PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement") is dated November 1, 2016 ("Effective Date") and is between the City of Manhattan Beach, a California municipal corporation ("City") and GHD Inc., a California 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. 1078-17 (RFP) on July 15, 2016, seeking proposals for the provision of design services for the Manhattan Avenue/ Highland Avenue Improvement Project and the Parkview Avenue Sidewalk and Access Ramp Improvement Project. Addenda to this RFP were issued as follows: Addendum 1 on July 21, 2016, Addendum 2 on July 28, 2016, Addendum 3 on August 2, 2016 and Addendum 4 on August 8, 2016.

B. Contractor submitted a proposal dated August 15, 2016 in response to the RFP and Addenda.

C. City desires to utilize the services of Contractor as an independent contractor to Engineering Services for the Manhattan Avenue/Highland Avenue Improvement Project and the Parkview Avenue Sidewalk and Access Ramp Improvement Project.

D. Contractor represents that it is fully qualified to perform such services by virtue of its experience and the training, education and expertise of its principals and employees.

E. City desires to retain Contractor and Contractor desires to serve City to perform these services in accordance with the terms and conditions of this Agreement.

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 Sarmad Farjo, 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 Services satisfactorily rendered, City shall pay Contractor at the hourly rates set forth in the Approved Fee Schedule attached hereto as Exhibit B. In no event shall Contractor be paid more than $119,053.00 (the "Maximum Compensation").

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: Ross Anderson, P.E.
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, California 90266
Telephone: (310) 802-5357
Email: randerson@citymb.info

If to Contractor:
Sarmad Farjo, P.E., Group Mgr.
GHD Inc.
175 Technology Dr., Ste. 200
Irvine, CA 92618
Telephone: (949) 293-8690
Email: Sarmad.Farjo@ghd.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: _____
Name: _____
Title: _____

ATTEST:

By: _____
Name: Liza Tamura
Title: City Clerk

APPROVED AS TO FORM:

By: _____
Name: Quinn M. Barrow
Title: City Attorney

APPROVED AS TO CONTENT:

By: _____
Name: Bruce Moe
Title: Finance Director

Contractor:

GHD Inc.,
a California Corporation

By: TB Linton, P.E.
Name: Theodore B Linton
Title: Vice President

By: _____
Name: PAUL HERMANN
Title: VICE PRESIDENT

EXHIBIT A
SCOPE OF SERVICES

City of Manhattan Beach

Proposal for

Professional Engineering Services for Manhattan Avenue/Highland Avenue and Parkview Avenue Sidewalk and Access Ramp Improvement Projects (1078-17)

August 15, 2016

August 15, 2016

Mr. Ross Anderson
City of Manhattan Beach, Public Works Department
1400 Highland Avenue
Manhattan Beach, CA 90266

GHD Proposal No. 11125127

Re: Request for Proposal for Professional Engineering Services for Manhattan Avenue/Highland Avenue Improvement Project Between 1st Street and 8th Street and Parkview Avenue Sidewalk and Access Ramp Improvement Project (1078-17)

Dear Mr. Anderson and Members of the Selection Panel:

GHD is pleased to submit our Proposal to provide professional engineering services for the subject projects to the City of Manhattan Beach (City). We have a long continuous history of providing engineering services for a wide range of successful municipal projects in Southern California.

The Right Team

We have selected our proposed key personnel based on their proven design and management experience. Our proposed point of contact and Project Manager, Mr. Sarmad Farjo, PE, has 25 years of civil engineering project management experience with numerous agencies, successfully leading teams while managing and executing design projects and delivering results. He will coordinate directly with the City's Project Manager to provide the deliverables for this proposed project. Mr. Farjo will be fully supported by a solid team of professionals that have a broad range of technical expertise that will deliver an enhanced level of service to the project. In addition, we have included a highly qualified team of Subconsultants to provide pavement investigation, public outreach and land survey services.

A Solid Approach

Our structured approach for supplying the needed services to the City is developed around the following elements:

- A highly qualified and experienced project manager and project team
- A work program based on minimizing impact on residents, visitors and business owners
- A high level of communication between the GHD team, the City and the community
- An expedited project schedule to provide complete PS&E within 4 months from NTP

Local Experience

GHD is a global firm with global resources and expertise that will feature a **local team** committed to successfully achieving the City's goals. This team has worked together on numerous similar projects in southern California and have the local knowledge and experience needed on this project.

We acknowledge the receipt of Addendums 1 dated July 21,, 2 dated July 28, 3 dated August 2, and 4 dated August 8. We want you to know that we are committed to you, and strive to be your partner and an extension of your resources. It is our goal to exceed your expectations and be the reliable, accurate, and cost effective partner for your needs. Should you have any questions regarding this submittal, please contact Sarmad Farjo at (949) 585-5238 or via email at Sarmad.Farjo@ghd.com.

Sincerely,

Sarmad Farjo, PE
Project Manager

Paul Hermann
Authorized Signatory, Principal

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Cover Letter

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Section 1

Understanding Scope of Services

The City of Manhattan Beach is soliciting proposals for the preparation of PS&E for pavement and ADA access ramp rehabilitation along Manhattan and Highland Avenues between 1st and 8th Streets, and for the preparation of PS&E for new sidewalk improvements along Parkview Avenue between Park Way and just east of Market Place.

Manhattan Avenue/Highland Avenue Improvement Project

The City of Manhattan Beach updated their Pavement Management Program in 2014, and rated the present condition of the pavement on Manhattan Avenue between 1st and 8th Streets with a Pavement Condition Index (PCI) of 35-47. Highland Avenue was rated with a PCI of 39-61. These ratings indicate that further delay in pavement rehabilitation may lead to the necessity of total reconstruction of the pavement and it is therfore imperative that spot repairs (if necessary) and appropriate rehabilitation be undertaken as soon as possible. Further, existing curb ramps within the project area do not meet ADA accessibility requirements.

The Manhattan and Highland Avenues project site is located in a beachfront community, in an area of the City with limited parking and moderately heavy pedestrian usage. The design approach will emphasize minimal disruption to users of all types during construction of the upgraded and rehabilitated facilities. The project also encompasses a transit stop on Manhattan Ave near 4th Street. The design will maintain the multi-modal usage of the street, including walking, cycling, public transit, and automobiles.

In addition to moderately heavy pedestrian usage, Manhattan Ave also includes a host of driveway access points. *Maintaining pedestrian routes and residential access during construction will be key priorities for the project.*

There are approximately 32 curb ramps along Manhattan Ave that will require upgrades to meet ADA requirements, including the addition of detectable warning tiles. On the western side of Manhattan Avenue, there are many existing pedestrian ramps that need to be replaced with directional ramps to discourage pedestrians from crossing the street at inappropriate locations. At many of these locations, the ramps are adjacent to steep grades and existing utility infrastructure, requiring special design considerations. ***Please refer to Exhibits 1 and 2).***

Manhattan Ave comprises a two-lane travel way with dedicated bicycle lanes and on-street parking. Reinforcing fabric was installed beneath the traveled way in the early 1990s. During a visit to the project site by the GHD team, discrete areas of alligator/fatigue cracking were observed throughout the project length on Manhattan Ave. This may be an indication of localized areas of base failure as indicated by the PCI rating..

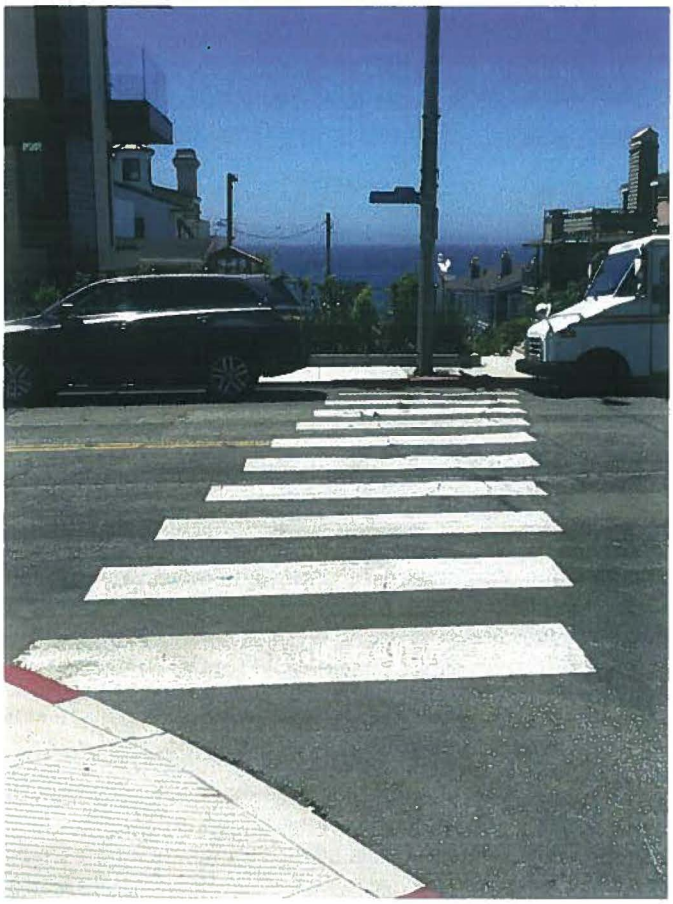
In general, the existing sidewalk is in good condition. However, in some areas along the roadway, the existing curb will need to be replaced due to dipping and sagging.

The existing storm drain along Manhattan Avenue consists of curb inlets which ultimately drain to the Pacific Ocean. There is no gutter along street within the project limits, and the pavement assessment will evaluate whether stormwater intrusion at the curb/pavement joint is affecting the structural integrity of the pavement section.

These issues will be thoroughly evaluated by the GHD team during the pavement evaluation survey and subsequent

geotechnical investigation. *The design team will evaluate all findings, evaluate the alternatives and recommend the best alternatives for pavement rehabilitation to improve the pavement smoothness and restore structural competency, resulting in an extended pavement life.*

Along Highland Avenue, there are approximately 37 curb ramps that will require upgrades to meet ADA requirements, including the addition of detectable warning tiles. On the western side of Highland Ave, there are many pedestrian ramps that may need to be replaced with directional ramps to discourage inappropriate mid-block pedestrian crossing. At many of these locations, the ramps are adjacent to steep grades and existing utility infrastructure, requiring special design considerations. At 2nd Street and 3rd Street there are currently no existing pedestrian crossings of Highland Ave. The design team will evaluate whether it is feasible to provide curb ramps and crosswalks at these intersections, including potential impacts to existing utilities and on-street parking. At Highland Ave and 6th Street, there is an existing crosswalk across Highland which directs pedestrians to an existing light pole. There is no ADA-accessible curb ramp on the western side of Highland, and therefore no accessible path of travel. During design, the GHD team will evaluate options for placement of an ADA-accessible curb ramp to complete an accessible path of travel. ***(Please refer to Exhibits 1 and 2).***



Highland Avenue's 60' ROW includes a two-lane travel way with on-street parking. As discussed above, the pavement condition of Highland Ave was rated with a PCI of 39-61 in 2014. The pavement section consists of an asphalt overlay above 5 ½ inches of concrete. A pavement rehabilitation project was undertaken in 1988 during which reinforcing fabric was installed beneath the travel lanes and a 2 ½ -inch AC overlay was constructed.

During site visits to Highland Ave, the GHD team observed some cracking and occasional patch repairs along the length of the project. *Since it is underlain with concrete pavement, a detailed pavement condition assessment will need to be conducted in order to evaluate possible causes of visible pavement stresses.* The GHD team will use the assessment to determine additional research, sampling, and testing that will be required to develop the probable root causes of the pavement stresses. The development of pavement restoration alternatives will include all of the project objectives including

- funding;
- constructability;
- functionality of the facility during construction;
- near coastal location of the project;
- pavement structural and smoothness;

All of the above will result in an overall pavement rehabilitation plan recommendation.

The existing storm drainage along Highland Avenue consists of curb inlets which ultimately drain to the Pacific Ocean. There is no gutter along street within the project limits, and the pavement assessment will evaluate whether stormwater intrusion at the curb/pavement joint is affecting the structural integrity of the pavement section.

Along both Manhattan and Highland Avenues, there are a number of utilities that will require coordination and adjustments particularly with the curb ramp replacement, including but not limited to sewer, water, and communications.

For both the Manhattan and Highland Avenues project, we understand that the City of Manhattan Beach will facilitate CEQA approval prior to construction.

Parkview Avenue Sidewalk

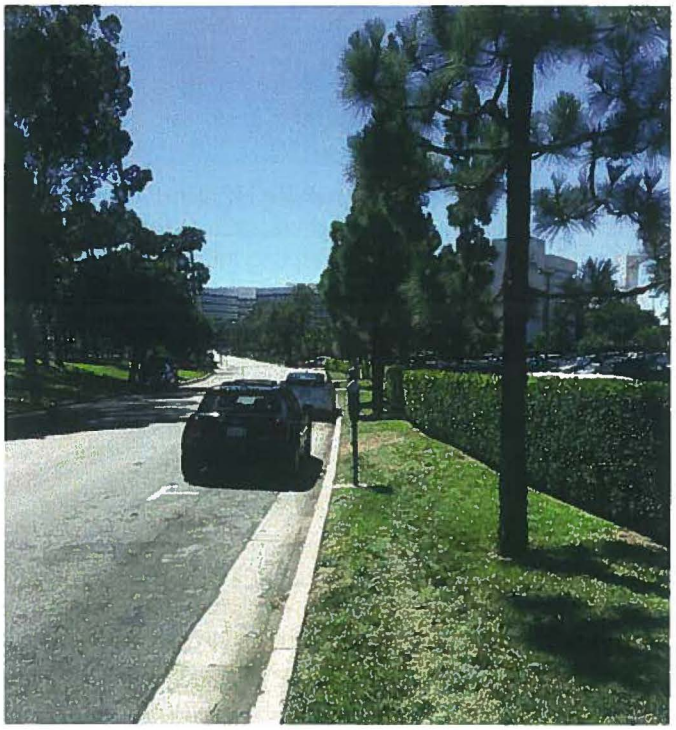
The Parkview Avenue sidewalk improvements project is located approximately 2.5 miles from the Manhattan and Highland Avenues project. GHD understands that the City desires to provide accessible pedestrian access from Park Way to the commercial development east of Market Place along the north side of Parkview Ave. The project is located in a commercial area of the City with an adjacent parking lot that serves the Continental Development along the project length. *Maintaining vehicular access and business operations and access will be a key issue during the project design and construction.*

The Parkview Ave sidewalk design will include five ADA accessible curb ramps, including the replacement of the existing non-compliant curb ramp on the northeast corner of Park Way and Parkview Ave.

The new sidewalk will provide an accessible pathway from the Marriott to the Comstock commercial development. At the southwest corner of the existing building, the new sidewalk will connect to the existing private walkway. ***(Refer to Exhibit 3).***

Given the elevation difference between the existing walkway and the new sidewalk, ADA-accessible ramp with handrails and landings may be required.

During visits to the site, the GHD team observed existing trees which will likely need to be removed or relocated, as well as existing private directional signs and street signs which will need to be relocated. Existing parking meters will be removed and reinstalled in their existing locations. The project will also include the restoration of landscaping and irrigation. Existing landscaping behind the curb on the north side of Parkview Ave includes hedges which provide visual separation between the roadway and the existing parking lot. Impacts to this landscaping need to be minimized, and the design and construction of the project will take into account the lowest possible impact on the adjacent landscaping. A key priority for the project will be close coordinate with adjacent property owners to acquire Right-of-way and to achieve the best possible design.



At the northeast corner of Parkview Ave and Market Place, a new ADA-accessible curb ramp will be installed, as well as a new sidewalk to connect to the existing private walkway. In this location, there are existing fire water double check detector assembly, irrigation and electrical utilities that may be impacted. *The design will require communication with the utility owners to coordinate any necessary relocations.*

Existing drainage patterns for the project site should not be impacted by the new sidewalk installation. There is an existing sidewalk underdrain approximately 40' east of the Continental parcel driveway that will remain in order to maintain current site drainage. For the Parkview Avenue sidewalk improvements, we understand that the City of Manhattan Beach will facilitate CEQA approval prior to construction.

