, progress payments, daily reports, digital photos, and the final punch list.

La Pata Avenue Gap Closure and Camino Del Rio Extension Project, Orange County, California. *LSA Associates, Inc.* Technician.

Responsibilities included surveying and mapping. Michael Baker performed alternative alignment studies and technical studies and prepared a project report in support of an environmental impact report for approximately four miles of La Pata Avenue and Camino Del Rio. Michael Baker has been involved in the development of alternative alignments for La Pata Avenue since the 1990s, and the project report is the culmination of more than 20 years of planning. The design also included the challenges of minimizing visual and noise impacts to residential communities, compatibility with regional power transmission facilities, maintaining access to a landfill, landslide remediation, and a provision for regional trail facilities.

Interstate 15 / California Oaks Road Interchange Modification, Murrieta, California. *City of Murrieta.* Technician.

Responsibilities included surveying and mapping. Michael Baker prepared final plans, specifications, and cost estimate (PS&E) for the Interstate 15/California Oaks Road interchange modification project. The improvements included reconfiguring the existing diamond interchange into a modified partial cloverleaf configuration; widening and lowering California Oaks Road to accommodate three through lanes in each direction, and the required vertical clearance to the mainline undercrossing structures; bridge widening of two separate undercrossing structures; retaining walls (one Type 1 wall and two tie-back walls); drainage improvements, including an infiltration basin; utility relocations; traffic signal improvements at two intersections; and electrical improvements to lighting and ramp metering equipment.

Years of Experience: 32

Education/Training:

Vocational/Technical, 1981, Civil Engineering



Anaheim Regional Transportation Intermodal Center (ARTIC) - Project Definition and Preliminary Engineering, Anaheim, California. *Jones & Stokes Associates.* Technician. Responsibilities included surveying and mapping. Michael Baker provided project definition and preliminary engineering design services for the Anaheim Regional Transportation Intermodal Center (ARTIC), a joint development transportation gateway and mixed-use center. Michael Baker prepared preliminary structural advanced planning studies and structural type selection for a railroad bridge, four post-tensioned tie-back retaining walls, an elevated pedestrian corridor, station platforms, pedestrian undercrossings and overcrossings for platform access, and railroad crash walls. Michael Baker also provided preliminary traffic design and traffic mitigation design, including intelligent transportation systems analysis and complete right-of-way constraint mapping of all jurisdictional parcel ownership. Michael Baker provided complete aerial topography, supplemental design survey, and all railroad track survey and three-dimensional laser-scanning surveying within the active Metrolink rail corridor.

Interstate 5 Gateway Project, Orange County, California. *Orange County Transportation Authority (OCTA).* Right-of-Way Acquisition Agent. Served as right-of-way analyst. The work included project control, aerial topographic mapping, land net recovery, and monument perpetuation surveys, and coordination between the consultant design team and Caltrans Districts 7 and 12. Michael Baker provided engineering services for the widening of I-5. As primary subconsultant, Michael Baker provided traffic handling, signing, lighting, striping, and traffic electrical plans; structural and aesthetic design plans for the replacement of I-5/Beach Boulevard and I-5/Stanton Avenue overcrossings; and design plans for the replacement of the Route 39/5 Separation Pump Station to provide sufficient stormwater drainage for the project area.

On-Call Surveying and Mapping Contract, Various Locations in CA, CO, NM, NV, UT and WY. *Federal Highway Administration.* CADD Technician. Mr. Rai served as CADD analyst for the project. Michael Baker provided surveying and mapping services under an on-call contract with the Federal Highway Administration covering 13 western states. The projects support development and improvements for federal roadways in national parks, national forests, and other federal facilities. Michael Baker's surveying services included global positioning system (GPS) control surveys, conventional and photogrammetric mapping, right-of-way surveying, and research and development for laser scanning and airborne GPS positioning.

State Route 22 Right-of-Way Mapping Services, Orange County, California. *Orange County Transportation Authority (OCTA).* Technician. Responsibilities included surveying and mapping. Michael Baker developed right-of-way plans for three miles of widening and improvements along S.R. 22, from Main Street to S.R. 55. Michael Baker's surveying and mapping services included full land net recovery and preconstruction record of survey, development of new right-of-way maps, and the preparation of acquisition documents. Michael Baker also provided final design surveying and construction support.



CIPRIA STELEA, PE

RETAINING WALL DESIGN

Summary

Mr. Stelea is a Civil Engineer in the Structures Department, responsible for the design of various structure types including retaining walls, earth retaining systems, hydraulic channels, underground box culverts, seismic retrofit design, pump stations, lift stations, water treatment plants, cast-in-place concrete reservoirs, and steel tanks,. He is experienced in computer analysis and design of hydraulic structures utilizing RISA, RetainPro, SAP2000, and various other design and structural analysis software applications. Mr. Stelea also served as CADD technician for various projects. He is proficient in Microstation and AutoCAD.

Project Experience

Interstate 5 / Jamboree Road Interchange Improvement, Irvine, California. *City of Irvine.* Civil Engineer. Responsible for structural engineering of retaining wall construction. Michael Baker prepared a Permit Engineering Evaluation Report (PEER) for the I-405/Jamboree Road Interchange southbound exit ramp widening. The intersection experiences congestion from the high volume of vehicles on Jamboree Road and turning volumes at the southbound I-405 ramp intersection. The proposed improvements include left-turn lane and retaining wall construction, overhead sign structure reconstruction, traffic signal modification, minor drainage improvements, and utility coordination. Michael Baker prepared new aerial topographic mapping, a traffic analysis, preliminary improvement plans, cost estimates, and environmental technical studies in support of a CEQA Categorical Exemption.

Interstate 10/Jefferson Street Interchange Improvements, Indio, California. *County of Riverside.* Civil Engineer. Responsible for structural engineering. Michael Baker performed environmental and engineering services for the preparation of the project report (PR), modified access report (MAR), and plans, specifications, and estimate for I-10/Jefferson Street interchange improvements. The interchange is included in the I-10 Corridor Plan, prepared by the Coachella Valley Association of Governments (CVAG), which requires specific architectural and landscape treatments to the improved or new interchanges located within the plan. The modifications included replacement and relocation of the Jefferson Street/I-10 overcrossing, additional loop on-ramps, and realignment of Varner Road and Jefferson Street. Michael Baker was responsible for alternatives analysis and design, environmental investigations, roadway design, traffic studies, drainage studies, and structure advance-planning studies. In addition, Michael Baker developed the final plans, specifications, and estimates. Preparation of construction plans included roadway layouts and profiles, bridge plans, retaining walls, grading, drainage, utilities, signing and striping, traffic signal, lighting, and staged construction.

Interstate 5 Widening - Project Report/Environmental Document (S.R. 73 to El Toro Road), Orange County, California. *Caltrans - District 12.* Civil Engineer. Responsible for structural engineering. Michael Baker, in a subconsultant role, prepared a project report and environmental document (Initial Study and Environmental Assessment) for 6.5 miles of mainline widening of I-5 from S.R. 73 to El Toro Road. The project included widening of four bridge structures; replacement of the bridge structures at Avery Parkway, La Paz Road, El Toro Overhead off-ramp, and Aliso Creek Road; retaining walls; sound walls; drainage improvements; and an extensive public outreach effort focused on gaining citizen input and community support.