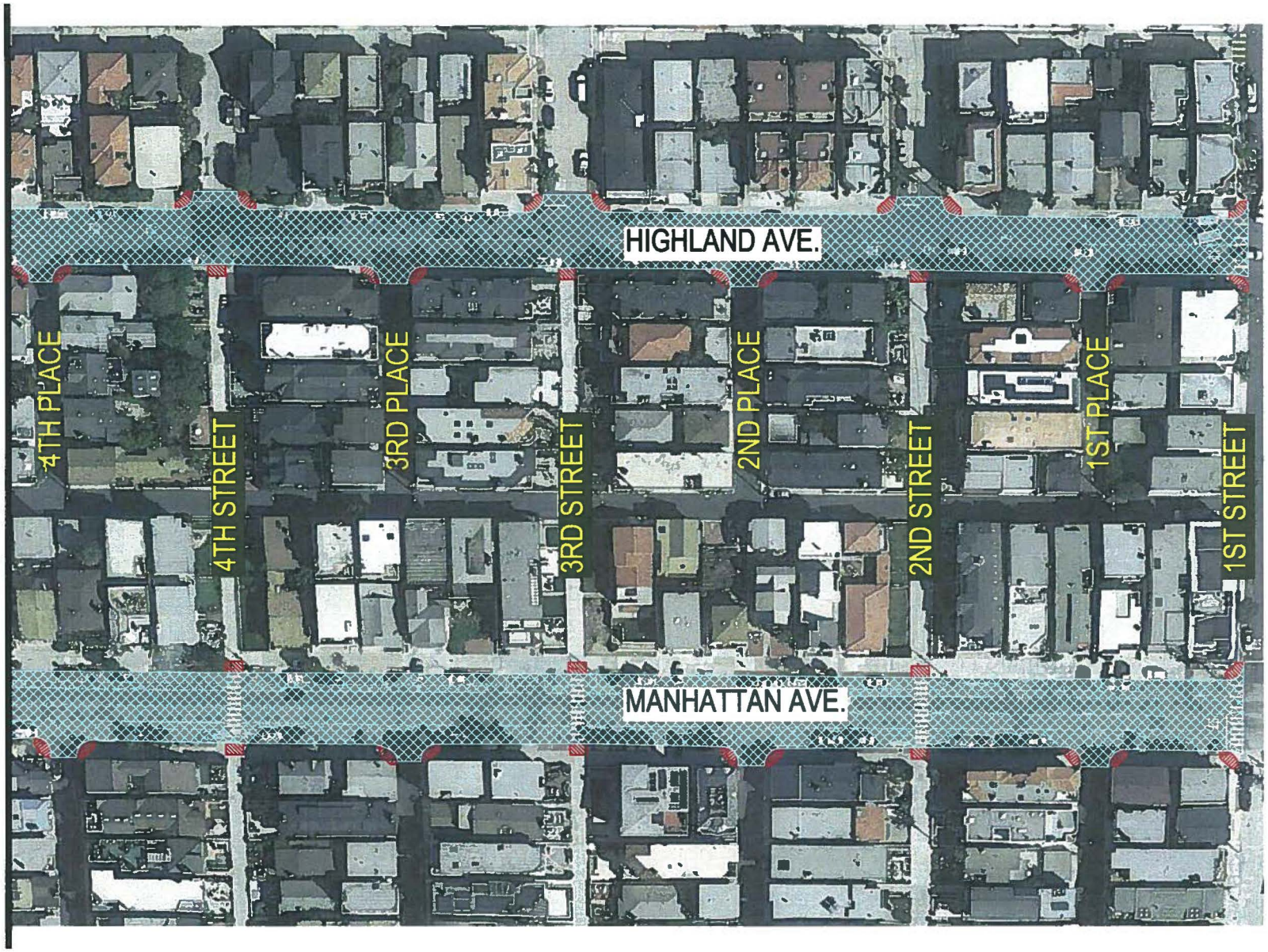


EXHIBIT 1

CITY OF MANHATTAN BEACH

MANHATTAN AVENUE/HIGHLAND AVENUE AND PARKVIEW AVENUE SIDEWALK AND ACCESS RAMP IMPROVEMENT PROJECTS

LEGEND

= PROPOSED ADA RAMP IMPROVEMENTS

= PROPOSED PAVEMENT RE-HABILITATION

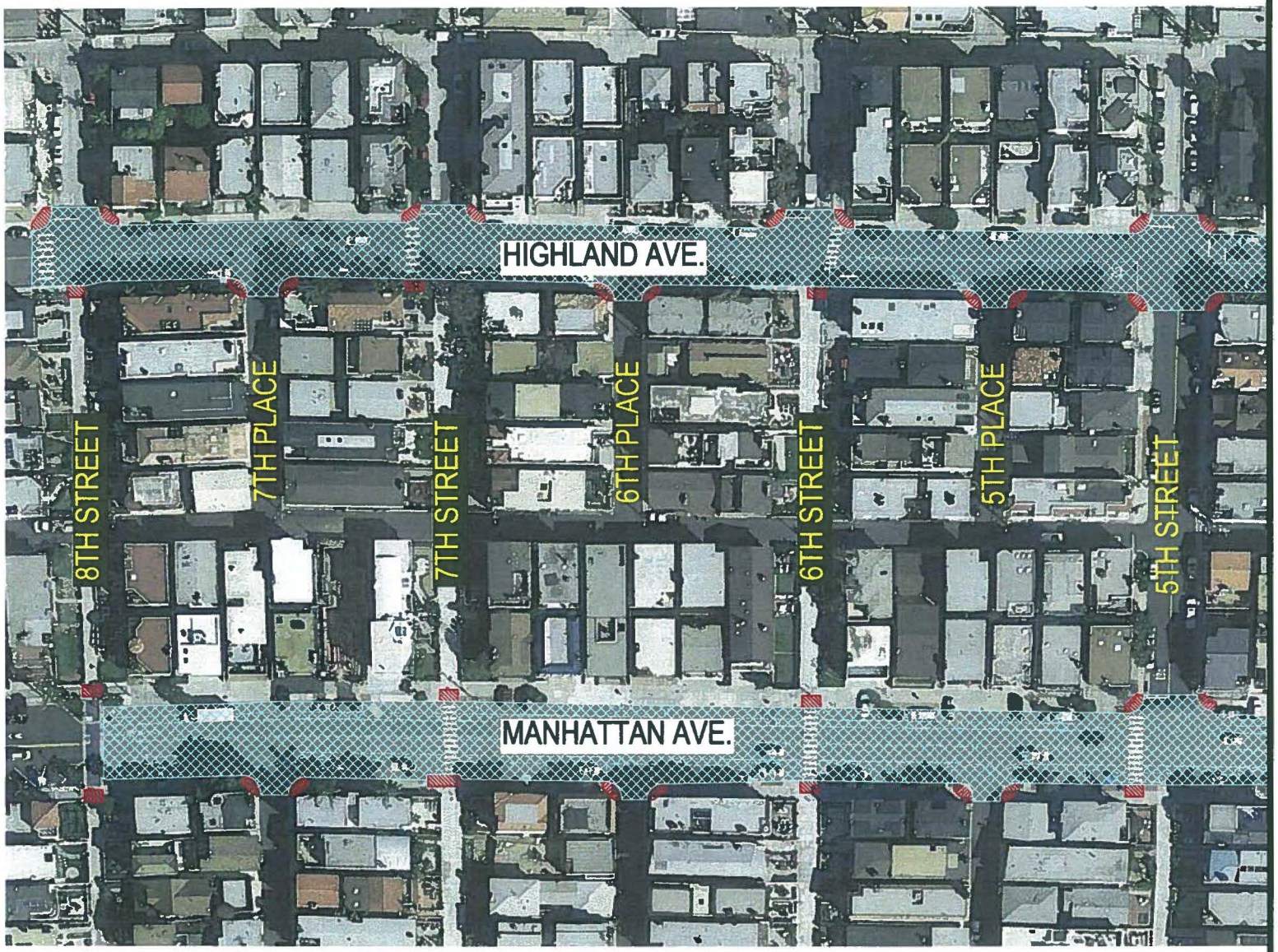


EXHIBIT 2

CITY OF MANHATTAN BEACH

MANHATTAN AVENUE/HIGHLAND AVENUE AND PARKVIEW AVENUE SIDEWALK AND ACCESS RAMP IMPROVEMENT PROJECTS

LEGEND

= PROPOSED ADA RAMP IMPROVEMENTS

= PROPOSED PAVEMENT RE-HABILITATION

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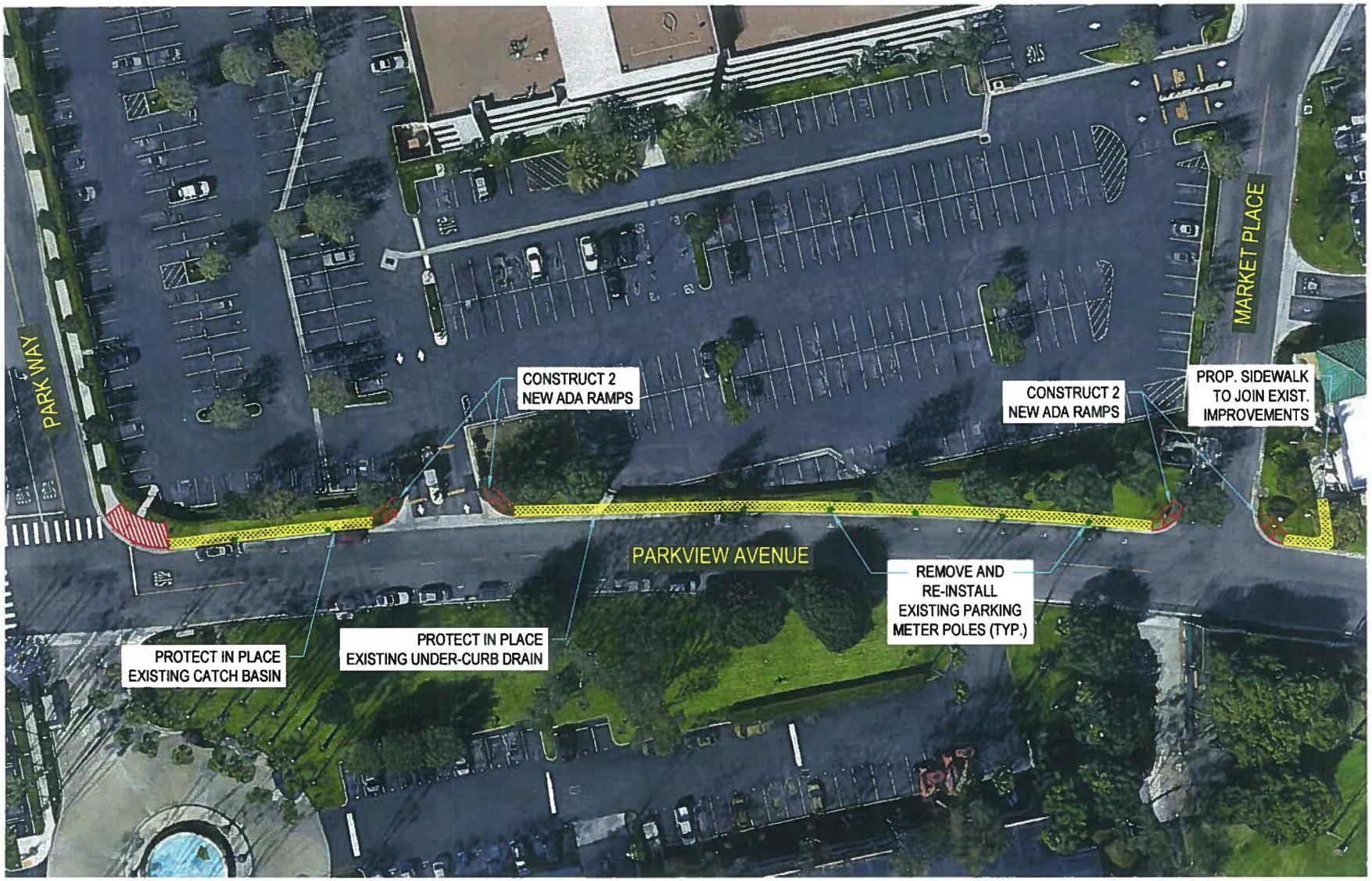


EXHIBIT 3

CITY OF MANHATTAN BEACH

MANHATTAN AVENUE/HIGHLAND AVENUE AND PARKVIEW AVENUE SIDEWALK AND ACCESS RAMP IMPROVEMENT PROJECTS

LEGEND

= PROPOSED ADA RAMP IMPROVEMENTS

= PROPOSED SIDEWALK

= CONSTRUCT NEW ADA RAMP

= EXISTING PARKING METER POLE

N

Section 2

Methodology and Work Plan

The GHD team is proposing on both Manhattan Ave/Highland Avenue and Parkview Ave Sidewalk and Access Ramp Improvement projects.

The GHD team has a diverse background in Transportation projects, including a wide range of roadway design, pavement rehabilitation, and ADA compliant access ramp and pedestrian path projects.

To deliver the Manhattan and Highland Avenues and Parkview Ave projects, GHD will employ a "turn-key" approach. This means the GHD team will be responsible for all aspects of the project including coordination with utility companies, R/W and construction easements, facilitating public meetings, stakeholder coordination, maintaining the overall project schedule, preparing the design plans, facilitating agency and independent reviews and approvals, supporting the City in preparing bid packages, and responding to questions or RFIs.

Some key factors for success on the Manhattan Ave/Highland Ave project include:

- Minimizing impact to residents and businesses

  Through our thorough public outreach program, we'll ensure that the design reflects the needs of the community and sufficiently serves pedestrians, bicycles, passenger cars, and public transit. ***Our design will prioritize maintaining driveway access and on-street parking after hours.***

- Extending pavement design life

  Our team will thoroughly evaluate the condition of the existing pavement to understand the underlying cause of the observed pavement stresses. We will develop the pavement design requirements with respect to the projected use and vehicular loading over the design life of the rehabilitated pavement and will formulate a solution that is both structurally sound and cost effective. ***We'll also consider the unique coastal environment of the project site to design rehabilitation alternatives that will endure weathering.***

- Providing an ADA accessible path-of-travel

  Ensuring that all users have continuous access through the project area to all areas of the beautiful beachfront community of Manhattan Beach will be of the utmost priority. ***We will leverage GHD's extensive experience in the design of ADA accessible routes to maximize the benefit realized by the local community for the available funding.***

Some key factors for success on the Parkview Ave project include:

- Minimizing impact on vehicular access

  We'll ensure that the GHD ***design will provide the lowest possible impact on vehicular access.***

- Minimize impact on adjacent Landscaping

  Our team will coordinate closely with our landscape architect during the design to ensure that ***our proposed sidewalk and ADA ramps will have the lowest possible impact on adjacent landscaping by providing the maximum restoration possible.***

- Help Expedite Property Acquisition

  Our team will prepare legal descriptions and plats for the right-of-way needed to construct the sidewalk and ADA ramps for Parkview. ***Our approach will prioritize legal and plats preparation to accelerate right-of–way negotiation and prevent delay in construction start day.***

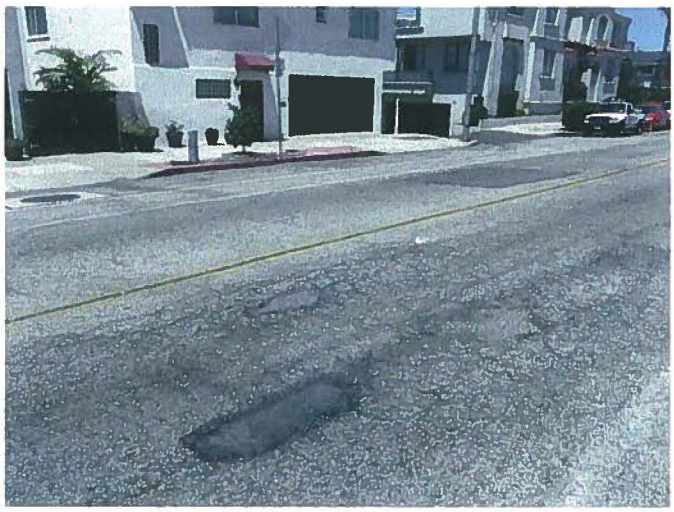
- Cost-effective design alternatives

  We understand that municipalities are working with tight budgets to deliver projects that will provide the most benefit their communities. ***Our thorough evaluation of design alternatives will ensure the Citys ability to provide the best possible outcomes on time and within budget.***

These key factors for success are the basis for our project methodology, some key elements of which are highlighted below and which is broken down into delivery phases in our project Work Plan.

Manhattan/Highland Avenues

Pavement Assessment



The GHD team will complete a pavement assessment survey to identify and evaluate the different types of pavement stresses and the extent of these stresses throughout the project limits.

Pavement deflection testing will be used in competent pavement areas to measure the residual strength of the existing pavement structure.

Materials sampling and testing will be used to identify specific characteristics of the pavement structure materials and underlying soils. Pavement cores will be used to explore and define the present condition of pavement materials, layer thicknesses, and prior resurfacing history (if possible).

Current and projected street characterization and vehicle loading over the design life of the pavement will then be evaluated and used to determine the necessary design parameters.

Pavement core data will be combined with laboratory soil strengths and projections of future traffic use to develop appropriate rehabilitation alternatives. These alternatives will then be evaluated with respect to a priority matrix, developed in conjunction with the City, in order to determine the preferred, alternative that will be both cost effective and will supply the required structural strength for both Manhattan Avenue and Highland Avenue.

Street Name	# Cores - withtin Travel Lanes	FWD Intervals
Manhattan Avenue	**4 Cores**	**100'**
Highland Avenue	**4 Cores**	**100'**

Public Outreach

Our public outreach program will be developed by our team with specialized experience in transportation, planning and public infrastructure projects throughout Southern California. Our expertise in these areas enables our team to develop outreach programs that reflect a technical understanding of the issues presented, which enhances our commitment to inform and engage communities in the public planning process. Our detailed program will include the following tasks:

Project Initiation and Administration

Following contract award, the team will participate with the City of Manhattan Beach in a project kick-off meeting to discuss project initiation. As part of this meeting, the proposed outreach tasks will be discussed and valuable input and direction provided by the City and project partners. These meeting outcomes will be used to develop a plan outlining specific outreach tasks and meeting schedule.

Collateral /Communication Materials

The project team will develop collateral materials that will be used at the project/public meetings, and transmitted to stakeholders as needed. As a basis, we will develop a project fact sheet, Questions and Answers, and public meeting notice.

Community Meeting

Our team will develop meeting parameters and provide guidance for the City to follow in efforts to conduct two community meetings. The focus of these parameters will be to provide uniformity in presenting information, facilitating dialogue, garnering input and fostering consensus.

Services in support of the meeting will include coordination of meeting times and location, organization of facility details (including equipment and insurance, if applicable), meeting set-up and clean-up, and photography. Meeting materials, including meeting notification, e-blasts, handouts, sign-in sheets, comment cards and directional signage will be prepared.

Our team is well versed in notification techniques used to reach a broad base of stakeholders. The tools utilized may include but are not limited to the following:

- E-Blasts can be used as an extremely cost effective method to reach the project database
- Fliers and posters distributed to residences at public access venues such as libraries, community centers, businesses, senior centers, etc.

City Council Public Hearing/Presentation

The project team will provide support, prepare presentation and collateral materials, and provide coordination/logistics for two City Council Public Hearings.

Parkview Avenue Sidewalk

Survey & Plat and Legal Description

A design level Topographic Survey will be provided for the project area. Included will be sufficient survey points to provide 1' contours with spot elevations throughout, inverts of drainage structure/features, parking area striping, street striping, islands, above ground visible utilities, and dipping of all manholes within the subject area.

The site boundaries will be shown for reference based upon available record maps. Complete title reports will be utilized (1) in order to identify all of the underlying encumbrances and (2) to prepare the Legal Descriptions and Exhibits of the subject area.

Landscape

The project entails the construction of a new sidewalk in an existing landscape area. Construction will impact the project area and some adjacent plantings. While the design will minimize impacts to the existing landscaping to the extent possible, GHD proposes to prepare landscape architectural plans to repair/ restore any impacted landscaping.

Existing Conditions

GHD will review available as-built drawings and/or otherwise document existing vegetation and irrigation system(s) in use within the project impact area. To the extent needed, GHD will also review landscape-related ordinances and plans pertinent to the project.

Construction Plans

Landscape Replacement Plans will be prepared for inclusion in the Construction Drawing set. Drafts of the plans will be submitted at the 60% and 95% phases of document preparation in addition to the 100% set.

Manhattan/Highland Avenues - Work Plan and Scope of Services

The GHD team will execute the project as follows:

Task I: Project Management and Meetings

GHD will complete the following tasks as part of this task:

1. Project Management: Throughout each of the proposed project tasks, GHD includes a task for Project Management, including coordination and quality assurance. This task is of the utmost importance throughout the entire life of the project, and GHD's PM approach is detailed in Section 3, Project Management.
2. Project Meetings: GHD will attend a kick off meeting, site visit and other meetings with City and/or stakeholders and will prepare meeting agenda, action items and outcomes, and project schedule updates to distribute to all parties.

Task 2: 60%, 95%, and 100% Level Completion

During the 60% design level the following task will be completed:

3. Topographic Survey: GHD's sub-consultant (CalVada) will complete a topographic survey of all ADA ramps at all locations and prepare base maps. CalVada will locate all existing improvements that may be affected by the construction and dip utilities to confirm depth and direction. Our sub-consultant will also plot the street centerline and right of way per available record maps. The survey will be tied horizontally to NAD 83, California Zone 6 Datum and vertically to temporary benchmarks to be set within the sites. CalVada will also prepare plats and legal descriptions for the Parkview Ave sidewalk improvements.
4. Utility Research: GHD will review all available documentation to understand key issues and factors affecting the project.
5. GHD's sub-consultant (LaBelle Marvin) will complete a Structural Pavement Assessment for Manhattan/Highland Avenues utilizing a combination of in-place deflection testing to define the current roadway strength combined with pavement core sampling to explore and define present street conditions, layer thicknesses and where detectable, prior resurfacing history. Pavement core data will be combined with laboratory soil strengths and projections of future traffic use to develop appropriate replacement sections. The existing sections will be compared to the required replacement sections, providing a basis for development of current structural needs and reinforcement requirements. During this task, the pavement rehabilitation alternatives will be evaluated. Traffic loading will be determined, along with the roadway design parameters. These parameters will be used with the results of the Structural Pavement Assesment, including falling weight deflectometer, geotechnical sampling and testing, to formulate solutions to satisfy the pavement structural requirements. Potential solutions may include, but are not limited to, cold in-place recycling, hot in-place recycling, overlay, micro-surfacing or full depth repair. We'll complete an alternative analysis to determine the most cost-effective design, evaluating a number of important factors, such as the results of the existing pavement condition assessment and the expected performance of each option to extend the pavement design life.

   The pavement rehabilitation alternatives and our recommendations will be summarized in a memorandum to the City Project Manager for review and confirmation of preferred alternative.
6. The 60% level of engineering is intended to develop a project to a level where major issues are identified, comparison estimates can be developed and major decisions can be made as to what will be included in the project. This level of project development is intended to develop the design to a point where it can be determined that there are no fatal flaws, and all design issues are revealed but with without the additional effort required to develop project details and detail drawings to the point where they are needed for construction. The first community meeting will follow this task.
7. Upon successful completion of the 60% Plans, and once the City issues written authorization to proceed with 95% level design. The GHD Team will complete the project design, specifications, and cost estimate and submit to the City for review.
8. Upon receiving the 95% plan check comments, GHD will proceed with the 100% final plans. The GHD Team will complete the PS&E and obtain City's approval.

   The design plans developed in Task 2 will include roadway pavement rehabilitation plans and details, sidewalk and access ramp design based on the detailed survey data and geotechnical investigations, providing an ADA accessible path-of-travel along the project length. The following items will be delivered to the City:

- Improvement Plans (at 60%, 95%, and 100%)
- Specifications (at 95%, and 100%)
- Construction Cost Estimate (at 60%, 95%, and 100%)

Task 3: Public Outreach

9. During the 60% design, the GHD team will begin our Public Outreach program. This task will be critical in ensuring that the design minimizes impacts on local residents and businesses. At 60% completion, the GHD will participate in the first of two community outreach meetings and the first of two City Council presentations. The second community outreach meeting will be held when the design is at 95% completion, ensuring that the public can influence project elements prior to completion. The second City Council presentation will occur at 100% design.

Task 4: Bid and Construction Support Services

Once final plans and specifications are completed, the project then enters the 4th Phase – the bidding and construction phase.

10. GHD has the knowledge and experience to manage your project. During the bidding process question may arise from prospective bidders. GHD will process RFI's and provide responses in an expedient fashion. GHD believes that it is critical to provide answers to help facilitate more favorable bids. GHD strives to respond to RFI's within 24 hours of receipt and will be available throughout the bidding to assist the City.
11. GHD will be available throughout the life of the construction contract to assist the City and the Construction Manager with RFI's, design changes, and shop drawing reviews, processing construction change orders, attend any prepconstruction meeting, preparing "As-Built" drawings and project close out.

Parkview Avenue - Work Plan and Scope of Services

The GHD team will execute the project as follows:

Task I: Project Management and Meetings

GHD will complete the following tasks as part of this task:

1. Project Management: Throughout each of the proposed project tasks, GHD includes a task for Project Management, including coordination and quality assurance. This task is of the utmost importance throughout the entire life of the project, and GHD's PM approach is detailed in Section 3, Project Management.
2. Project Meetings: GHD will attend a kick off meeting, site visit and other meetings with City and/or stakeholders and will prepare meeting agenda, action items and outcomes, and project schedule updates to distribute to all parties.

Task 2: 60%, 95%, and 100% Level Completion

During the 60% design level the following task will be completed:

3. Topographic Survey: GHD's sub-consultant (CalVada) will complete a topographic survey of the area. CalVada will locate all existing improvements that may be affected by the construction and dip utilities to confirm depth and direction. Our sub-consultant will also plot the street centerline and right of way per available record maps. The survey will be tied horizontally to NAD 83, California Zone 6 Datum and vertically to temporary benchmarks to be set within the sites. CalVada will also prepare plats and legal descriptions for the Parkview Ave sidewalk improvements.
4. Utility Research: GHD will review all available documentation to understand

key issues and factors affecting the project.

5. The 60% level of engineering is intended to develop a project to a level where major issues are identified, comparison estimates can be developed and major decisions can be made as to what will be included in the project. This level of project development is intended to develop the design to a point where it can be determined that there are no fatal flaws, and all design issues are revealed but with without the additional effort required to develop project details and detail drawings to the point where they are needed for construction. The first community meeting will follow this task.
6. Upon successful completion of the 60% Plans, and once the City issues written authorization to proceed with 95% level design. The GHD Team will complete the project design, specifications, and cost estimate and submit to the City for review.
7. Upon receiving the 95% plan check comments, GHD will proceed with the 100% final plans. The GHD Team will complete the PS&E and obtain City's approval.

   The design plans developed in Task 2 will include roadway pavement rehabilitation plans and details, sidewalk and access ramp design based on the detailed survey data and geotechnical investigations, providing an ADA accessible path-of-travel along the project length. The following items will be delivered to the City:

   - Improvement Plans (at 60%, 95%, and 100%)
   - Specifications (at 95%, and 100%)
   - Construction Cost Estimate (at 60%, 95%, and 100%)

Task 3: Right of Way Engineering

8. During the 60% design, the GHD team will prepare legal and plats for Right of Way and TCE acquisition. This task will be completed as soon as the 60% design is accepted by the City to allow time for the City to acquire the land.

Task 4: Bid and Construction Support Services

Once final plans and specifications are completed, the project then enters the 4th Task – the bidding and construction phase.

9. GHD has the knowledge and experience to manage your project. During the bidding process question may arise from prospective bidders. GHD will process RFI's and provide responses in an expedient fashion. GHD believes that it is critical to provide answers to help facilitate more favorable bids. GHD strives to respond to RFI's within 24 hours of receipt and will be available throughout the bidding to assist the City.
10. GHD will be available throughout the life of the construction contract to assist the City and the Construction Manager with RFI's, design changes, and shop drawing reviews, processing construction change orders, attend any prepconstruction meeting, preparing "As-Built" drawings and project close out.

Section 3

Project Management

The GHD team is dynamic, responsive and adaptive to project changes and client needs. GHD's Project Management Approach is customized to account for project-specific needs and requirements and is typically formed in close collaboration with the client, using proven Project Management tools to deliver efficient, comprehensive, and sustainable projects for our clients and ultimately for our local communities.

GHD's Project Management is built on constant communication with our clients and coordination with adjacent ongoing projects, public and private utilities, stakeholders, the community, approval authorities, and regulating agencies. The management of each project is customized to account for project-specific needs and requirements.

One of the first critical steps in the successful management of GHD projects is the development of our Project Management Plan (PMP) that is shared with all team members, especially the City. This document provides a framework for the successful execution of the project. It includes the roles and responsibilities of each team member and an independent Quality Control plan for each task. As part of GHD's standard for collaboration, our Project Manager, Mr. Sarmad Farjo will coordinate with the City during PMP development and prior to implementation. Importantly, the PMP is a living document that will be updated in coordination with the City as required throughout project development.

Project Control

Many projects are influenced by a complex system of variables and as a result, aspects of the best planned project approach will require some type of adjustments before the project is delivered. GHD understands the need for adjustments and knows how to anticipate, formulate, and implement these changes in a decisive and timely manner. It is therefore very important to not only develop a system of project controls but also to have a Project Manager that understands how all of the aspects of a project interact, and who will maintain constant communication and coordination with all task leads.

GHD's project controls comprise the following elements to keep the project within schedule and budget.

- Project Management Plan (PMP)
- Scope Verification and Control
- Schedule Control
- Cost Control
- Document Control
- Risk Management
- Managing the Project Team

These project controls are briefly described below:

Project Management Plan (PMP)

The first step in Project Control is to develop a sound, efficient achievable and effective Project Management Plan (PMP).

The GHD Project Manager develops this PMP with input from the City's Project Manager, project task leads, and other personnel on the team. The PMP will be distributed among the project team and will be implemented and used throughout the life of the project. It will be updated and revised as described below.

Scope Verification and Control

The GHD team understands that the scope verification process is very important to ensure that project deliverables are formally accepted. This will be achieved through the use of a well-defined scope of work for the project and by having each task lead develop and agree to the scope. GHD will define the deliverables for each task in the scope.

Any issues that arise during the execution of the project will be addressed by the GHD team. Our solutions and recommendations will be available for input from the City. This is part of the normal design development; however, any issues that could potentially require adjustments to scope will be communicated immediately to the City's Project Manager along with our recommended solutions and a plan to recover schedule and budget if required.

Schedule Control

The schedule prepared as part of the PMP will integrate the work of all sub-consultants and include milestones, preparing and processing, as well as in-house Quality Control and agency review. Once the detailed scope is established, our Project Manager will prepare a Critical Path Method (CPM) based schedule using MS Project. As work proceeds and progresses, the project schedule will be closely monitored and tracked to assure timely adjustments are made. If schedule recovery is required, we will look at different techniques and determine which can be applied to a particular situation to recover the schedule. Schedule updates will be provided as required following coordination meetings with the City as per the RFP.

Cost Control

Our Project Manager will track the cost and expenditure for the project using our in-house cost control tools. Prior to each invoice, GHD's Project Manager will review the progress for consistency with the PMP and ensure that the billing does not exceed the estimated fee in the PMP for services rendered to date.

This cost control plan ensures that our fee will always be properly tracked with the progress of work.