S.R. 57 Northbound Widening – Final PS&E (Orangethorpe Avenue to Yorba Linda Boulevard), Orange County, California. *Orange County Transportation Authority (OCTA).* Civil Engineer. Responsible for structural engineering. Michael Baker served as the prime consultant for the this \$30 million project involving 2.5 miles of mainline widening in the northbound direction through the cities of Placentia and Fullerton, and modifications to interchanges at Orangethorpe Avenue, Chapman Avenue, Nutwood Avenue and Yorba Linda Boulevard. In addition,

Years of Experience: 13

Education/Training:

M.S., 2006, Civil
Engineering/Structures, University
of California at Irvine

B.S., 2004, Civil Engineering, Central
Connecticut State University

Licenses/Certifications:

Professional Engineer - Civil,
California, 2008, 73379



the project included seven bridge widenings, including two railroad overheads, and approximately two miles of retaining wall and sound wall improvements, as well as the development of special wall structure aesthetic treatments. The project consisted of 1,000 plan sheets, including 260 structural plan sheets.

Interstate 15 / California Oaks Road Interchange Modification, Murrieta, California. *City of Murrieta.* Civil Engineer. Responsible for structural engineering. Michael Baker prepared final plans, specifications, and cost estimate (PS&E) for the Interstate 15/California Oaks Road interchange modification project. The improvements included reconfiguring the existing diamond interchange into a modified partial cloverleaf configuration; widening and lowering California Oaks Road to accommodate three through lanes in each direction, and the required vertical clearance to the mainline undercrossing structures; bridge widening of two separate undercrossing structures; retaining walls (one Type 1 wall and two tie-back walls); drainage improvements, including an infiltration basin; utility relocations; traffic signal improvements at two intersections; and electrical improvements to lighting and ramp metering equipment.

Interstate 880 Operational and Safety Improvements, Oakland, California. *Alameda County Congestion Management Agency.* Civil Engineer. Responsible for structural engineering. Michael Baker provided engineering, environmental, and surveying and mapping services for a project to improve the mobility and traffic safety through the I-880 corridor, in the vicinity of 29th Avenue and 23rd Avenue. The project included removal and reconstruction of two freeway overcrossings, reconstruction of on-ramps and off-ramps, reconfiguration of local circulation patterns, and incorporation of a new roundabout at the 29th Avenue entrance ramp. Michael Baker provided right-of-way mapping services, boundary surveys, and aerial topographic surveys and prepared a joint CEQA/NEPA document. Michael Baker also provided type selection and final PS&E for mechanically stabilized embankment (MSE) retaining walls and pile-supported and conventional spread footing CIP concrete retaining walls, sound walls, and expanded polystyrene (EPS) block fill embankment and associated load distribution slab.

Marblehead Coastal Residential, San Clemente, California. Designer. Responsible for an earth retention system consisting of CMU and concrete conventional retaining walls and caisson supported retaining wall. Responsibilities included coordination with civil engineer and architect, structural design and plan development.



CHRIS LOERA

UTILITY POTHOLING

Summary

Mr. Leora serves as Project Manager and Chief Operating Officer at C Below. He plans, organizes, directs and controls the activities of the Operations function of the division. He is responsible for the performance of all Department functions including Research and Development, Material Management, Order Services, Engineering and Surveying.

Project Experience

Cole Avenue Storm Drain Utility Investigation, Riverside, CA

Role: Vice President

- Supervised all operations to assure they were conducted and completed as directed by the City of Riverside
- Services included: Utility locating via GPR, Electromagnetic locating, ram rod locating, potholing via vacuum excavation, and Surveying/CAD work, CCTV Pipe Inspection

Durfee Avenue Potholing, Pico Rivera, CA

Role: Vice President

- Supervised all operations to ensure the highest quality control and accuracy
- Services included: Vacuum Excavated 50 locations as directed by our client

KPFF- Rancho Los Amigos National Rehabilitation Center, Downey, CA

Role: Vice President

- Oversaw all operations of utility investigation of the entire campus
- Services included: utility locating via GPR and Electromagnetic locating, site surveying, CAD work, and Potholing

Port of Long Beach (On-Call), Long Beach, CA

Role: Vice President

- Supervised all operations to ensure high quality control and accuracy
- Services included: vacuum potholing, traffic control, permanent or temporary restoration of potholes, utility location, and trenches

Years of Experience: 16

Education/Training:

Construction Inspection, East L.A. Skills Center

Licenses/Certifications:

Ground Penetrating Radar Technician- Level III

Utility Locator- Level III



BEN HUSHMAND, PE, PHD

GEOTECHNICAL/PAVEMENT DESIGN

Summary

Dr. Hushmand has more than 30 years of experience in geotechnical and environmental research, testing, and applications, specializing in soil dynamics and analysis and design of soil-structure systems.

He has managed and acted as lead engineer for numerous challenging public and private projects of the last three decades involving geotechnical evaluations and seismic hazards. These investigations have included a large number of bridge design and construction projects for local, state, and federal government agencies such as a number of bridge widening, replacement, and seismic retrofit projects for City of Los Angeles, Port of Los Angeles, and OCTA, and several research projects on seismic design of bridges for Caltrans and Washington State Department of Transportation,.

Dr. Hushmand has conducted a wide range of research projects in both earthquake and geotechnical engineering. He has worked on several projects studying dynamic behavior of shallow foundations, piles, gravity base offshore platforms, dams, bridges, retaining walls, and liquefiable soils. He has specialized expertise related to experimental and computer modeling studies of the dynamic response of earth structures and foundations.

Project Experience - Representative Street Improvement (Design & Construction) Project

City of Downey:

- Lakewood Boulevard Improvements, Phase 3B – Florence Avenue to Gallatin Road & Phase 3C – Gallatin Road to Telegraph Road, Cash Contract No. 632-3B & 632-3C (2011-2013)
- Brookshire Avenue Pavement Rehabilitation, Cash Contract No. 681 (2011-2013)
- Gardendale Street Pavement Rehabilitation, Cash Contract No. 636 (2012-2013)

City of Carson:

- The Annual Overlay Program, Citywide-Project Nos. 1230, 1233, 1241, 1281, 1297 and 1360 (2007, 2009, 2010, 2011, 2013, and 2015, respectively)
- Avalon Boulevard Pavement Reconstruction Project from Dominguez Street to Victoria Street, City Project No. 1444 (2015)
- Broadway Improvements Project, Griffith Street to Main Street and Griffith Street from Broadway to 500 E/O Broadway, City Project No. 839 (2015)
- Avalon Boulevard Pavement Reconstruction Project (from I-405 Fwy to 223rd St), City Project No. 1330 (2014)
- Figueroa Street Pavement Reconstruction from I-405 to Victoria Street, City Project No. 1362 (2013)
- Wilmington Avenue Pavement Restoration (Del Amo Boulevard to Victoria Street), City Project No. 1311 (2011)
- Broadway Improvements Project (Griffith Street to Alondra Boulevard), City Project No. 1066 (2010)
- Figueroa Street Improvements Project (Victoria Street to Alondra Boulevard), City Project No. 843 (2008)
- The Annual Slurry Seal Program, Citywide-Project No. 964 (2008)

Years of Experience: 30

Education/Training:

Ph.D. Civil (Geotechnical & Earthquake) Engineering, California Institute of Technology (Caltech), 1984

M.S., Civil Engineering, California Institute of Technology, 1978

B.S., Structural Engineering, Sharif University of Technology, Tehran, Iran, 1977

Licenses/Certifications:

Professional Engineer, California, #C44777

40-Hour OSHA Trained, 29 CFR 1910.120 (e)(2)/8 CCR 5192.