Example Cost Control Plan

CYCLE 7 - BASE BID - REVISED 11/13/2015
COMPENSATION AND FEE SCHEDULE

Phase	Phase/Task Description	Principal P2 295 /HR	Associate P2 286 /HR	Engineer P1 298 /HR	Engineer E3 181 /HR	Engineer E2 178 /HR	Engineer D3 166 /HR	Engineer C2 141 /HR	Engineer C1 131 /HR	Environmental Scientist C3 135 /HR	Admin Support 82 /HR	Total Hours	GHD Labor COSTS	Subconsultants Including 10% Markup: Cal-One (Underground Utilities)	Subconsultants Including 10% Markup: Fairbanks (Survey)	Subconsultants Including 10% Markup: Leighton (Geotechnical)	Subconsultants Including 10% Markup: DPIC (Right of Way)	Total Fee
1	Project Reconnaissance and Summary Memorandum																	
1.1	Project Initiation and Grant Application Review				2							2	$ 362	$ -	$ -	$ -	$ -	$ 362.00
1.2	Attend meetings and prepare agenda and outcome		6		20				6		2	34	$ 5,780	$ -	$ -	$ -	$ -	$ 5,780.00
1.3	Utility research and locating services								4			4	$ 524	$ 2,145	$ -	$ -	$ -	$ 2,669.00
1.4	Geotechnical Investigation		1		2				2		2	7	$ 953	$ -	$ -	$ 9,158	$ -	$ 10,110.50
1.5	Topographic Survey and prepare base map				1				4			5	$ 705	$ -	$ 7,348	$ -	$ -	$ 8,053.00
1.6	Prepare Project Summary Memorandum for City's approval				8							8	$ 1,448	$ -	$ -	$ -	$ -	$ 1,448.00
1.7	Coordination, Project Management & Quality Control				4							4	$ 724	$ -	$ -	$ -	$ -	$ 724.00
	Subtotal		7		37				16		4	64	$ 10,479	$ 2,145	$ 7,348	$ 9,158	$ -	$ 29,129.50
2	35% Level Completion																	
2.1	Prepare Preliminary Hydrology and Hydraulic Report					4		8	8		2	14	$ 1,836	$ -	$ -	$ -	$ -	$ 1,836.00
2.2	Prepare Improvements Plans		2		16			8	24		2	52	$ 7,702	$ -	$ -	$ -	$ -	$ 7,702.00
2.3	Prepare legal and plats and easement acquisition				4				6			10	$ 1,510	$ -	$ 3,620	$ -	$ 9,972	$ 15,001.50
2.4	Prepare environmental documents and process to obtain clearance		2		2					12		16	$ 2,392	$ -	$ -	$ -	$ -	$ 2,392.00
2.5	Prepare 1st utility notice								4			4	$ 524	$ -	$ -	$ -	$ -	$ 524.00
2.6	Coordination, Project Management & Quality Control	1	4	4	8				10		4	31	$ 4,831	$ -	$ -	$ -	$ -	$ 4,831.00
	Subtotal	1	8	4	30		4	8	52	12	8	127	$ 19,798	$ -	$ 3,620	$ -	$ 9,972	$ 32,288.50

Invoicing					
Apr-16	May-16	Jun-16	Jul-16	Total Billed	Remaining
$ 362.00				$ 362.00	$ -
$ 2,730.25	$ 1,808.00		$ 724.00	$ 5,262.25	$ 497.75
$ 2,669.00				$ 2,669.00	$ -
$ 10,110.50				$ 10,110.50	$ -
$ 8,053.00				$ 8,053.00	$ -
$ 1,448.00				$ 1,448.00	$ -
$ 724.00				$ 724.00	$ -
$ 28,096.75	$ 1,808.00	$ -	$ 724.00	$ 28,628.75	$ 497.75
$ 1,836.00				$ 1,836.00	$ -
$ 7,702.00				$ 7,702.00	$ -
			$ 82.25	$ 82.25	$ 14,919.25
$ 401.25			$ 1,990.75	$ 2,392.00	$ -
			$ 524.00	$ 524.00	$ -
$ 4,421.00			$ 410.00	$ 4,831.00	$ -
$ 14,360.25	$ -	$ -	$ 3,007.00	$ 17,367.25	$ 14,919.25

Document Control

GHD has its own document control system that makes all project documents, including QC checks and comment responses, available for delivery to the City. GHD therefore has a system in place to collect and categorize all project documentation in place and will adapt this system to meet City requirements.

Risk Management

Risk Management begins with identifying risks, which generally occurs during development of the project approach and is re-visited throughout project development as part of the project control. Identified risks must be listed and tracked to assure that they do not surface. When identified, many of the associated risks can be avoided.

When a risk cannot be avoided, it is specified as a risk to budget and/or schedule. Once identified, there is generally a brainstorming session involving technical, budgetary, and management professionals to determine if a solution could be found to either eliminate or significantly reduce the risk. If further analysis is required, either Alternatives Analysis or a Weighted Matrix Process is employed in order to clarify or provide additional information so that a recommendation can be made to the City.

The simple alternatives analysis approach can be thought of as a Qualitative Risk Analysis, whereas a more rigorous Alternatives Analysis and a Weighted Matrix Approach would be considered a Quantitative approach. The trigger for each of these approaches will be included in the overall Project Management Plan.

Managing the Project Team

Scheduling and Resource Planning is a continuous and evolving process that requires daily attention. Weekly meetings are conducted to assign appropriate staff to specific tasks based upon their skills, project needs, and project schedule commitments. The project Schedule and Resource Planning Matrix shall be updated and maintained weekly to address any issues or changes. Our Project Manager has expertise in managing the Scheduling and Resource Planning Matrices, which will allow work to be completed as efficiently and effectively as possible. The City of Manhattan Beach can be confident that

our project schedule commitments will be met by using these techniques to prioritize work.

Quality Control and Assurance

GHD operates under the Practice Quality Management System ISO 9001:2008 and an Environmental Management System, ISO 14001:2015 which are certified by Lloyds Register Quality Assurance.

GHD's Quality Procedures are also compliant with Federal guidelines and GHD has successfully undergone federal audits with respect to Quality documentation.

Having adequate resources and a project management team does not always ensure successful project delivery. The resources must follow well-established and well-practiced project execution policies and procedures. GHD follows the following key guidelines to produce high-quality work.

Our Team understands that quality management is essential to the success of any project. As an integral part of our Project Management Plan (PMP), we will abide by a Quality Management Plan (QMP). No matter the delivery method, all of our project and technical managers will work with their project delivery teams (PDTs) and your staff to achieve the highest quality deliverables. Ultimate responsibility for the execution of the QMP belongs to our Project Manager with input from our QA/QC Manager, Mr. Ludy Smeets, in coordination with the City. The fundamental driver of the QMP is to provide set design or planning documents consistent with good engineering professional practices and meeting City requirements. Utilizing our QMP will cultivate the smooth flow of design information and document control specific to project needs and requirements. Each plan, at a minimum, will include:

- A central point of contact;
- Quality Team organization, responsibilities, purpose, scope; lines of authority, and communication;
- Design checks (plans, specifications, calculations, reports, programs/modeling, cost estimates, etc.);
- Standardized procedures and documentation;
- Document control, revisions, and audit protocol;
- Project design QA audits and certifications;
- Independent professional technical reviews; and
- Quality focus and consistency from all team personnel.

One of the most critical aspects of the QMP is the identification and scheduling of quality assurance/quality control reviews. Each task shall be reviewed at key design milestones in accordance with the following:

1. A formal quality assurance review process for each discipline shall occur prior to each submittal to the City; informal reviews shall occur throughout the entire design process.
2. The project schedule shall accommodate sufficient time for quality assurance reviews. Meeting scheduled dates ensures implementation of the review process.
3. In-house and interdisciplinary reviews will be completed by the Quality Assurance/Quality Control Manager for the project and designated reviewers.
4. Additional interim reviews shall be scheduled as required by the Project Manager. A design quality checklist will be used to ensure critical elements have been included in the project and are adequately represented in the documents.
5. The Project Manager shall conduct weekly coordination meetings to facilitate information exchange and ensure understanding of all coordination items, and monitor progress.
6. The Project Manager shall record the proceedings of each review meeting summarizing the results and type of each review. The report shall be included in the quality assurance/quality control documentation of the QMP or design analysis for the project.

Section 4

Firm Qualifications and Experience

GHD is a world leader in science, engineering, and environmental consulting, operating in the global markets of transportation, energy and resources, environment, property and buildings, and water. We provide engineering, architecture, environmental and construction services to private and public sector clients.

Established in 1928 and privately owned by our people, GHD operates across five continents – Asia, Australia, Europe, North and South America. We employ more than 8000 people in 200+ offices to deliver projects with high standards of safety, quality and ethics across the entire asset value chain. Driven by **a client-service led culture**, we connect the knowledge, skill and experience of our people with innovative practices, technical capabilities and robust systems to create lasting community benefits.

A member of the World Business Council for Sustainable Development, GHD operates under a Practice Quality Management System, ISO 9001:2008 and an Environmental Management System, ISO 14001:2004 which are certified by Lloyds Register Quality Assurance.

GHD has been serving southern California communities since 1951, and we have a long history of working collaboratively with municipalities, agencies, special districts, and private clients in the region. Our team will draw upon technical, production and administrative support from our Irvine office to deliver this project.

Legal Name

GHD Inc.

Type

California Corporation

Office

175 Technology Drive, Suite 200
Irvine, CA 91791

Authorized Officer

Paul Hermann | Principal
175 Technology Drive, Suite 200
Irvine, CA 91791
P: 949-585-5217
Paul.Hermann@ghd.com

Primary Contact

Sarmad Farjo, PE | Project Manager
175 Technology Drive, Suite 200
Irvine, CA 91791
P: 949-585-5238
Sarmad.Farjo@ghd.com

GHD is committed to providing municipal agencies with quality, on-time, budget-conscience, value-engineered project deliverables. We are also locally experienced, having delivered numerous roadway and pavement rehabilitation projects within the Counties of Los Angeles, Orange, San Diego, Riverside, and San Bernardino.

Sidewalk and Access Ramp Improvements Design Experience

The GHD team has extensive experience in providing ADA accessible pedestrian design, bidding and construction support services to municipalities throughout southern California. Our team has provided quality consulting services to local agencies such as the City of Moreno Valley, City of Downey, City of Pico Rivera, City of San Diego, City of Long Beach and many others. From the City of Diamond Bar's ADA Ramps Annual Improvements Program, to the City of San Gabriel Safe Streets projects, to the City of Moreno Valley Cycle 6 and 7 ADA Improvements, and the City of Chula Vista's ADA compliance condition assessments of City's sidewalk ramps, GHD has completed numerous projects helping Cities comply with current ADA regulations as referenced per the revised regulations for Titles II and III of the Americans with Disabilities Act of 1990 (ADA) as published in the Federal Register on September 15th, 2010.

These regulations adopted revised, enforceable accessibility standards called the 2010 ADA Standards for Accessible Design, "2010 Standards." On March 15, 2012, compliance with the 2010 Standards was required for new construction and alterations under Titles II and III. March 15, 2012, is also the compliance date for using the 2010 Standards for program accessibility and barrier removal.

GHD Project References

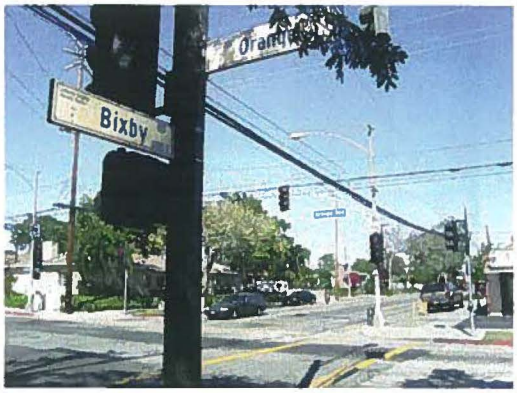
Orange Avenue Improvements, City of Long Beach, CA

GHD provided design engineering for a busy collector roadway in a high traffic area within the City of Long Beach. This project included the removal and replacement of damaged pavement, curb and gutter, and sidewalk; pavement rehabilitation and reconstruction; ADA ramp upgrades to meet federal requirements; and sidewalk and parkway improvements.

The project also features traffic striping. During the design review process, GHD met diligently with City staff and provided graphic exhibits of the project so that all stakeholders could understand how the project would look. GHD successfully completed on schedule and within budget.

Some of the challenges that GHD overcame include:

- Public outreach and organization with property owners
- Roadways in busy commercial areas
- Traffic control was critical



Client/Owner: City of Long Beach

Reference	Robert Woodings Project Manager 949-371-3272 rwoodings@andpen.com
Completion	2015
Fee	$108k

Cycle 6 and 7 Citywide Pedestrian and Bicycle Facility Enhancements, City of Moreno Valley, CA

Client/Owner: City of Moreno Valley

Reference	Henry Ngo, PE Sr. Project Manager 951-413-3106 henryn@moval.org
Completion	Ongoing
Fee	$200k

The City of Moreno Valley selected GHD to provide plans, specifications, cost estimates, and right-of-way acquisition services for the Cycle 7 Citywide Pedestrian and Bicycle Facility Enhancements project. The base bid project includes the street widening of Alessandro Boulevard from east of Perris Boulevard to Apple Blossom Lane, plus Brodiaea Avenue widening from Perris Boulevard to 600 feet easterly. Also included was the addition of sidewalk at the aforementioned locations plus the south side of Perris Boulevard from Brodiaea northerly approximately 650 feet. In addition 42 ADA accessible curb ramps at five intersections where reconstructed to meet the current ADA code, and a Class II bike lane along one segment of Alessandro Boulevard was installed.

Professional consulting services being provided by the GHD team include: preparation of plans, specifications, and estimate to include street improvement plans, striping and signing plan, and stormwater pollution prevention plan; environmental documents; hydrology and hydraulics; survey; geotechnical; potholing; meeting facilitation; utility coordination; right-of-way acquisition and review.

The GHD team is also providing environmental, permit processing, geotechnical engineering, surveying and topographic mapping, existing utilities research, utility potholing, and right-of-way/easement services.

Ball and Sunkist Intersection, City of Anaheim, CA

GHD provided design for the widening of the intersection at Ball Road and Sunkist Street to accommodate an additional westbound through-lane and dual southbound left turn lanes. The project required widening all four legs of the intersection by relocating the curbs, narrowing the parkway width, and in some locations acquiring additional right-of-way, as well as complete replacement of the existing traffic signal. The intersection widening improvements were designed to reduce vehicular traffic congestion, improve regional circulation, and comply with the City's General Plan Circulation Element for 6-lane and 4-lane arterials. The project was designed to accommodate the needs of bicycles, pedestrians, and transit users.

GHD conducted numerous utility relocations (water service, electrical, communication) and relocated and added new street lights. Along Sunkist Street, the sidewalk is separated from the curb by a planter with proposed new landscaping. Driveway aprons and curb ramps were upgraded throughout the project site to meet the current ADA standards, improving pedestrian accessibility and safety. The existing bus stops at the intersection were upgraded with adequate lighting areas and space for additional bus stop amenities. The project also included a Water Quality Management Plan to mitigate any impacts to stormwater quality.

Client/Owner: City of Anaheim

Reference	Quang Le, PE Principal Engineer 714-765-4526 qle@anaheim.net
Completion	2015
Fee	$480k

Telegraph Road Improvements, City Pico Rivera/City of Downey, CA

GHD provided design engineering and land surveying services for a busy, arterial roadway in a high traffic commercial area within both Cities of Downey and Pico Rivera. This project included the widening of the intersections; the addition of a raised median; modification of traffic signals; removal and replacement of damaged pavement; curb and gutter and sidewalk; pavement rehabilitation and reconstruction; as well as ADA ramp upgrades to meet Federal requirements; and sidewalk and parkway improvements. The project also included storm drain system modifications, landscape beautification, and street and pedestrian lighting. During the design review process GHD held public meetings and provided graphic exhibits of the project so that all stakeholders could get a feel for how the project would look. The project was successfully designed and completed on schedule and within budget.

Client/Owner: City of Downey

Reference	Edwin Norris, PE Deputy Director 562-904-7109 enorris@downeyca.org
Completion	2015
Fee	$240k

Artesia Boulevard and Stearns Street Rehabilitation, City of Long Beach, CA

Client/Owner: City of Long Beach

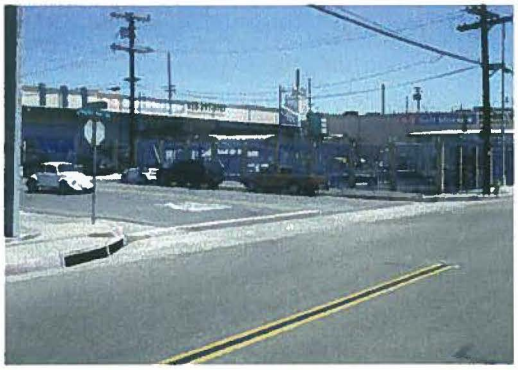
Reference	Onofre Ramirez, PE Senior Civil Engineer 562-570-6183 onofre.ramirez@longbeach.gov
Completion	2014
Fee	$143k

The project included removal and replacement of damaged sections of pavement, roadway realignment, pavement resurfacing, removals and replacements of damaged curb and gutter and sidewalks, removal and replacement of intersection access ramps, adjusting manholes, adjusting covers to utilities and survey monuments, traffic striping, traffic sign replacement, and installation of traffic loop detectors. The scope of work included the preparation of plans, specifications and cost estimates for street resurfacing.

The project also included community outreach and notification to maintain communication between the City of Long Beach and its residents and businesses, ensuring that the project addressed community needs.

The GHD Team accomplished this outreach by incorporating a series of meetings and website postings to ascertain community needs, develop concept plans, and confirm the public's needs were met by the project.

Pacific Highway Curb Ramps Barrier Removal Project, City of San Diego, CA



Client/Owner: City of San Diego

Reference	Bryan Olson Project Engineer 858-492-5059 olsonb@sandiego.gov
Completion	2016
Fee	$101k

The Pacific Highway frontage road intersects Bandini Street, Wright Street, Estudillo Street, Sutherland Street, Hancock Street and Noell Street in the Midway Area in San Diego. The existing curb returns at these intersections did not have curb ramps required for compliance with the Americans with Disability Act (ADA) path of travel. Ramp improvements to comply with ADA requirements were complicated by spatial conflicts between the proposed ramp modifications and several existing curb inlets, which occupied the existing curb returns.

As the prime consultant for this project, GHD provided civil design and project management for the ramp modifications to provide compliance with ADA path of travel requirements. GHD designed modifications and relocations of existing stormwater inlets which conflicted with the revised ramp layouts. GHD prepared a hydrology and hydraulics study to determine the existing runoff rates to the inlets. A geotechnical investigation was performed to study the subsurface conditions at the inlet modification locations. Conflicting utilities were identified and re-routed to accommodate the revisions to the pedestrian right-of-way. GHD also provided structural design of modifications to the existing conflicting inlets, transforming inlets into junctions and connecting new pipes to the existing inlet structure.

GHD successfully completed the design and provided the City with ramps and path of travel upgrades to meet ADA. GHD provided the city with PS&E to bid the project out and also supported the City during the bidding process and a contractor is being selected to construct the project.

Section 5

Project Team

Our project team members have been carefully selected to meet the project requirements of experience and work approach to achieve the City's vision. Our **Project Manager**, Sarmad Farjo, PE, will lead the project development and project management efforts, serving as the City's main point of contact. Our **QA/QC Manager,** Ludy Smeets, PE, will provide quality oversight and oversee the overall project. Our **Principal In Charge,** Brad Kutzner, PE, will ensure that the City's needs are met.

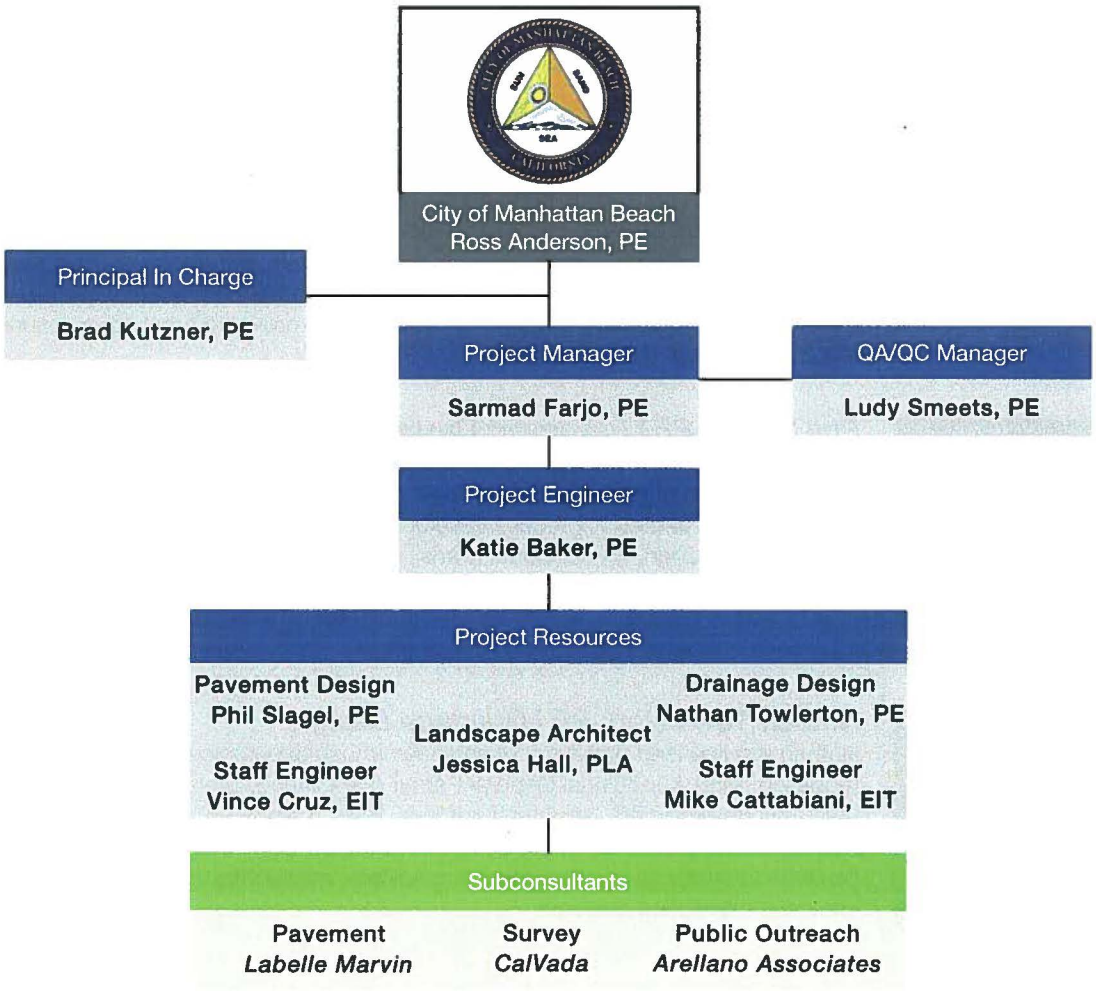
Our Subconsultants consist of Labelle Marvine for pavement engineering, CalVada for surveying, and Arellano Associates for public outreach.

The biography summaries of key team members provided on the following pages highlight the multi-disciplined professionals within our project team and identify the project role and responsibilities assigned to them. Key team member resumes can be found in Appendix A

Our organizational chart below identifies each member of our team structure.

In addition to providing a team with deep experience, the GHD Team includes unique expertise and the critical multi-disciplined skillsets required to execute this project.

Organizational Chart



Key GHD Team Members

Brad Kutzner, PE | Principal In Charge

Brad has over 37 years of experience as a project manager and Principa-in-Charge on southern California engineering and construction projects. These projects include all manner of infrastructure projects, as well as the design and new construction of many public infrastructure projects. They have ranged from small to major new infrastructure up to $100 Million in construction cost. Mr. Kutzner has successfully completed roadway and infrastructure projects in Southern California and will provide the City with great benefit on this project.

Sarmad Farjo, PE | Project Manager

Sarmad has 25 years of design and management experience with roadway design, roadway widening, intersection upgrade and widening projects, traffic control, traffic signals, signing and striping projects, major infrastructure projects for public utility companies/agencies, and major land development projects for public and private clients. He is familiar with the City's standards as well as the latest Regional Water Quality Control Board Requirements and has experience dealing with regulatory agencies and Caltrans for permits. Mr. Farjo's skills set and experience will greatly benefit the City on this project.

Ludy Smeets, PE | QA/QC Manager

Ludy has over 36 years of experience in the civil engineering profession, including 20 years in the public sector, and over 16 years with private consulting firms serving public entities and private land developers. Over the past 20 years, Mr. Smeets has managed various street rehabilitation, street widening, and site development improvement projects for local agencies, including experience working with cities that reside in Los Angeles County. The high quality and technical expertise that Ludy brings to our project team is shown in his proven track record of award winning projects completed in Southern California.

Katie Baker, PE | Project Engineer

Katie is a civil engineer with over 6 years' experience in transportation and roadway improvements, site development, and infrastructure upgrades. Her experience includes geometric roadway design, intersection upgrades, ADA accessibility improvements, stormwater management, commercial and residential development, neighborhood revitalization, and school infrastructure improvements. Several of her past projects have included innovative designs to alleviate traffic congestion and improve safety and access to multi-modal transportation. Katie's experience has provided a broad exposure to jurisdictional requirements and compliance with local standards.

Phil Slagel, PE | Pavement Design

Phil has over 25 years of experience in project/design management, roadway/roadway drainage design and analysis, alternative design analysis, project scoping and prioritization, design & documentation process development and implementation. He is also experienced in pavement design, roundabouts, transit design, traffic control design, construction staging, standard plan development, and constructability review.

Nathan Towlerton, PE | Drainage Design

Nathan is a licensed professional engineer whose experience includes hydraulic & hydrologic modeling, MS4 & Industrial General Permit compliance, Stormwater Pollution Prevention Plan (SWPPP) development, structural analysis, BMP maintenance compliance, and construction oversight. He specializes in the design of structural stormwater BMPs including bioretention/ biofiltration systems, hydrodynamic separators, media filtration, and detention/retention/ rainwater harvesting systems.

Subconsultants

Each subconsultant was selected to increase the benefits to the City's project and to enhance its successful delivery both within budget and on schedule. GHD acknowledges and understands that any change in the sub-consultants will require written permission from the City.

Labelle Marvin (Pavement Engineering)

LaBelle Marvin, Inc. is a full-service pavement engineering firm ideally qualified to provide all necessary technical services specializing in pavement engineering, material testing, design, and pavement evaluations. The strength of LaBelle Marvin lies in their in-house capabilities including full-service Caltrans certified soils and asphalt concrete laboratory, Falling Weight Deflectometer deflection testing equipment, Ground Penetrating Radar GPR, coring and boring machinery, and the expertise of our multidiscipline engineering department.

Relevant Key Personnel: Steve Marvin, PE | Principal Pavement Engineer

Brookshire Avenue Pavement Improvement Study

The City of Downey identified two segments of Brookshire Avenue in need of restoration/rehabilitation. Investigation of the roadway segments was undertaken by Labelle Marvin, whom provided a combination of visual evaluation, pavement strength testing (FWD) and component analysis, field coring and boring sampling, laboratory analysis, pavement evaluation, and the final report.

Relevant Staff: Steve Marvin

Project Dates: 2015 - 2015

City of Downey

Edwin Norris

562-904-7109

Valley View Street Improvements

Labelle Marvin assisted the City of Buena Park with the investigation of Valley View Street between Orangethorpe to Caballero, which provided the basis for development of improvement requriements to meet long-term perfomance expectations. The scope of work included visual evaluation, pavement strength testing (FWD) and component analysis, field coring and boring sampling, laboratory analysis, pavement evaluation, and the final report.

Relevant Staff: Steve Marvin

Project Dates: 2015 - 2015

City of Buena Park

Jeff Townsend

714-562-3680

CALVADA SURVEYING, INC.

Calvada Surveying, Inc. (Survey)

Calvada is a full service SBE, MBE, DBE, and DVBE land surveying firm (providing Topographic Surveys, ALTA/ACSM surveys, Boundary Surveys and Mapping, Telecom Surveys, Construction Staking, Environmental Surveys, 3D Scanning Services). Calvada uses the state of the art surveying equipment such as GPS, Leica HDS and has a unique field to office process.

Relevant Key Personnel: Saul Melgarejo, LSIT | Survey Project Manager, Armando DuPont, PLS | Principal Land Surveyor

Rehabilitation of Wisconsin Avenue

Calvada performed a full Topographic Survey for the rehabilitation of Wisconsin Ave., Sequoia Dr., Michigan Ave. and Cornish Ave. in the City of Lynwood.

Relevant Staff: Saul Melgarejo, Armando Dupont

Project Dates: 2016 - 2016

Civil Source
Amy Amirani
949-585-0477

Street Paving Rehabilitation Project

Calvada performed a full Topographic Survey for the rehabilitation of (1) Michillinda Ave.–Orange Grove to Sierra Madre Blvd and (2) W. Montecito Ave.–Michillinda Ave. to Sunnyside Ave. in the City of Sierra Madre.

Relevant Staff: Saul Melgarejo, Armando Dupont

Project Dates: 2014 - 2014

Willdan Engineering
Ray Wellington
714-345-7457

Arellano Associates (Public Outreach)

Arellano Associates (AA) is a consulting firm specializing in communications and public outreach for the public sector. AA has extensive transportation outreach experience with an array of agencies within Los Angeles County, including the CALTRANS, METRO, and cities in the surrounding areas.

Relevant Key Personnel: Susan DeSantis | Sr. Project Manager, Sohrab Mikanik | Project Coordinator

Capital Improvement Projects Outreach Program

AA is the lead Outreach Consultant supporting the City of South Gate on a comprehensive outreach program for the CIP projects currently in the design and construction. Outreach activities include community meetings, information booths, one-on-one business outreach, collateral materials, mailings, meeting notifications, alerts and press release, and key stakeholder database development.

Relevant Staff: Susan DeSantis

Project Dates: 2014 - 2016

City of South Gate
Arturo Cervantes, PE
323-563-9567

Performance Measurement Framework Strategic Plan

Arellano Associates was responsible for engaging the region's transportation stakeholders in a constructive dialogue that led to consensus on priority needs and goals. The Outreach Approach involved one-on-one outreach to targeted stakeholders (subregions) input on goals and objectives, documentation of user needs and requirements; and input into gap analysis.