Radiation Safety and Use of Nuclear Gauges Certificate



City of Arcadia:

- Baldwin Avenue Rehabilitation Project (2013)
- Santa Anita Canyon Erosion Repair Project (2006-2007)
- Street Improvement of Baldwin Avenue between Duarte Road and Naomi Avenue (2004)
- Street Reconstruction of Diamond Street between Santa Anita Avenue and First Avenue (2004)
- Geotechnical Field Monitoring and Testing Services for Santa Anita Entry Corridor Improvements Between Foothill (210) Freeway and Huntington Drive (2004)
- Rehabilitation of W/B Huntington Drive From Holly Avenue to Colorado Place and Colorado Place from Colorado Boulevard to Huntington Drive (2005)
- New City of Arcadia Police Station (2003)
- City of Arcadia Bus Pad Locations (2003 and 2004)
- Arcadia Police Station Existing Parking Lot (2003)
- Street Rehabilitation of N/B Baldwin Avenue and Huntington Drive (2003)
- Street Rehabilitation Projects at Santa Anita Avenue, Duarte Road, and Sunset Boulevard (2003)

City of San Gabriel:

- Improvements on Two (2) Intersections Along San Gabriel Blvd (2009)
- Bilton Road / Hazell Way Rehabilitation Project (2009)
- Saxon Avenue and Brighton Street Pavement (2007)

City of San Bernardino/Inland Valley Development Agency (IVDA):

- IVDA Parking Area Infrastructure Improvements Located Around Building 747 (2010)
- IVDA Parking Area Infrastructure Improvements Located Around Building 730 (2009)
- 3rd Street and 5th Street IVDA Improvements Project (2008-2009)

City of Lake Forest:

- Lake Forest Drive and Rockfield Boulevard Rehabilitation Projects (2012)
- El Toro Road and Santa Margarita Parkway Pavement (2008)
- Los Alisos Boulevard, Lake Forest (2008)



THOMAS BOYLE

RIGHT-OF-WAY - ACQUISITIONS

Summary

Mr. Boyle is a seasoned right of way agent with more than 21 years of right of way and real estate consulting experience. As an industry recognized and accomplished right of way professional for more than 15 years, he is educated and trained to tackle all tasks and/or challenges. Mr. Boyle is experienced in all facets of commercial appraisal and acquisition. He brings best in class solutions and problem solving tactics that follow applicable project and industry regulations. Mr. Boyle also brings more than a decade's worth of expert experience as a real estate agent, appraiser and tax assessor. His depth and breadth of professional experience makes him a top notch candidate for acquisition projects.

Project Experience

Durfee Avenue Grade Separation Project. *Alameda Corridor-East Construction Authority (ACE).* Paragon is acquiring property interests from 45 property owner, and providing relocation and property management services as needed for the grade separation project. Currently, out of the six commercial properties acquired, Mr. Boyle is providing property management services for five commercial properties.

Imperial Avenue/Telegraph Road Project, La Mirada, California. *City of La Mirada.* Mr. Boyle is acquiring right of way for a right-turn pocket located North of Imperial Highway and Telegraph Road in the City of La Mirada. Tasks include obtaining preliminary title reports, appraisals, performing negotiations and acquiring easement deeds.

I-710 Soundwalls, Early Action Project, Los Angeles County, California. *Los Angeles County Metropolitan Transportation Authority/Caltrans (subconsultant to Parsons).* Mr. Boyle is working with Metro and Caltrans to obtain temporary construction easements from 14 separate property owners for the I-710 soundwalls from north of 91Fwy to SR-60. Negotiations include obtaining maintenance agreements for Caltrans. Tasks include preparing valuation summaries, performing negotiations and acquiring temporary construction easements.

Sierra Highway Bridge Project, San Clarita, California. *City of Santa Clarita.* Mr. Boyle is working with the City to acquire property rights of six parcels impacted by the project. Permanent roadway easements and temporary construction easements are needed for this project that will widen the northbound bridge and replace the southbound bridge. The project is being designed and administered by the County under the Federal Highway Bridge Program. Tasks included obtaining preliminary title reports, appraisals, performing negotiations and acquiring easement deeds.

Right of Way Agent, Arizona. Mr. Boyle performs all tasks associated with the negotiation, acquisitions and relocations of rights of way and easements for capital improvement projects. He has a working knowledge of interpreting highway right of way and construction plans. He collaborates and coordinates surveyors, permitting, environmental, city development services and property inspections for displacees. To support accurate and timely project completion, Mr. Boyle ensures all right of way acquisition and relocation activities are in compliance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970. He has worked on large commercial relocations for the South Mountain Freeway project as an on-call consultant for ADOT.

Years of Experience: 21

Education/Training:

B.A., Business Administration, San Diego State University

Licenses/Certifications:

Commercial Tax Assessor
Level Two Certification,
Department of Revenue, State of
Arizona



Senior Right of Way Agent, Scottsdale, California. *City of Scottsdale.* As Senior Right of Way Agent, Mr. Boyle acquired residential and commercial rights of way for capital improvement projects. His project support included reviewing capital project plans, surveying and directives to determine scope of acquisitions and relocations. Mr. Boyle responsibilities and task accomplishments include:

- Title searches
- Reviewing outside title reports
- Rendering opinions on land rights necessary for project
- Preparing City council reports and resolutions for review by City Attorney
- Drafting deeds, easements, mortgage releases and consents
- Coordinating closings with title companies
- Reviewing and preparing legal descriptions
- Preparing all residential and commercial uncomplicated market analysis under ten thousand dollars per the Uniform Act
- Providing support to the City Attorney during eminent domain proceedings
- Preparing market evaluations on City owned property for management review on future development potential or disposal.

Arizona Department of Transportation (ADOT). Various Projects. As a Right of Way Agent, Mr. Boyle supported with streamlined acquisition services for 14 years. His responsibilities included the acquisition of property rights necessary to facilitate the State highway program, relocation assistance and relocation determinations for individuals. Mr Boyle also relocated both large and small businesses displaced by highway projects, leveraging his knowledge and experience with implementing local, state and federal rules, regulations, policies and statutes pertaining to acquisition, relocation and condemnation. Because of his depth and breadth of project support, Mr. Boyle has a comprehensive understanding of the Federal Uniform Act 49 CFR 24 and creating relocation plans. Mr. Boyle is also equipped with the skills to review and interpret title reports, complex commercial real estate appraisals, construction plans and legal descriptions. He has drafted and supervised acquisition and relocation transactional documents that the State of Arizona now uses for all acquisition and relocation activities. Moreover, he drafted and created the current database program which ADOT and on-call consultants use for all acquisition and relocation activities within the State of Arizona. He has coordinated with outside agencies to include Arizona State Land, Flood Control, Maricopa County, railroads and BLM. He has even worked with the State Attorney General's office with condemnation cases and drafting contract language for the Department of Transportation.



JOHN PENNER, MAI

RIGHT-OF-WAY - APPRAISALS

Summary

Mr. Penner has over 30 years of experience in real estate appraisals and acquisitions. His expertise includes the appraisal and/or consultation of reports for acquisition, sale, refinance, estate, development, condemnation, fractional interest and court testimony purposes. Typical clients served are financial institutions, investors, developers, legal firms, and governmental.