Relevant Staff: Susan DeSantis, Sohrab Mikanik

Project Dates: 2014 - 2015

Los Angeles County Metropolitan Transportation Authority
Steve Gota
213-922-3043

Resource Allocation Matrix

CITY OF MANHATTAN BEACH - MANHATTAN AVE/HIGHLAND AVE IMPROVEMENTS PROJECT
RESOURCE ALLOCATION MATRIX

TASK	Task Description	Principal F2 (PIC, QC Manager)	Associate F1 (Project Manager)	Engineer D3 (Senior Engineer)	Engineer C2 (Project Engineer)	Engineer B3 (Staff Engineer)	Admin Support	Total GHD Hours	CALVADA (SURVEYING)	LA BELLE MARVIN (PAVEMENT)	ARELLANO (PUBLIC OUTREACH)	Total Hours
		Hours							Hours			
TASK 1	PROJECT MANAGEMENT AND MEETINGS											
1	**PROJECT MANAGEMENT**											
1.1	Project Coordination		8		24			32				32
1.2	Project Management throughout the life of the project		24					24				24
	Subtotal		32		24			56				56
2	**PROJECT MEETINGS**											
2.1	Attend Kick off meeting		3		3			6				6
2.2	60% Design Progress Meeting		3		3			6				6
	Subtotal		6		6			12				12
SUBTOTAL TASK 1												68
TASK 2	PROJECT PS&E PACKAGE											
3	**TOPOGRAPHIC SURVEY**											
3.1	Field topographical survey (Calvada)		1				1	2	60			62
	Subtotal		1				1	2	60			62
4	**UTILITY RESEARCH**											
4.1	Desktop utility research					4		4				4
	Subtotal					4		4				4
5	**PAVEMENT REPORTS**											
5.1	FWD TEST and Report		2				2	4		84		88
	Subtotal		2				2	4		84		88
6	**60% PLANS, SPECIFICATIONS AND ESTIMATES**											
6.1	Street Improvement Plans				16	24		40				40
6.2	Signing and Striping Plans					4		4				4
6.3	Utility Relocation and Connection Plans				8			8				8
6.4	Engineer's Estimate			2				2				2
6.5	Technical Specifications Table of Contents			1				1				1
6.6	Quality Control	4						4				4
	Subtotal	4		3	24	28		59				59
7	**95% PLANS, SPECIFICATIONS AND ESTIMATES**											
7.1	Street Improvement Plans				8	32		40				40
7.2	Signing and Striping Plans					8		8				8
7.3	Traffic Control Plans			8		16		24				24
7.4	Utility Relocation and Connection Plans				16			16				16
7.5	Engineer's Estimate			4				4				4
7.6	Technical Specifications			4				4				4
7.7	Quality Control	4						4				4
	Subtotal	4		16	24	56		100				100
8	**100% PLANS, SPECIFICATIONS AND ESTIMATES**											
8.1	Street Improvement Plans				8	8		16				16
8.2	Signing and Striping Plans					2		2				2
8.3	Traffic Control Plans			8		16		24				24
8.4	Utility Relocation and Connection Plans				8			8				8
8.5	Engineer's Estimate			4				4				4
8.6	Technical Specifications			8				8				8
8.7	Quality Control	4						4				4
	Subtotal	4		20	16	26		66				66
SUBTOTAL TASK 2												379
TASK 3	PUBLIC OUTREACH											
9	**Public Outreach**											
9.1	Public Outreach including 4 meetings		4					4			105	109
	Subtotal		4					4			105	109
SUBTOTAL TASK 3												109
TASK 4	BID AND CONSTRUCTION PHASE											
10	**BID SUPPORT**											
10.1	Provide on-going support during bidding phase		4		2			6				6
	Subtotal		4		2			6				6
11	**CONSTRUCTION SUPPORT**											
11.1	Provide on-going support during construction phase		10		4			14				14
	Subtotal		10		4			14				14
SUBTOTAL TASK 4												20
	REIMBURSABLE EXPENSES (NOT TO EXCEED)											
	Reimbursable expenses											
	Subtotal											
Total Task 1 through 4		12	59	39	100	114	3	327	60	84	105	576

	OPTIONAL TASKS											
	Presentation Drawing Rendering			16	16			32				32
	Subtotal			16	16			32				32
Total Optional Tasks				16	16			32				32

CITY OF MANHATTAN BEACH - PARKVIEW AVE IMPROVEMENTS PROJECT
RESOURCE ALLOCATION MATRIX

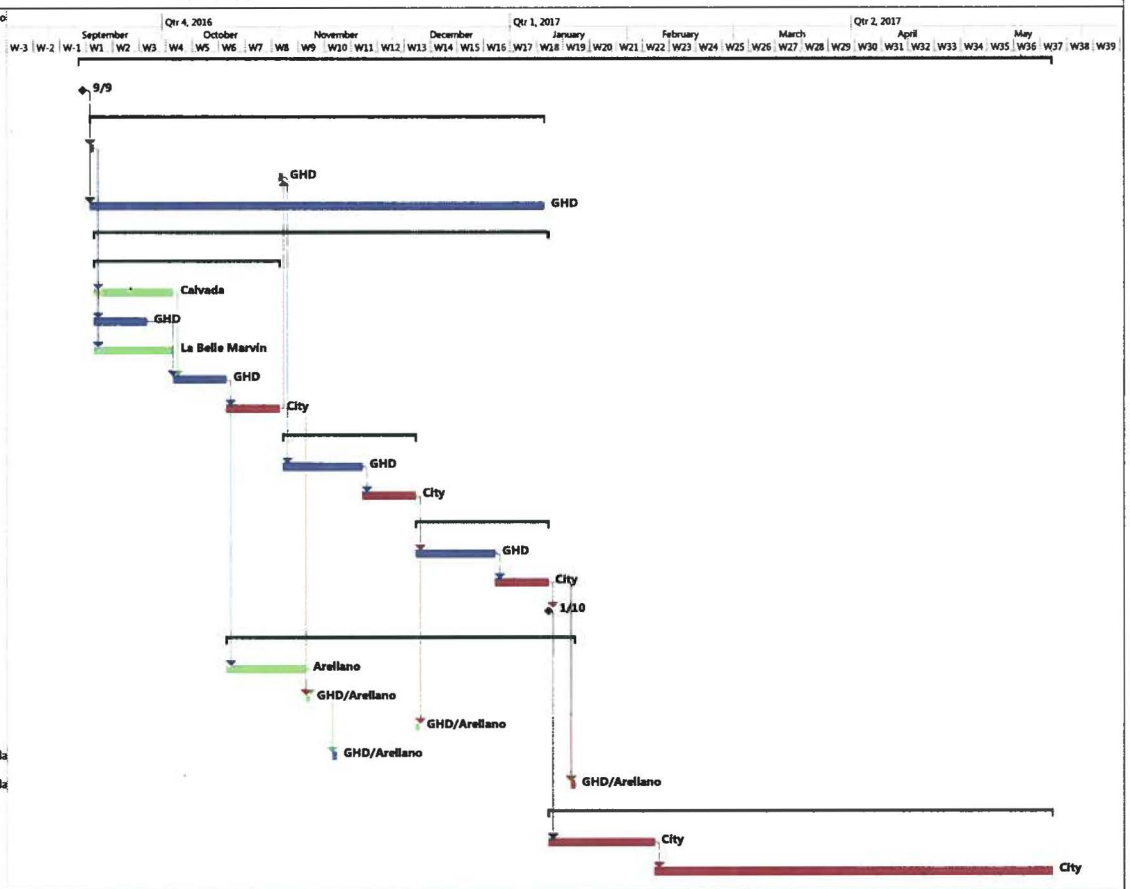
TASK	Task Description	Principal F2 (PIC, QC Manager)	Associate F1 (Project Manager)	Engineer D3 (Senior Engineer)	Engineer C2 (Project Engineer)	Engineer B3 (Staff Engineer)	Admin Support	Total GHD Hours	CALVADA (SURVEYING)	Total Hours
		Hours							Hours	
TASK 1	PROJECT MANAGEMENT AND MEETINGS									
1	**PROJECT MANAGEMENT**									
1.1	Project Coordination		8		12			20		20
1.2	Project Management throughout the life of the project		12					12		12
	Subtotal		20		12			32		32
2	**PROJECT MEETINGS**									
2.1	Attend Kick off meeting		3		3			6		6
2.2	60% Design Progress Meeting		3		3			6		6
	Subtotal		6		6			12		12
SUBTOTAL TASK 1										44
TASK 2	PROJECT PS&E PACKAGE									
3	**TOPOGRAPHIC SURVEY**									
3.1	Field topographical survey (Calvada)		1				1	2	9	11
	Subtotal		1				1	2	9	11
4	**UTILITY RESEARCH**									
4.1	Desktop utility research					2		2		2
	Subtotal					2		2		2
6	**60% PLANS, SPECIFICATIONS AND ESTIMATES**									
6.1	Street Improvement Plans				8	8		16		16
6.2	Landscaping and Irrigation Plans					12		12		12
6.3	Utility Relocation and Connection Plans				4			4		4
6.4	Engineer's Estimate			1				1		1
6.5	Technical Specifications Table of Contents			1				1		1
6.6	Quality Control	2						2		2
	Subtotal	2		2	12	20		36		36
7	**95% PLANS, SPECIFICATIONS AND ESTIMATES**									
7.1	Street Improvement Plans (including retaining wall design)				8	8		16		16
7.2	Landscaping and Irrigation Plans					16		16		16
7.3	Utility Relocation and Connection Plans				4			4		4
7.4	Engineer's Estimate			2				2		2
7.5	Technical Specifications			2				2		2
7.6	Quality Control	2						2		2
	Subtotal	2		4	12	24		42		42
8	**100% PLANS, SPECIFICATIONS AND ESTIMATES**									
8.1	Street Improvement Plans				2	8		10		10
8.2	Landscaping and Irrigation Plans					8		8		8
8.3	Utility Relocation and Connection Plans				4			4		4
8.4	Engineer's Estimate			2				2		2
8.5	Technical Specifications			2				2		2
8.6	Quality Control	2						2		2
	Subtotal	2		4	6	16		28		28
SUBTOTAL TASK 2										119
TASK 3	RIGHT OF WAY ENGINEERING									
9	**RIGHT OF WAY**									
9.1	Prepare R/W legal and plats (Calvada)				1			1	6	7
	Subtotal				1			1	6	7
SUBTOTAL TASK 3										7
TASK 4	BID AND CONSTRUCTION PHASE									
10	**BID SUPPORT**									
10.1	Provide on-going support during bidding phase		4		2			6		6
	Subtotal		4		2			6		6
11	**CONSTRUCTION SUPPORT**									
11.1	Provide on-going support during construction phase		4		4			8		8
	Subtotal		4		4			8		8
SUBTOTAL TASK 4										14
	REIMBURSABLE EXPENSES (NOT TO EXCEED)									
	Reimbursable expenses									
	Subtotal									
Total Task 1 through 4		6	35	10	55	62	1	169	15	184

Section 7

Project Schedule

CITY OF MANHATTAN BEACH - MANHATTAN AVE/HIGHLAND AVE IMPROVEMENTS
PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish	Predecesso
1	MANHATTAN AVE/HIGHLAND AVE IMPROVEMENTS PROJECT	183 days	Fri 9/9/16	Tue 5/23/17	
2	NOTICE TO PROCEED	1 day	Fri 9/9/16	Fri 9/9/16	
3	TASK 1 - PROJECT MANAGEMENT AND MEETINGS	86 days	Mon 9/12/16	Mon 1/9/17	
4	Kickoff Meeting	1 day	Mon 9/12/16	Mon 9/12/16	2
5	Project Progress Meeting AT 60% DESIGN	1 day	Tue 11/1/16	Tue 11/1/16	13
6	Project Meetings and Coordination	86 days	Mon 9/12/16	Mon 1/9/17	2
7	TASK 2 - PROJECT PS&E	86 days	Tue 9/13/16	Tue 1/10/17	
8	60% PS&E (Preliminary Design)	35 days	Tue 9/13/16	Mon 10/31/16	
9	Topographical Survey	15 days	Tue 9/13/16	Mon 10/3/16	4
10	Utility Research	10 days	Tue 9/13/16	Mon 9/26/16	4
11	Pavement Investigation and Reports	15 days	Tue 9/13/16	Mon 10/3/16	4
12	Complete 50% PS&E	10 days	Tue 10/4/16	Mon 10/17/16	9,10,11
13	City review of 50% PS&E	10 days	Tue 10/18/16	Mon 10/31/16	12
14	95% Level Completion	25 days	Wed 11/2/16	Tue 12/6/16	
15	Prepare 90% PS&E	15 days	Wed 11/2/16	Tue 11/22/16	5
16	City Review of 90% PS&E	10 days	Wed 11/23/16	Tue 12/6/16	15
17	100% Level Completion	25 days	Wed 12/7/16	Tue 1/10/17	
18	Prepare 100% PS&E	15 days	Wed 12/7/16	Tue 12/27/16	16
19	City review and approve 100% PS&E	10 days	Wed 12/28/16	Tue 1/10/17	18
20	PS&E Approved	0 days	Tue 1/10/17	Tue 1/10/17	19
21	TASK 3 - PUBLIC OUTREACH	66 days	Tue 10/18/16	Tue 1/17/17	
22	Prepare outreach materials	15 days	Tue 10/18/16	Mon 11/7/16	12
23	Public Outreach Meeting # 1	1 day	Tue 11/8/16	Tue 11/8/16	22,13
24	Public Outreach Meeting # 2	1 day	Wed 12/7/16	Wed 12/7/16	16
25	City Council Meeting # 1	1 day	Tue 11/15/16	Tue 11/15/16	23FS+4 da
26	City Council Meeting # 2	1 day	Tue 1/17/17	Tue 1/17/17	19FS+4 da
27	TASK 4 - BID AND CONSTRUCTION PHASE	95 days	Wed 1/11/17	Tue 5/23/17	
28	Project Bidding	20 days	Wed 1/11/17	Tue 2/7/17	20
29	Project Construction	75 days	Wed 2/8/17	Tue 5/23/17	28

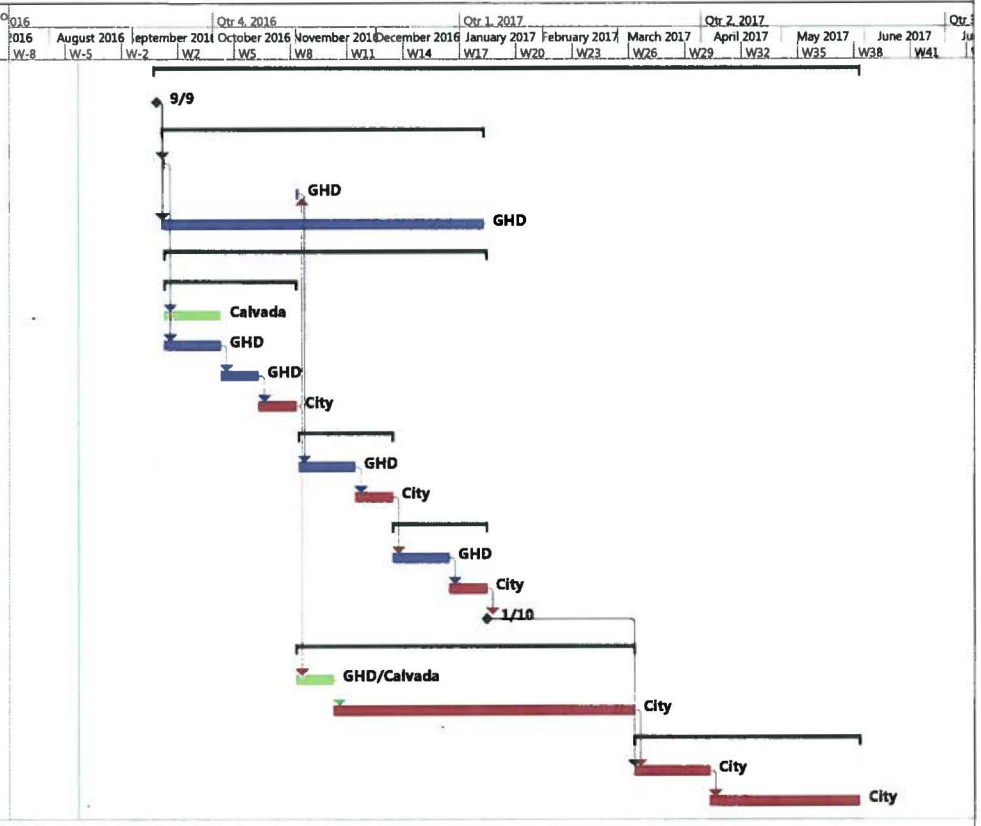


Project: Project Schedule
Date: Fri 8/12/16

Task · Split · Milestone · Summary · Project Summary · Inactive Task · Inactive Milestone · Inactive Summary · Manual Task · Duration-only · Manual Summary Rollup · Manual Summary · Start-only · Finish-only · External Tasks · External Milestone · Deadline · Progress · Manual Progress

CITY OF MANHATTAN BEACH - PARKVIEW AVE IMPROVEMENTS
PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish	Predecessors
1	**PARKVIEW AVE IMPROVEMENTS PROJECT**	**187 days**	**Fri 9/9/16**	**Mon 5/29/17**	
2	**NOTICE TO PROCEED**	**1 day**	**Fri 9/9/16**	**Fri 9/9/16**	
3	**TASK 1 - PROJECT MANAGEMENT AND MEETING**	**86 days**	**Mon 9/12/16**	**Mon 1/9/17**	
4	Kickoff Meeting	1 day	Mon 9/12/16	Mon 9/12/16	2
5	Project Progress Meeting AT 60% DESIGN	1 day	Tue 11/1/16	Tue 11/1/16	12
6	Project Meetings and Coordination	86 days	Mon 9/12/16	Mon 1/9/17	2
7	**TASK 2 - PROJECT PS&E**	**86 days**	**Tue 9/13/16**	**Tue 1/10/17**	
8	**60% PS&E (Preliminary Design)**	**35 days**	**Tue 9/13/16**	**Mon 10/31/16**	
9	Topographical Survey	15 days	Tue 9/13/16	Mon 10/3/16	4
10	Utility Research	15 days	Tue 9/13/16	Mon 10/3/16	4
11	Complete 50% PS&E	10 days	Tue 10/4/16	Mon 10/17/16	9,10
12	City review of 50% PS&E	10 days	Tue 10/18/16	Mon 10/31/16	11
13	**95% Level Completion**	**25 days**	**Wed 11/2/16**	**Tue 12/6/16**	
14	Prepare 90% PS&E	15 days	Wed 11/2/16	Tue 11/22/16	5
15	City Review of 90% PS&E	10 days	Wed 11/23/1	Tue 12/6/16	14
16	**100% Level Completion**	**25 days**	**Wed 12/7/16**	**Tue 1/10/17**	
17	Prepare 100% PS&E	15 days	Wed 12/7/16	Tue 12/27/16	15
18	City review and approve 100% PS&E	10 days	Wed 12/28/1	Tue 1/10/17	17
19	PS&E Approved	0 days	Tue 1/10/17	Tue 1/10/17	18
20	**TASK 3 - RIGHT-OF-WAY**	**90 days**	**Tue 11/1/16**	**Mon 3/6/17**	
21	Prepare Legal and Plats	10 days	Tue 11/1/16	Mon 11/14/16	12
22	Right-of-way acquisition	80 days	Tue 11/15/16	Mon 3/6/17	21
23	**TASK 4 - BID AND CONSTRUCTION PHASE**	**60 days**	**Tue 3/7/17**	**Mon 5/29/17**	
24	Project Bidding	20 days	Tue 3/7/17	Mon 4/3/17	19,22
25	Project Construction	40 days	Tue 4/4/17	Mon 5/29/17	24



Project: Project Schedule
Date: Fri 8/12/16

Task	Project Summary	Manual Task	Start-only	Deadline			
Split	Inactive Task	Duration-only	Finish-only	Progress			
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress			
Summary	Inactive Summary	Manual Summary	External Milestone				

Section 8

Contract Exceptions

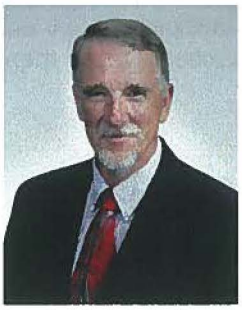
GHD takes no exceptions to the information presented in the City's Request for Proposal and Professional Services Agreement. GHD is able to execute the City's Professional Services Agreement without any changes.

Appendix A

Key Team Member Resumes

J. Bradley Kutzner, PE

Principal-In-Charge



Qualified. Cal Poly San Luis Obispo State University. BS in Architectural Engineering 1976.

Relevance to project. Brad Kutzner has over 37 years of experience as a Program Manager, a project manager and construction manager on southern California engineering and construction projects. These projects include all manner of infrastructure projects, as well as the design and new construction or renovation, of many public facilities. They have ranged from small to major infrastructure projects of up to $100 Million in construction cost. Mr. Kutzner's constructability review will be a great value to this project.

QC Manager

Ball and Sunkist Intersection Improvements | City of Anaheim, CA

Quality Control Manager for the preliminary and final design of the Ball & Sunkist intersection near Highway 57 in Anaheim CA. The objective of the project is to increase the capacity of the intersection since it is under sized for the current and projected traffic demands. The project includes widening the road width to fit additional lanes and signal modifications. The design is especially challenging due to the constraints on all sides by various businesses and residences

QC Manager

Callado Road Green Street BMP | City of San Diego, CA

Quality Control Manager for the design of a pilot green street BMP project for the City of San Diego. As the project director, responsible for coordinating with the client and the project manager to ensure all activities progress in time and within budget (Civil engineering fee of $392,000.

Project Manager

Pier Cruise Ship Terminal | San Diego, CA

Managed the design of a new Cruise Ship Terminal at the existing Broadway Pier. Provided design project management for the steel frame 52,000 sf terminal, housing ticketing, baggage handling functions and Customs and Border Protection (CBP) facilities. Coordinated with Center City Development Corporation on exterior design, Customs and Border Protection staff, environmental and planning staffs. Oversaw Florida-based architect and San Diego based subconsultants. Set up expedited plan review process with City of San Diego Building Department for this project. Architect from Florida had never pulled permits in San Diego and was not familiar with the requirements of the City. Provided major coordination effort that was needed to supplement design efforts and complete design on time.

Project Manager

B Street Cruise Street Terminal Facility Planning | San Diego, CA

Developed long range plans for the B Street Cruise Ship Terminal (main cruise ship terminal for Port of San Diego). Set up 3 ½ day planning session to develop the long range "master plan". Process recommended to the Board of Port Commissioners the size the project should be to serve the cruise business for the next 20 years. Brought in 3 world reknown Cruise terminal architecture firms to assist in the process in addition to local architect, engineers, Port and City staff. Recommendations: (1) $160M Pier and Terminal improvements; (2) Total reconstruct of Pier with new piles and deck, removal of existing terminal, in stages, to allow continued operation on at least one side at all times during

construction; (3) New 206,000 sf terminal constructed in similar phases.

Project Manager
Navy Pier Rehabilitation | San Diego, CA

Project Manager for the Navy Pier Rehabilitation and Broadway Pier Pile Encasement and Structural Deck Overlay projects. Provided full construction management functions, interfacing with contractor, District inspector, testing consultants and Port managers. Reviewed progress payments and provided recommendations; reviewed RFI's RFP's, submittals. Prepared Change Orders (mostly due to the Districts request). Prepared weekly minutes of construction meetings. Met weekly with Port managers and inspector to convey status of construction and budget. 100 ksf Broadway Deck Overlay began construction with Change Order based on 45% plans. Completed deck work on time, to allow cruise ships to use pier 4-5 months after starting.

Construction Manager
Crosby Street Pier Improvements | Port of San Diego, CA

Construction Management services for the improvement of the Crosby Street Pier to accommodate utility service needed by NOAA research vessel to be based in San Diego at the Crosby Street Pier. Improvements included installing new 1400A electrical substation, extending data and telecommunication system, water and sewer services from land based locations to the end of the 800' long pier. Required coordination with SDG&E, City of San Diego, NOAA, Port of San Diego Real Estate division, AT&T, and Tenth Avenue Marine Terminal Operations Staff.

Project Manager
National City Marine Terminal Structural Upgrades | National City, CA

Project Manager for the National City Marine Terminal is a 100 acre industrial maritime port that provides shipping access for import of foreign made cars and lumber shipments coming into the United States. Provided initial project management for the structural upgrade design of marine wharf facilities (4800 lf in length). Analyzed total project cost by wharf segment. Due to funding constraints, this $30 million dollar project had to be broken up into multiple design and construction contracts, stretched over many years.

Project Manager
National City Marine Terminal Fire Alarm Upgrades | National City, CA

Project manager for design and construction of complete replacement of Fire Alarm system at the NCMT. The project involved providing designs for the interior and exterior alarm functions for three warehouses, one administrative office for the Wharfingers and Terminal Supervisor, two remote bathroom buildings and numerous pull stations located along the wharf of the 130 ac facility. Provided coordination with other projects going on concurrently that were providing fiber optic and structural improvements to the Terminal facilities. Worked with Port tenants who operated business in the Terminal.

Project Manager
Tenth Avenue Marine Terminal Communications and Fire Alarm Upgrade | San Diego, CA

Successfully managed the construction of a $1 million upgrade to the existing communications and fire alarm systems throughout the Terminal. New fire alarm systems were required in eight existing facilities, including 785,000 sf of warehouse space and active fuel storage and dispensing facility and a bulk materials import and distribution operation.. Coordinated project with the Port Wharfingers who managed the 100 acre Marine Termnal and who coordinated storage of dozens of 300' to 400' tall electric generating windmills that were being stored on the site before shipment to other parts of the country. Project required continued operation of the active import/export terminal. Modified project designs, at Port request, to accommodate several unique tenant requests.

Sarmad Farjo, PE, CP

Project Manager

Qualified. BE in Civil Engineering. 1991

Connected. Member of California Board of Professional Engineers. ASCE – American Society of Civil Engineers. APWA – American Public Works Association. ASEM – American Society of Engineering Management. MIPENZ – Member Institute of Professional Engineers New Zealand

Relevance to project. Mr. Farjo has 25 years of civil engineering design and project management experience. He routinely interacts with clients, city and state officials, consultants, contractors and others. Mr. Farjo is a powerful advocate for his clients, representing them at meetings and industry conferences. Mr. Farjo has extensive experience in roadway design, roadway widening, intersection upgrade and widening projects, traffic control, traffic signals, signing and striping projects, major infrastructure projects for public utility companies/agencies, and major land development projects for public and private clients.

Project Director

Ball and Sunkist Intersection Improvements | City of Anaheim, CA

Project Director for the preliminary and final design of the Ball & Sunkist intersection near Highway 57 in Anaheim CA. The objective of the project is to increase the capacity of the intersection since it is under sized for the current and projected traffic demands. The project includes widening the road width to fit additional lanes and signal modifications. The design is especially challenging due to the constraints on all sides by various businesses and residences.

Project Director

Palm Avenue Improvement | City of San Diego, CA

Project director for a 1.5 mile roadway design project. The project consist of intersection widening, new signal design and signal modification, drainage design, geometric design, bus pads, ADA access, storm water management, and bike/pedestrian access design (civil engineering fee of $464,000).

Project Director

Callado Road Green Street BMP |City of San Diego, CA

Project director for the design of a pilot green street BMP project for the City of San Diego. As the project director, responsible for coordinating with the client and the project manager to ensure all activities progress in time and within budget (Civil engineering fee of $392,000).

Project Director

Streamview Drive Improvement |City of San Diego, CA

Project director for roundabouts and traffic calming measures along Streamview Drive. Project includes design of two roundabouts designed to fit within the existing right of way along a residential collector street. The project also includes traffic calming measures such as chicanes, designed to work with parking in the median and along the shoulders (civil engineering fee of $187,000).

Project Manager

University of California Irvine Medical Center | Orange, CA

Project manager for the master planning and design of a $700 million, 33- acre full service medical center campus. As the project manager, I am responsible for the planning, execution and coordinating the design of site improvements, grading, traffic, all wet and dry utilities including water, sewer, storm drains, gas, power, communication, chilled water, steam as well as the construction support for the project (civil engineering fee of $4 million, construction cost of $700 million).

Project Manager

Southern California Edison TRTP 500 KV Underground Transmission Lines | Chino Hills, CA

Project Manager for SCE 500 KV underground transmission lines in the City of Chino Hills. The work involved designing roadways, grading and

drainage to construct and maintain underground transmission lines in a trench crossing roads, hills and developed land. The project is first in kind in the USA with a capital cost of $1 billion, civil engineering design cost of $1.6 million.

Project Director

Campus Point Storm Drain Replacement | City of San Diego, CA

Project director for the design of a storm drain replacement project in Campus Point Street for the City of San Diego. As the project director, responsible for coordinating with the client and the project manager to ensure all activities progress in time and within budget (Civil engineering fee of $290,000).

Project Manager

Whitewood (Meadowlark) Road | City of Murrieta, CA

Project manager for Whitewood (Meadowlark) Road, a 2 mile major highway with median and bike lanes in the City of Murrieta. The work included prepare construction plans for the roadway, assist the City with right-of-way acquisition, prepare a detailed cost analysis, specification and bid document, assist the City with bidding process through award of contract and construction completion (project capital cost of $14 million, civil engineering cost of $0.9 million).

Project Manager

Roads Pavement Rehabilitation | City of Monrovia, CA

Project manager for roadway rehabilitation of Huntington Drive and Duarte Blvd in the City of Monrovia. This project involved streets resurfacing evaluation, assessing the exiting concrete and AC pavement and provide construction plans to rehabilitate the streets. The work included prepare construction plans, prepare a detailed cost analysis, specification and bid document, assist the City with bidding process through award of contract and construction completion (project construction cost of $1.0 million).

Project Manager

Keller Road Intersection | City of Murrieta, CA

Project manager for Keller Road and Antelope Road intersection upgrade, widening, traffic signal, and coordination with Caltrans and private property owners on land acquisition (project capital cost of $300 k, civil engineering design cost of $50k).

Project Manager

Olive Avenue Street Improvements | Winchester, CA

Project manager for the design of Olive Avenue, a 2 mile secondary highway between Leon Road and Winchester Road (HWY 79). This project was done as part of Tract 30322-1 and the Winchester Hills Development for Rancon Group (project cost $2.0 M, engineering cost $400 k).

Project Manager

Limonite Ave widening and Traffic Signals modifications | Jurupa Valley, CA

Project manager for the widening of Limonite Avenue between Wineville Avenue and Pats Ranch Road and modify the traffic signals for two intersections. This project was done as part of Lennar Homes development for Tract 33428.

Project Manager

Cedar Glen Street Improvement Project | Cedar Glen, CA

Project manager for the design of 4 miles of local roads and 25 culverts design in the Cedar Glen area of the San Bernardino Mountains. The work included preparing construction plans for the roadways and the storm drain system, assist the County with property and right-of-way research and preparing a detailed cost analysis. Prepare specification and bid document and assist the County with bidding process through award of contract and construction completion. (engineering design cost of $340,000, construction cost is $5.0 million)

Other related areas of interest

- BE in Civil Engineering - 1991
- PE Civil– State of California, USA
- CPEng (Civil) – IPENZ, New Zealand

Ludwig Smeets, PE

QA/QC Manager

Qualified. B.S. Civil Engineering, California State University, 1979

Connected. Member of American Public Works Association. Member of Society of American Military Engineers. Member of American Society of Civil Engineers.

Relevance to project. Mr. Smeets has over 35 years of experience in the civil engineering profession, including 16 years in the public sector, and over 16 years with private consulting firms serving public entities and private land developers. Beginning his career with the City of Fullerton, as a Project Engineer, Mr. Smeets became proficient in roadway, sewer, water, and storm drain design for various projects in the City of Fullerton. Also serving as Senior Civil Engineer for the City of Whittier, Mr. Smeets undertook responsibility for the Earthquake Damage Related Improvement Projects, including the repair of all damaged infrastructure within the city limits. Over the past 13 years, Mr. Smeets has managed various street rehabilitation, street widening, and site development improvement projects for local agencies, including direct experience working with Orange County Public Works, Cities of Buena Park, Moreno Valley, and Menifee in plan checking services and project management.

Project Manager

Cycle 6 and 7 Pedestrian and Bike Facility Improvements | City of Moreno Valley, CA

Project Manager for the full design document for the widening of Alessandro Boulevard, Perris Avenue, and Bodriaea Road, Mr. Smeets provided complete and experienced direction to include R/W engineering, drainage solutions, and overall grading design to assure all civil engineering standards were met for a sound constructible design bid plans, specifications, and cost estimate. The project challenges included utility relocations and timely determination of right-of-way needs to move into the R/W acquisition process as well as the relocation of utility poles preceding the construction start date.