Relevant Experience

Senior Managing Director/Owner, 1991-Present. This firm performs valuation and advising for commercial real estate with a specialty in medical office, and industrial properties. Mr. Penner has over 30 years of experience in the Southern California region and has completed assignments in many areas of the United States.

Senior Appraiser: T.L. Yates & Associates, 1990–1991. Work included narrative appraisals of proposed, existing and problem properties located in the markets of Southern California and Arizona.

Senior Appraiser/Analyst: Home Savings of America, 1983–1990. Work included valuation of residential and commercial properties located throughout Southern California, parts of Northern California, Arizona, Texas, Florida and New York. Specific responsibilities included the appraisal of problem properties, market studies, feasibility, and portfolio analysis.

Years of Experience: 30

Education/Training:

B.S., Business Administration
Finance and Investments, San Diego
State University, San Diego

Licenses/Certifications:

Certified General Appraiser, CA
@AG001720

Real Estate Broker's License, CA
#00976229

Michael Baker

INTERNATIONAL

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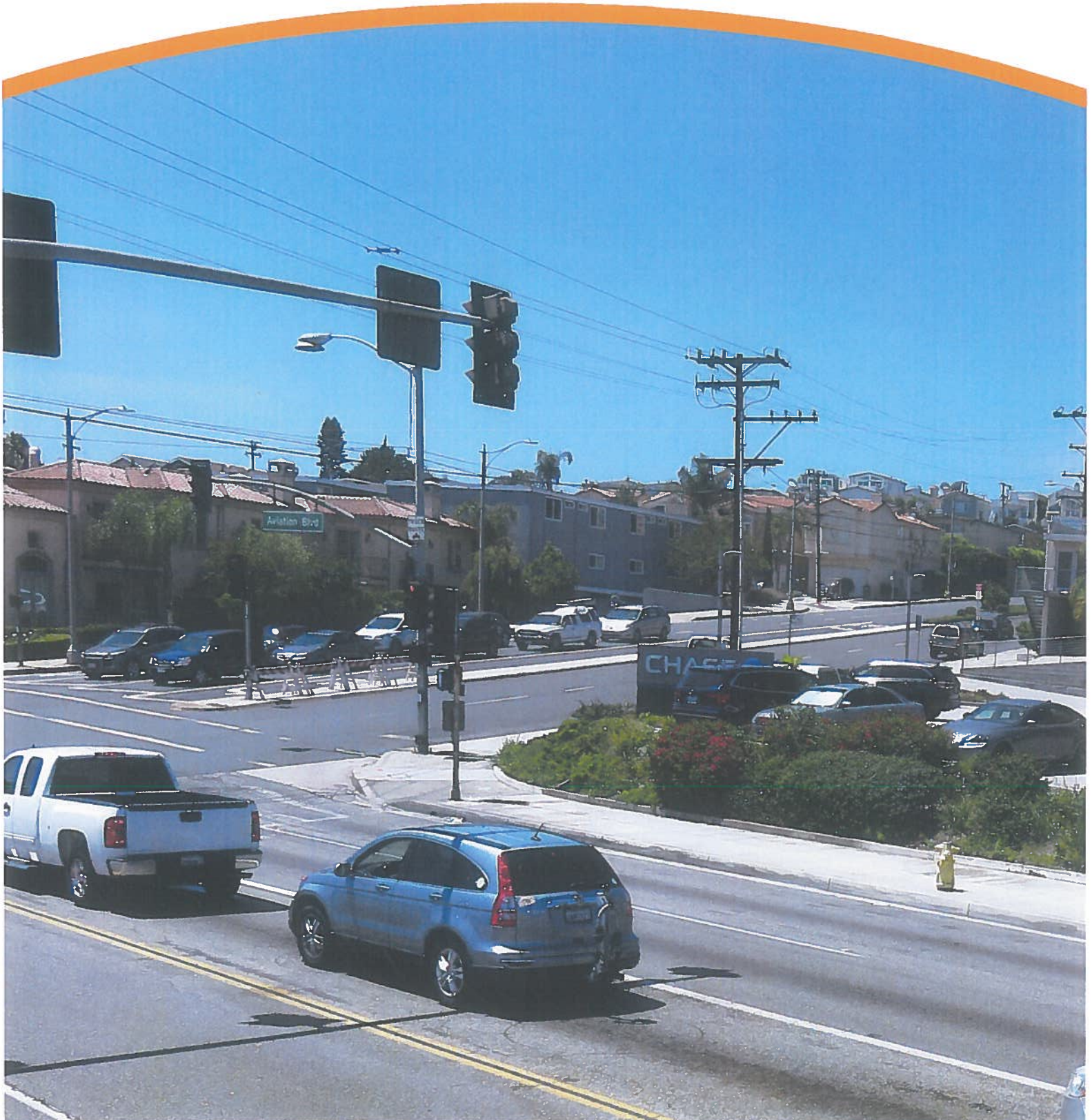


EXHIBIT B
APPROVED FEE SCHEDULE

Michael Baker International, Inc.													
Task Description	Project Manager		Project Engineer		Landscape Architect		Designer/Planner		2 Person Survey Crew		Licensed Surveyor		Michael Baker Cost
	Hours	\$185.00	Hours	\$155.00	Hours	\$164.00	Hours	\$130.00	Hours	\$285.00	Hours	\$188.00	
Preliminary Design													
Task 1	2	\$370.00	2	\$310.00			8	\$1,040.00					\$1,720.00
Task 2			2	\$310.00			8	\$1,040.00	8	\$2,120.00	2	\$376.00	\$3,846.00
Task 3			16	\$2,480.00									\$2,480.00
Task 4	12	\$2,220.00	8	\$1,240.00			86	\$11,180.00					\$14,640.00
Task 5			8	\$1,240.00			4	\$520.00					\$1,760.00
Task 6	4	\$740.00	16	\$2,480.00			24	\$3,120.00					\$6,340.00
Task 7	4	\$740.00					24	\$3,120.00					\$3,860.00
Task 8			4	\$620.00			12	\$1,560.00					\$2,180.00
Task 9	4	\$740.00	24	\$3,720.00			8	\$1,040.00					\$5,500.00
Task 10	4	\$740.00					12	\$1,560.00	2	\$376.00	2	\$376.00	\$2,676.00
Preliminary Design Subtotal	30	\$5,560.00	89	\$12,480.00			186	\$24,880.00	8	\$2,120.00	4	\$752.00	\$45,662.00
Final Design PS&E / Coordination													\$30,248.00
Task 11			12	\$1,860.00	16	\$2,624.00	206	\$26,780.00					\$31,264.00
Task 11.1			1	\$155.00			8	\$1,040.00					\$1,195.00
Task 11.2			1	\$155.00			8	\$1,040.00					\$1,195.00
Task 11.3			1	\$155.00			12	\$1,560.00					\$1,715.00
Task 11.4			1	\$155.00			10	\$1,300.00					\$1,455.00
Task 11.5			1	\$155.00			24	\$3,120.00					\$3,275.00
Task 11.6			1	\$155.00			20	\$2,600.00					\$2,755.00
Task 11.7			1	\$155.00			32	\$4,160.00					\$4,315.00
Task 11.8			1	\$155.00			20	\$2,600.00					\$2,755.00
Task 11.9			1	\$155.00			20	\$2,600.00					\$2,755.00
Task 11.10			1	\$155.00			16	\$2,080.00					\$2,235.00
Task 11.11			1	\$155.00	16	\$2,624.00	20	\$2,600.00					\$5,379.00
Task 11.12			1	\$155.00			16	\$2,080.00					\$2,235.00
Task 12	8	\$1,480.00	16	\$2,480.00									\$3,960.00
Task 13			4	\$620.00			12	\$1,560.00					\$2,180.00
Task 14			12	\$1,860.00	8	\$1,240.00							\$2,900.00
Task 15	40	\$7,400.00	12	\$1,860.00									\$9,260.00
Task 15.1	16	\$2,960.00											\$2,960.00
Task 15.2	24	\$4,440.00	12	\$1,860.00									\$6,300.00
Task 16	8	\$1,480.00	24	\$3,720.00			20	\$2,600.00					\$7,800.00
PS&E / Coordination Subtotal	89	\$10,380.00	89	\$12,480.00	16	\$2,624.00	246	\$31,880.00					\$57,364.00
Total Design Hours	128		180		16		432		8		4		\$102,348.00
Sub Total Labor Costs		\$16,910.00		\$24,800.00		\$2,624.00		\$64,140.00		\$2,120.00		\$752.00	\$132,811.00
Task 16 - Reimbursables and Permit Fees													\$3,200.00
Total Design Costs		\$16,910.00		\$24,800.00		\$2,624.00		\$64,140.00		\$2,120.00		\$752.00	\$135,811.00

OPTIONAL TASK													
Task 17	4	\$740.00	16	\$2,790.00			40	\$5,200.00					\$6,730.00
Total Optional Task Hours	4		18				40						\$8,730.00
Sub-Total Optional Task Labor Costs		\$740.00		\$2,790.00				\$5,200.00					\$8,730.00

Total Hours (with Optional Task)	130		178		16		472		8		4		\$111,096.00
Total Design Costs (with Optional Task)		\$16,690.00		\$27,590.00		\$2,624.00		\$61,340.00		\$2,120.00		\$752.00	\$144,541.00

1. Potholes: 4 potholes at \$1,250 ea.

Michael Baker International, Inc.										
Task Description										
Preliminary Design	Project Manager		Project Engineer		Landscape Architect		Designer/Planner		2-Person Survey Crew	
	Hours		Hours		Hours		Hours		Hours	
Task 1	2		2				8			
Task 2			2				8			
Task 3			16							
Task 4	12		8				86			
Task 5			8				4			
Task 6	4		16				24			
Task 7	4						24			
Task 8			4				12			
Task 9	4		24				8			
Task 10	4						12			
Preliminary Design Subtotal										
	30		80				186		8	
Final Design PS&E / Coordination										
Task 11			12		16		206			
Task 11.1			1				8			
Task 11.2			1				8			
Task 11.3			1				12			
Task 11.4			1				10			
Task 11.5			1				24			
Task 11.6			1				20			
Task 11.7			1				32			
Task 11.8			1				20			
Task 11.9			1				20			
Task 11.10			1				16			
Task 11.11			1		16		20			
Task 11.12			1				16			
Task 12			16							
Task 13			4				12			
Task 14			12				8			
Task 15	40		12							
Task 15.1	16									
Task 15.2	24		12							
Task 16	8		24				20			
PS&E/Coordination Subtotal										
	56		80		16		246		8	
Total Design Hours										
	86		160		16		432			
Subconsultant										
Michael Baker Hours										
Licenssed Surveyor										
Hours										
Total Hours										
2-Person Survey Crew										
Hours										
Total Hours										
Design/Planner										
Hours										
Landscape Architect										
Hours										
Total Hours										
Project Engineer										
Hours										
Total Hours										
Project Manager										
Hours										
Total Hours										
Optional Task										
Task 17	4		18				40			
Total Optional Task Hours										
	4		18				40			
Total Hours (with Optional Task)										
	130		178		16		472		8	
Subconsultant										
Michael Baker Hours										
Licenssed Surveyor										
Hours										
Total Hours										
2-Person Survey Crew										
Hours										
Total Hours										
Design/Planner										
Hours										
Landscape Architect										
Hours										
Total Hours										
Project Engineer										
Hours										
Total Hours										
Project Manager										
Hours										
Total Hours										

AMENDMENT NO. 1 TO THE PROFESSIONAL SERVICES AGREEMENT
BETWEEN THE CITY OF MANHATTAN BEACH AND MICHAEL BAKER
INTERNATIONAL, INC.

This First Amendment ("Amendment No. 1") to that certain agreement by and between the City of Manhattan Beach, a California municipal corporation ("City") and Michael Baker International, Inc., a Pennsylvania corporation ("Consultant"), (collectively, the "Parties") is hereby entered into as of AUGUST 8TH, 2018 ("Effective Date").

RECITALS

A. On January 3, 2017, the City and Consultant entered into an agreement for professional services for the Consultant to provide design services for the Aviation Boulevard to Artesia Boulevard Southbound to Westbound Right Turn Lane Improvement Project ("Agreement");

B. The original term of the Agreement has expired, and the Scope of Services has not yet been completed;

C. The Parties now desire to amend the Agreement to extend the term, modify the Scope of Services to add additional services, and increase the Maximum Compensation to pay for the additional services.

NOW, THEREFORE, in consideration of the Parties' performance of the promises, covenants, and conditions stated herein, the Parties hereby agree as follows:

Section 1. Section 2 of the Agreement is hereby revised to extend the term of the Agreement through December 31, 2019, unless sooner terminated as provided in Section 12 of the Agreement.

Section 2. Section 3.A of the Agreement is hereby revised to increase the Maximum Compensation amount by \$55,000, for a new Maximum Compensation of \$ 199,541.

Section 3. The letter from Brian Anderson dated June 25, 2018 and attached hereto as Exhibit A is hereby incorporated into the Agreement, as a supplement to the Scope of Services (Exhibit A) and Approved Fee Schedule (Exhibit B) of the Agreement.


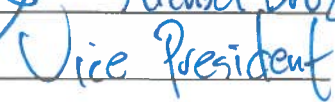
Section 4. Except as specifically amended by this Amendment No. 1, all other provisions of the Agreement shall remain in full force and effect.

IN WITNESS THEREOF, the Parties hereto have executed this Amendment No. 1 on the day and year first shown above.

CITY OF MANHATTAN BEACH

Michael Baker International, Inc.
(CONSULTANT)

By: 
Bruce Moe, City Manager

By:  Michael Bruz
Its:  Vice President

ATTEST:

 8/9/18
(fm) Liza Tamura, City Clerk

APPROVED AS TO FORM:


for Quinn M. Barrow, City Attorney

APPROVED BY FINANCE DEPARTMENT:

By: 
Steve S. Charellan
Interim Finance Director



We Make a Difference

June 25, 2018

JN 160287

Mr. Prem Kumar, P.E.
City Engineer
City of Manhattan Beach
3621 Bell Avenue
Manhattan Beach, CA 90266

**Subject: Contract Amendment Request Revision (June 25, 2018):
Aviation/Artesia Boulevard Southbound to Westbound Right Turn
Improvement Project – Initial Study/Mitigated Negative Declaration (ISMND),
and Phase II Subsurface Investigation**

Dear Mr. Kumar:

For your review Michael Baker is providing this environmental amendment for the Aviation Boulevard at Artesia Boulevard Right Turn Improvement Project. The attached services are specific to an Initial Study/ Mitigated Negative Declaration (IS/MND) and a Phase II Subsurface Investigation. We have removed the optional service for installation of the Maxwell Plus Drywell Infiltration System, due to the restrictions for providing ground infiltration at this site.

The scope of work includes the following:

TASK 1: INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION (ISMND): Michael Baker will prepare an Initial Study/Mitigated Negative Declaration (IS/MND) under the California Environmental Quality Act (CEQA). Based on a preliminary review of the proposed project, a scope of work for environmental services is provided below.

1.1 Special Studies

1.1.1 CULTURAL RESOURCES

Michael Baker will retain Cogstone Resource Management (Cogstone) for preparation of the cultural resources documentation for the project. The primary components of this task consist of the following:

Research. Cogstone will conduct searches through the South Central Coastal Information Center (SCCIC), Los Angeles County Museum of Natural History (LACMNH), Native American Heritage Commission (NAHC) and other local (city and county) and internet archives.

Native American Coordination. Upon receipt of the Native American Heritage Commission (NAHC) letter, Cogstone will support the City by providing draft AB-52 letters for City review and to be put on City letterhead. Upon receipt of the letter back from the City, Cogstone will send letters to tribes via U.S. Certified Mail initiating the consultation process under AB-52. Cogstone does not anticipate the need for any meetings. Cogstone will attach a summary of consultation matrix to the project report.

Site Visit. A Cogstone archaeologist/paleontologist will conduct a reconnaissance survey of the project site. The primary purpose is to document the cultural setting. The archaeologist/paleontologist will take photographs of the site and surrounding uses in order to document the project setting.

Report. Upon completion of these tasks, Cogstone will prepare a cultural/paleontological resources assessment report. The report will characterize the results of the records search and previous consultation efforts, to determine baseline conditions, assess potential impacts to cultural resources resulting from the project, and make appropriate recommendations to avoid or minimize any potentially significant impacts. The cultural resources report will focus on impacts to archaeological/Native American resources, and this task specifically excludes an analysis of paleontological resources.

1.1.2 AIR QUALITY

Fugitive dust and equipment exhaust emissions from construction activities will be quantitatively evaluated using the California Emissions Estimator Model (CalEEMod). The air pollutant emissions during construction will be compared to the SCAQMD regional thresholds of significance. Modeled construction will also be compared to the SCAQMD Localized Significance Thresholds to determine whether the localized impacts would occur. As the project is an intersection improvement and would not generate new trips, operational emissions analysis will be qualitative. The operational analysis will be based on level of service and delay times at the project intersection. Where necessary, carbon monoxide hotspots will be evaluated. Project consistency with the *2016 Air Quality Management Plan* will be evaluated. Michael Baker will also qualitatively discuss naturally occurring asbestos impacts.

1.1.3 GREENHOUSE GASES

Michael Baker will prepare an inventory of the greenhouse gas (GHG) emissions (i.e., nitrous oxide, methane, and carbon dioxide) from direct sources (i.e., construction equipment). The emissions inventory will be compiled utilizing CalEEMod. As the project is an intersection improvement and would not generate new trips, operational emissions analysis will be qualitative and will be based on level of service and delay times at the project intersection.

1.1.4 NOISE

Michael Baker will review applicable noise and land use compatibility criteria for the project area. Noise standards regulating noise impacts will be discussed for land uses adjacent to the proposed roadway improvements. The construction noise impacts will be evaluated in terms of maximum levels (L_{max}) and hourly equivalent continuous noise levels (L_{eq}) and the frequency of occurrence. A screening level operational noise assessment will be conducted to determine the change in ambient noise due to implementation of the proposed intersection improvements. Compliance with applicable noise standards will be evaluated, with recommended mitigation measures included where appropriate. This scope excludes on-site noise measurements.

1.2 Preparation of the Initial Study

Michael Baker's existing/executed scope of work includes preparation of an Initial Study that was intended to be utilized to support the conclusions of a Categorical Exemption. Based on discussions with City Staff, the use of an Exemption for the project is no longer feasible and a Mitigated Negative Declaration (MND) will be prepared. Although, this task incorporates the

Initial Study under Michael Baker's existing scope of work, the Initial Study will be modified to support preparation of an MND rather than a Categorical Exemption.

Michael Baker will submit five (5) copies of the Administrative Draft Initial Study for review and comment by the City. Should additional copies be required, additional copies will be provided by Michael Baker at an additional fee. This scope of work assumes two rounds of review by City staff prior to the 30-day CEQA public review process. Correspondingly, this scope is limited to two rounds of revisions by Michael Baker in response to City comments.

1.3 Preparation of the Public Review IS/MND

With the anticipated conclusion in the Initial Study that no significant environmental effects will occur, a Mitigated Negative Declaration (MND) will be prepared. Following this determination, Michael Baker will prepare the Notice of Intent to Adopt (NOI) and the MND for City review. The NOI and MND will be attached to the Initial Study to fully explain the proposed project and its effects. Twenty-five (25) copies, one (1) camera-ready original, and an electronic file of the IS/MND will be provided to the City. Michael Baker will submit the IS/MND to the State Clearinghouse and additional agencies/interested parties as directed by the City. This task assumes that the City would be responsible for any radius mailing or newspaper noticing required for public review. The IS/MND would be subject to a mandatory 30-day public review period.

1.4 Mitigation Monitoring & Reporting Plan/Notice of Determination

Michael Baker will prepare the Mitigation Monitoring and Reporting Program (MMRP) in accordance with Public Resources Code Section 21081.6 (AB 3180). Fifteen copies (15), one (1) camera-ready original, and an electronic file of the MMRP will be provided to the City. In addition, upon adoption of the IS/MND by the City, Michael Baker will prepare a Notice of Determination (NOD) and will file the NOD at the County Clerk's Office. This scope of work excludes any applicable CEQA filing fees required by the CDFW.

1.5 Coordination and Meetings

Mr. Alan Ashimine will be responsible for project oversight, quality assurance, and quality control. Mr. Ashimine will undertake consultation and coordination of the project and the environmental review for compliance with CEQA requirements. Mr. Ashimine will consult with State and Local Agencies regarding the environmental documents. Michael Baker will provide management services to implement the work program and coordinate the effort with City staff.

Mr. Ashimine will attend up to one (1) staff-level meeting and one (1) City Council public hearing (to consider adoption of the Final IS/MND) for the project. Mr. Ashimine will represent the project team at staff meetings and the public hearing and make a presentation as necessary. Should the City determine that additional meetings beyond those listed below are necessary, services will be provided under a separate scope of work on a time and materials basis.

- One staff-level IS/MND progress meeting; and
- One City Council public hearing with a presentation.

TASK 2: LIMITED PHASE II SUBSURFACE INVESTIGATION: Michael Baker will retain Roux Associates Inc. (Roux Associates) to perform a limited Phase II Subsurface Investigation to address potential environmental concerns for the City's need to acquire right-of-way at the

northwestern corner of Aviation Boulevard and Artesia Boulevard, in the City of Manhattan Beach as part of the proposed, Aviation/ Artesia Boulevard Southbound to Westbound Right Turn Improvement Project. The scope of work for this task comprises of shallow soil excavation and the potential export of soils that may be impacted with petroleum hydrocarbons from the former on-site gasoline service station uses.

Pre-Field Preparations, Utility Clearance and Geophysical Survey

A site-specific Health & Safety Plan will be prepared prior to initiating fieldwork to ensure worker safety. Underground Service Alert (USA) will be notified of intended subsurface work at the Site at least 48 hours prior to fieldwork, and will be engaged to identify potentially buried utility lines (i.e., natural gas, electric, water, sewer, telephone, fiber optic, etc.). Roux Associates will use a sub-contractor to conduct a geophysical investigation to clear proposed locations.

Proposed Investigation

Roux Associates will advance a maximum of five shallow, hand-augered borings at the Site. Volatile vapors will be field screened and recorded, and samples will be collected for laboratory analyses and lithologic logging. Soil samples will be collected at the surface, 2 feet below surface, and 5 feet below surface. Selected soil samples (up to 10 total) will be analyzed for total petroleum hydrocarbons (TPH) by USEPA Method 8015M, volatile organic compounds (VOCs) by USEPA Method 5035/8260B, and Title 22 Metals by USEPA 6010/7000, including total lead.

Reporting and Deliverables

Upon completion of all field activities and receipt of final laboratory reports, the findings of the Limited Phase II will be presented and included in a summary letter report. The report will include: a brief description of the investigation, including background information; sample collection and analytical methods; a description of field observations; laboratory data (in text tables, figures, and boring logs); and, interpretation of data, conclusions, and recommendations.

TASK 3: ADDITIONAL SOILS/ENVIRONMENTAL INVESTIGATION (AS AUTHORIZED BY THE CITY): At the direction of the City, and with authorization from the City, additional work may be performed on initial sampling results and/or requests for work outside of Task 2 (above). Because the scope of additional work is undefined at this time, an exact cost cannot be provided. Additional work, if any, would be expected to include deeper borings, collection and/or analysis of additional soils samples, and/or the collection of soil gas samples. If any of this work is conducted within Aviation Boulevard right of way, encroachment permits, a traffic control contractor would be needed.

An allowance of \$8,117 has been established for a not to exceed value for this task.

EXHIBIT B

FEE

Task Description	Project Manager \$208	Project Engineer \$155	Design Engineer \$135	Project Planner \$145	Sub Consultant	Total Hours	Total Fee
TASK 1: INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION (ISMND)	\$7,072	-	-	\$15,370	\$8,437	140	\$ 30,879
TASK 2: LIMITED PHASE II SUBSURFACE INVESTIGATION	\$1,664	-	-	\$1,740	\$12,600	20	\$ 16,004
TASK 3: ADDITIONAL SOILS/ENVIRONMENTAL INVESTIGATION (AS AUTHORIZED BY THE CITY)						-	\$6,000
Subtotal Professional Fees							\$ 52,883
Additional Reimbursable Allowance							\$2,117
Total Fees							\$ 55,000

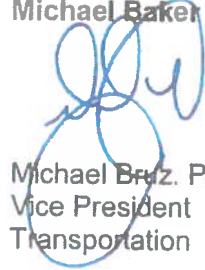
Should you have any questions and/or require additional information, please contact me directly at 949/330-4145 or briananderson@mbakerintl.com.

Sincerely
Michael Baker International, Inc.



Brian Anderson, P.E.
Senior Project Manager
Transportation

Michael Baker International, Inc.



Michael Bruz, P.E.
Vice President
Transportation

AMENDMENT NO. 2 TO THE PROFESSIONAL SERVICES AGREEMENT
BETWEEN THE CITY OF MANHATTAN BEACH AND MICHAEL BAKER
INTERNATIONAL, INC.

This Second Amendment ("Amendment No. 2") to that certain agreement by and between the City of Manhattan Beach, a California municipal corporation ("City") and Michael Baker International, Inc., a Pennsylvania corporation ("Consultant"), (collectively, the "Parties") is hereby entered into as of July 8, 2019 ("Effective Date").

RECITALS

A. On January 3, 2017, the City and Consultant entered into an agreement for professional services for the Consultant to provide design services for the Aviation Boulevard to Artesia Boulevard Southbound to Westbound Right Turn Lane Improvement Project ("Agreement");

B. On August 8, 2018, the Parties entered into Amendment No. 1 to the Original Agreement. The Original Agreement, as amended by Amendment No. 1 is referred to herein as the Agreement.

C. On June 21, 2019, in response to a request from the City for additional design related services, Consultant submitted a proposal for a contract change order in the amount of \$21,000.

D. The Parties now desire to amend the Agreement to allow Consultant to provide additional specified services to City, and to allow City to provide compensation for the services provided.

NOW, THEREFORE, in consideration of the Parties' performance of the promises, covenants, and conditions stated herein, the Parties hereby agree as follows:

Section 1. Section 2 of the Agreement is hereby revised to extend the term of the Agreement through December 31, 2020, unless sooner terminated as provided in Section 12 of the Agreement.

Section 2. Section 3.A of the Agreement is hereby revised to increase the Maximum Compensation amount by \$21,000, for a new Maximum Compensation of \$220,541.

Section 3. The letter from Michael Baker International, Inc. dated June 21, 2019 and attached hereto as Exhibit A is hereby incorporated into the Agreement, as a supplement to the Scope of Services (Exhibit A) and Approved Fee Schedule (Exhibit B) of the Agreement.



Section 4. Except as specifically amended by this Amendment No. 2, all other provisions of the Agreement shall remain in full force and effect.

IN WITNESS THEREOF, the Parties hereto have executed this Amendment No. 1 on the day and year first shown above.

CITY OF MANHATTAN BEACH

Michael Baker International, Inc.
(CONSULTANT)

By: 
Bruce Moe, City Manager

By:  Michael Broz
Its:  Vice President

ATTEST:

 7-23-19
Liza Tamura, City Clerk

APPROVED AS TO FORM:


Quinn M. Barrow, City Attorney

APPROVED AS TO CONTENT:

By: 
Steve S. Charellan
Finance Director

EXHIBIT A

[insert 6/21/19 MBI Letter]

June 21, 2019

JN 160287

Mr. Prem Kuman, P.E.
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

**SUBJECT: ARTESIA/AVIATION INTERSECTION IMPROVEMENTS:
PS&E COMPLETION AMENDMENT REQUEST**

Dear Mr. Kumar,

The purpose of this letter is to present the scope of work and associated fee proposal to complete the PS&E of the project. As discussed and agreed at our meeting on June 19th, the following items represent work required to complete the project that was not included in the original proposal and scope of work or changes to scope of work, to complete these work tasks for the reasons outlined below.

Item 1: Changes to R/W Acquisition Dimension.

Michael Baker was instructed to change the permanent R/W dimension at 1727 Artesia Blvd. from a variable width acquisition to 8.0', based upon the City Council Resolution 6055 which required an 8.0' roadway dedication as a condition of approval for the redevelopment of the property.

This requires changes to:

- the legal description and plat exhibit that was already prepared
- the TCE exhibit that was prepared
- The roadway plans

Item 2: Custom Retaining wall design

A custom retaining wall design is required for the following reasons:

- (1) The retaining wall calculations revealed that due to live load surcharge from the Chase Bank parking lot, that the Greenbook standard plans retaining wall will not work and a custom design retaining wall is required.
- (2) The proposed 8.0' R/W acquisition does not accommodate the standard plan footing shape, and the footing shape needs to be changed to fit within the proposed R/W. The Michael Baker structural group will design a custom footing that will fit within the proposed 8.0' R/W, and will include PVC drainage details for draining the soil behind the retaining wall so hydrostatic pressures are minimized.

Item 3: Project Schedule Delay

The original contract expired on December 7, 2017. Amendment #1 for the environmental document and Phase II Subsurface Investigation was signed on August 8, 2018. During this 8-month period, the project was on hold while the City researched and contemplated the Environmental Document. Michael Baker hourly rates escalated during this time and additional project costs were incurred due to this delay and re-start. Additional hours are shown in the fee proposal for this project management, coordination, and engineering time.

Please review the attached fee proposal that corresponds to this scope of work. Should you have any questions and/or require additional information, please feel free to contact me at (949) 855-3657 or at eric.spangler@mbakerintl.com.

Respectfully submitted,

MICHAEL BAKER INTERNATIONAL



Eric Spangler, PE, TE
Senior Project Manager
Transportation

Aviation / Artesia Blvd Intersection Improvements - City of Manhattan Beach
ENGINEERING PROJECT COMPLETION - Fee Proposal: 6/21/19

TASK	Michael Baker International					Total Cost
	Senior Project Manager	Project Engineer / Retaining Wall Engineer	Land Surveying Mapping Specialist	Civil Designer	Michael Baker Total Hours	
Hourly Rates	\$240	\$155	\$173	\$110		
1.0 Changes to R/W Acquisition Dimension						
1.1 Update Legal and Plat	1		8	1	10	\$1,734
1.2 Update TCE Exhibit	1			6	7	\$900
1.3 Update Plans	4	4		12	20	\$2,900
2.0 Custom Retaining wall design	1	24		24	49	\$6,600
3.0 Additional Effort associated with Project Schedule Delay	12	23		22	57	\$8,865
TOTAL HOURS	19	51	8	65	143	
PROFESSIONAL LABOR FEE	\$4,560	\$7,905	\$1,384	\$7,150		\$20,999

AMENDMENT NO. 3 TO THE PROFESSIONAL SERVICES AGREEMENT
BETWEEN THE CITY OF MANHATTAN BEACH AND MICHAEL BAKER
INTERNATIONAL, INC.

This Third Amendment ("Amendment No. 3") to that certain agreement by and between the City of Manhattan Beach, a California municipal corporation ("City") and Michael Baker International, Inc., a Pennsylvania corporation ("Consultant") (collectively, the "Parties") is hereby entered into as of December 22, 2020 ("Effective Date").

RECITALS

A. On January 3, 2017, the City and Consultant entered into an agreement for professional services for the Consultant to provide design services for the Aviation Boulevard to Artesia Boulevard Southbound to Westbound Right Turn Lane Improvement Project ("Agreement");

B. On August 8, 2018, the Parties entered into Amendment No. 1 to the Original Agreement.

C. On July 8, 2019, the Parties entered into Amendment No. 2 to the Original Agreement. The Original Agreement, as amended by Amendment No. 1 and Amendment No. 2 is referred to herein as the "Agreement".

D. The Parties now desire to amend the Agreement to extend the term and modify the hourly rates.

NOW, THEREFORE, in consideration of the Parties' performance of the promises, covenants, and conditions stated herein, the Parties hereby agree as follows:

Section 1. Section 2 of the Agreement is hereby revised to extend the term of the Agreement through December 30, 2022, unless sooner terminated as provided in Section 12 of the Agreement.

Section 2. Exhibit B (Approved Fee Schedule) of the Agreement is hereby amended with new hourly rates. The rate schedule is included in the attached Exhibit B (Approved Fee Schedule).

Section 3. Except as specifically amended by this Amendment No. 3, all other provisions of the Agreement shall remain in full force and effect.

IN WITNESS THEREOF, the Parties hereto have executed this Amendment No. 3 on the day and year first shown above.

[SIGNATURE PAGE FOLLOWS]

Approved for use 2/15/20

The Parties, through their duly authorized representatives are signing this Agreement on the date stated in the introductory clause.

City:

Consultant:

City of Manhattan Beach,
a California municipal corporation

Michael Baker International, Inc.,
a Pennsylvania corporation

DocuSigned by:
By: Bruce Moe 12/24/2020
EAD3C06646684FC
Name: Bruce Moe
Title: City Manager

DocuSigned by:
By: Darren Riegler 12/15/2020
D0BECC2AD0B494
Name: Darren Riegler
Title: Senior Vice President

ATTEST:

DocuSigned by:
By: Liza Tamura 12/24/2020
AF05022D1C0841F
Name: Liza Tamura
Title: City Clerk

APPROVED AS TO FORM:

DocuSigned by:
By: Quinn Barrow 12/16/2020
96FA866DAA974F6
Name: Quinn M. Barrow
Title: City Attorney

APPROVED AS TO FISCAL IMPACT:

DocuSigned by:
By: Steve S. Charelian 12/16/2020
AD5390F2B9C404
Name: Steve S. Charelian
Title: Finance Director

APPROVED AS TO CONTENT:

DocuSigned by:
By: Stephanie Katsouleas 12/16/2020
6EE60733FB8C499
Name: Stephanie Katsouleas
Title: Public Works Director

EXHIBIT B APPROVED FEE SCHEDULE

Hourly Rate Schedule Summary Aviation/Artesia Intersection Improvements - City of Manhattan Beach November 2020 through October 2021

Office Personnel	
Principal	\$300.00
Project Director / Department Manager	\$285.00
Senior Project Manager	\$270.00
Project Manager	\$250.00
Environmental Manager	\$240.00
Technical Manager	\$235.00
Structural Engineer	\$225.00
Principal Planner/Engagement Specialist	\$200.00
Senior Engineer	\$190.00
Senior Planner	\$190.00
Survey Analyst	\$185.00
Electrical Engineer	\$180.00
R/W Engineering Manager	\$180.00
Project Engineer	\$175.00
Landscape Architect	\$175.00
Technical Specialist/Traffic Engineer	\$170.00
Senior Environmental Analyst	\$165.00
Senior Designer / Senior GIS Analyst	\$160.00
Project Planner / Civil Engineer II	\$155.00
GIS Analyst / Landscape Specialist	\$155.00
Senior R/W Engineer	\$150.00
Civil Engineer I	\$145.00
CADD Technician	\$140.00
Project Controls/Civil Designer	\$130.00
Design Technician	\$120.00
Graphic Artist	\$120.00
Assistant Engineer/Assistant Planner	\$115.00
Environmental Analyst/Environmental Planner	\$110.00
Assistant Planner	\$110.00
Permit Processor	\$105.00
Engineering Aid/Planning Aide	\$98.00
Administrative Assistant	\$85.00
Survey Personnel	
2-Person Survey Crew	\$290.00
Survey Principal	\$240.00
1-Person Survey Crew	\$180.00
Licensed Surveyor	\$165.00
Field Supervisor	\$187.00
Survey Party Chief	\$160.00
Survey Chainman	\$135.00

Note: Hourly rates shown will increase 3% annually effective one year from contract NTP, and annually thereafter. Vehicle mileage will be charged as an additional cost at the IRS approved rate. Printing & Reproduction costs will be charged at the cost rate with no mark-up.