Project Manager

Ball and Sunkist Intersection Improvements | City of Anaheim, CA

Project Manager for the preliminary and final design of the Ball & Sunkist intersection near Highway 57 in Anaheim CA. The objective of the project is to increase the capacity of the intersection since it is under sized for the current and projected traffic demands. The project includes widening the road width to fit additional lanes and signal modifications. The design is especially challenging due to the constraints on all sides by various businesses and residences.

Project Manager

Telegraph Road Improvements – Passons to Lakewood Blvd | City of Pico Rivera/City of Downey, CA

Project Manager for the preparation of PS&E to facilitate street improvements to include street reconstruction, rehabilitation, and complete intersection reconstruction at Lakewood Blvd. Additionally, the scope of work included raised landscape medians, traffic signal modifications,

Project Manager

Artesia Boulevard Street Improvements | City of Long Beach, CA

Project Manager for the preparation of PS&E for the rehabilitation and reconstruction of 3/4 miles of poor condition major arterial roadway. Project includes pavement rehabilitation, curb, gutter and sidewalk repair, and addition of curb ramps.

Project Manager

Culver Drive/Walnut Avenue Project Report | Irvine, CA

Project Manager for the preliminary design and project report for the proposed addition of a northbound lane on Culver Drive and an eastbound lane on Walnut Avenue to increase the intersection capacity and reduce congestion in the area. Construction was estimated to be at $2.3 million. Important elements in determining the design concepts included right-of-way acquisition, environmental study and impact report, the relocation of existing landscaping and traffic analysis.

Assistant Project Manager

Callado Road Green Street | City of San Diego, CA

Assistant Project Manager for the design of a pilot green street for the City of San Diego. The scope consisted of a feasibility study including site analysis, geotechnical investigation, drainage and hydrology report, alternative analysis and design report, and 30% plans. The scope was expanded to include final PS&E, bidding and construction support services. The goal was to design and construct a pilot study green street using low impact development structures to provide treatment of the runoff from the roadway and adjacent parcels with minimal impact to the pedestrian's walkway and the parking lane.

Project Manager

Drake/Chavez Park & Soccer Field | City of Long Beach CA

PM for the preparation of PS&E for an eight acre park site in the City of Long Beach, adjacent to the Port of Long Beach south of Anaheim Street along the east side of the Los Angeles River. Project also included grading and drainage, water quality, utility relocations, hardscape and landscape design, as well as structural retaining walls, roadways/parking lots, and site development.

Contract/Project Manager

Westminster Boulevard Improvements and Widening | Westminster, CA

Contract/Project Manager for the preparation of PS&E for 16,000 LF of arterial highway improvements, traffic signal and striping plans. Project also included median islands, landscaping, widening, street reconstruction, bike lanes, and street rehabilitation. The project included Federal funding with Caltrans coordination and processing.

Project Manager

Bolsa Avenue Improvements | City of Westminster, CA

Project Manager for the preparation of PS&E for 7,500 LF arterial highway improvements, traffic signal and striping plans. Project also included median islands, landscaping, widening, street reconstruction, bike lanes, and street rehabilitation. The project included Federal funding with Caltrans coordination and processing.

Project Manager

Pigeon Pass Road Improvements | City of Moreno Valley, CA

Project Manager for the design of street widening to include R/W acquisition, traffic signal improvements, roadway paving and striping, on-site private improvements, and utility relocations for a street length of approximately 2.5 miles. The scope of work also included construction management and inspection services for the City.

Other related areas of interest

- **Registered.** Civil Engineer, CA, 37221. Civil Engineer, NV, 11105. Civil Engineer, AZ, 28642.

Katharine Baker, PE

Project Engineer

Qualified. BSE (Civil), Northern Arizona University, 2010.

Connected. Member ASCE, Member Engineers Without Borders

Relevance to project. Katie is a civil engineer with 5 years' experience in transportation and roadway improvements, site development, stormwater drainage design, water and sewer utilities, and accessibility upgrades. Her experience includes geometric roadway design, parking layout, intersection upgrades, striping and signing projects, commercial and residential development, neighborhood revitalization, and school infrastructure improvements. Katie's experience with both private and public clients across southern California, Arizona and Australia has provided a broad exposure to a variety of jurisdictional requirements and compliance with local standards.

Project Engineer

Cycle 6 and 7 Citywide Pedestrian and Bicycle Facility Enhancements | City of Moreno Valley

Project Engineer responsible for the design for roadway widening, addition of sidewalk, adding Class II bike lane and ADA ramps improvements.

Project Engineer

University of California Irvine Medical Center, UC Irvine Health | Orange, CA

Project engineer for the Master Site Utility Plan (MSUP) of the $700 million, 50- acre full service medical center campus redevelopment. Katie was responsible for developing the Water Quality Section of the MSUP to provide long-term guidance for the planning and design of water quality infrastructure.

Project Engineer

University Avenue Improvements | City of San Diego, CA

Project engineer for the design of roadway improvements including a new median, pavement rehabilitation, new sidewalk and parking areas, driveway aprons, ADA compliant curb ramps, cross gutter reconstruction, striping, sign relocations, and lighted crosswalks. The goals of this project were to contribute to a safer walkable community, eliminate left turns onto 50th street from University, and to provide a dedicated left turn into the strip mall at the corner of 50th and University.

PCH Curb Ramp Barrier Removal Project | City of San Diego, CA

Project engineer for the curb ramp improvements on the Pacific Highway frontage road at the intersections of Bandini, Wright, Estudillo, Sutherland, Hancock and Noell Streets. The existing curb returns did not have ramps meeting ADA compliance requirements and improvements were complicated by conflicts with existing storm drain curb inlets.

Project Engineer

Orange Ave. Curb Extensions at 49th Street | City of San Diego, CA

Project engineer for the design of a pedestrian safety enhancement project that included curb extensions, ADA compliant curb ramps and the addition of crosswalk beacons. These safety measures were developed to alert motorists to the crosswalk adjacent to the Herbert Ibarra Elementary School drop off area. The goal of the project was to contribute to a safer walkable community.

Project Engineer

Izabel Street Bond Improvements, City of Flagstaff | Flagstaff, AZ

Project engineer for the Izabel Street Improvements. This project consisted of 93,000 square feet of roadway resurfacing, as well as

new sidewalk, curb and gutter, and ADA compliant curb ramps along the corridor. An extension of the existing waterline was also designed, which required careful coordination with existing storm drainage infrastructure. As a designer for the project, Katie's focus was on client needs, which included maintaining existing drainage patterns and incorporating existing improvements into the new design.

Project Engineer

Callado Road Green Street Infiltration BMP, San Diego CA | City of San Diego, CA

Project engineer for the design of a pilot green street project for the City of San Diego. As the civil designer, Katie is responsible for developing the design documentation for the proposed Callado Road Green Street Infiltration BMP. Proposed water quality structures include bio-retention and permeable pavement.

Project Engineer

Virginia Avenue Transit Center, General Services Administration| San Diego, CA

Project engineer for the concept design of the new multi-use transit facility being developed for the new US-Mexico International West Pedestrian Border Crossing at San Ysidro. As the civil designer, Katie was responsible for the site layout, incorporating feedback from multiple stakeholders to achieve the best possible outcome for the highly constrained site.

Project Engineer

Thomas Elementary Traffic Control Improvements, Flagstaff AZ | Flagstaff Unified School District

Katie was the civil design engineer for the Thomas Elementary Traffic Control project. This project included the design of a new parking area and upgrades to ADA accessible parking, and also incorporated a new drop-off/pick-up area and bus lane extension in order to mitigate traffic congestion near the school. Additionally, the project required innovative drainage solutions to accommodate the client's Low Impact Development (LID) storm water management requirements. As designer, Katie was responsible for achieving client objectives and requirements with innovative design solutions and for producing construction documentation.

Project Engineer

Easy Access Ramp Upgrades (Group 2) – Transport Projects Division | NSW Australia

Katie was part of the civil design team for the delivery of access ramp upgrades for nine railway stations. The project included access road modifications, DDA (Disability Discrimination Act) compliant car park upgrades, and DDA upgrade of access ramps at multiple stations. Katie attended site visits and client meetings, and prepared various reports throughout the design. During construction phase services Katie produced construction phase services (CPS) summary reports. In her role Katie demonstrated the desire and ability to meet accelerated client schedules while maintaining quality, which required careful and timely consideration of issues as they arose and forward planning skills.

Project Engineer

Dapto Interchange Upgrade – Transport Projects Division, Transport for NSW | NSW Australia

Katie was part of the civil design team for the delivery of the transport interchange upgrade at Dapto Station, delivered as part of the Easy Access Ramp upgrades (Group 1). The project included modification of the station precinct access road, sidewalks and landscaping, upgrade of Disability Discrimination Act (DDA) car parking, and a new DDA compliant Easy Access Ramp at Platform 2. In her role Katie also helped to organize input from sub-consultants and during construction phase services Katie was involved with civil and storm water redesign when unforeseen site conditions and poor soil quality required a prompt response from GHD, resulting in very positive client feedback.

Phillip D. Slagel, PE*

Pavement Design Engineer

* WA, NV, MT, GU, CNMI (CA Pending)

Qualified. B.S./ 1991/Civil Engineering Technology, Oregon Institute of Technology/OR

Connected. American Society of Civil Engineers, Society of American Military Engineers.

Relevance to project. Phillip has over 24 years of experience in project management, design management, street/roadway design, roadway drainage design, alternatives analysis, project scoping, and quality control. He has managed and coordinated technical & regulatory requirements and criteria with Federal, State, City, County, and Tribal approval authorities as well as utilities and other stakeholders. Phil also has experience in traffic control design, construction staging, and constructability review. All of this experience will be of value to half street design projects proposed under this RFP.

Team Lead

Ball and Sunkist Intersection Improvements | City of Anaheim, CA

Team Lead for the preliminary and final design of the Ball & Sunkist intersection near Highway 57 in Anaheim CA. The objective of the project is to increase the capacity of the intersection since it is under sized for the current and projected traffic demands. The project includes widening the road width to fit additional lanes and signal modifications. The design is especially challenging due to the constraints on all sides by various businesses and residences.

Team Lead

Palm Avenue Improvement | City of San Diego, CA

Design Team Lead Phase 2 of a 1.5 mile roadway design project. The project consist of intersection widening, new signal design and signal modification, drainage design, geometric design, bus pads, ADA access, storm water management, and bike/pedestrian access design.

Team Lead

Callado Road Green Street BMP | City of San Diego, CA

Design Team Lead for the final design of a pilot green street BMP project for the City of San Diego. As a team lead, responsible for coordinating with the project manager and the design team to ensure all activities progress in time and within budget.

Team Lead

Streamview Drive Improvement | City of San Diego, CA

Team Lead for roundabouts and traffic calming measures along Streamview Drive. Project includes design of two roundabouts designed to fit within the existing right of way along a residential collector street. The project also includes traffic calming measures such as chicanes, designed to work with parking in the median and along the shoulders (civil engineering fee of $187,000).

Team Lead

Orange Ave. Curb Extensions at 49th Street | City of San Diego, CA

Team Lead for the final design of a pedestrian safety enhancement project that included curb extensions and the addition of crosswalk beacons. These safety measures were developed to alert motorists to the crosswalk adjacent to the Herbert Ibarra Elementary School drop off area. The goal of the project was to contribute to a safer walkable community.

Chief Roadway Engineer

Guam Department of Public Works | Tamuning, Guam

As Chief Roadway Engineer, was the approval authority for roadway engineering designs on Guam. Worked in tandem with the Roadway Administrator of the Guam Department of Public Works (DPW) to insure that all projects meet the requirements of the Federal Aid Highway program and all of the exacting standards of the

Stewardship agreement as set forth by the Federal Highway Administration (FHWA) and the Government of Guam. The Chief Engineer also works in conjunction with the Mayors Council, Public Utilities, local developers, and Federal and Local regulatory agencies. The Chief Engineer also directs the department's engineering consultants, construction Management consultants, and other various sections of the Roadway Division.

Program Design Manager
Guam Department of Public Works - Program Management Team (PMT) | Tamuning, Guam
Served as overall Program Design Manager for all roadway projects included in the Guam Territorial Transportation Improvement Plan. Responsibilities included development of design standards and criteria, coordination with both local and remotely located design professionals, coordination with Federal and local regulatory agencies, and coordination with local government officials including Village Mayors, school officials, and the Guam Senatorial Transportation Committee Chair for a wide range of ongoing projects that were developed simultaneously. Projects ranged from emergency bridge repairs, to roadway rehabilitation, to capacity improvement projects, to coordination of the Hazard Elimination Study and subsequent roadway and Village Street safety enhancement projects.

Project Manager
Grand Central Parkway Bus Rapid Transit (BRT) Project | Las Vegas, Nevada
Project Manager for the Grand Central Parkway Widening Project which widened and improved Grand Central Parkway in the Urban Core of the City of Las Vegas. The roadway widening was required in order to accommodate the addition of transit lanes for a Bus Rapid Transit (BRT) project and associated median Transit Stations but also had to accommodate a newly inaugurated Grand Prix racing event in the City. The preliminary engineering phase of the project included extensive alternatives analyses. It also required a proactive approach in maintaining close coordination with the City of Las Vegas, local business leaders and interested stakeholders as the design matured to ensure that the design, cost and schedule met the strict project requirements without adversely impacting the local community. A very aggressive project schedule was made even more challenging when the addition of a 24" water main that needed to extend through the entire length of the project, was added only three months prior to project advertisement.

Project Manager
Guam Regional Medical City Intersection | Tamuning, Guam
This capital improvement project provided access to the Guam Regional Medical City from Route 3, a major arterial, in Dededo Guam. The project included all aspects of a major traffic study, from planning and data collection to signal warrants and extensive alternatives analysis. The analysis consisted of several alternative geometric designs and lane configurations and was complicated by the short distance it was located from the busiest intersection on Guam (350 to 500 feet) as well as a limited Right-of- Way corridor.

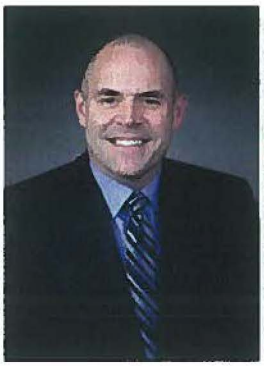
Project Development and Scoping Manager
Territorial Transportation Improvement Plan | Tamuning, Guam
Served as Project Development and Scoping Manager for the roadway and bridge portion of a four year fiscally constrained Transportation Improvement Plan. This task included assessment and categorization of each potential project. It also included the development of conceptual project scopes and cost estimates, as well as identification of constraints and other complications, for over 60 individual roadway and roadway drainage projects. Additional responsibility included development of the prioritization matrix that ultimately ranked the projects according to need and feasibility.

Other related areas of interest

- **Registered.** Civil Engineer- States of Washington, Vermont, Nevada, and the U.S. Territory of Guam - * California Pending

Nathan Towlerton, PE

WQMP Engineer



Qualified: Licensed Professional Civil Engineer (CA), BSc Chemical Engineering – Environmental Process, Oregon State University, 2006

Connected: Member American Society of Civil Engineers (ASCE), Environmental & Water Resources Institute (EWRI), American Public Works Association (APWA)

Professional Summary: Mr. Towlerton is a licensed professional engineer who has worked on a multitude of stormwater projects throughout Southern California. His experience includes hydraulic & hydrologic modeling, Stormwater Pollution Prevention Plan (SWPPP) development, Construction & Industrial General Permit compliance, structural analysis, BMP maintenance compliance, and construction oversight. Mr. Towlerton specializes in the design of structural stormwater BMPs including detention/retention/rainwater harvesting systems, hydrodynamic separators, media filtration, and biofiltration/bioretention systems.

Stormwater Engineer

Broadway Neighborhood Greenway | Los Angeles, CA

Provided design assistance to City of Los Angeles and local consulting firms on a 55,540 cu ft concrete stormwater infiltration vault for a pilot project in South Los Angeles. Requirements included a hydraulic analysis for overall system volume and design of integrated water quality sedimentation pond to meet requirements of City's Municipal Stormwater Permit.

Stormwater Design Engineer

Del Rey Apartments | Marine Del Rey, CA

Designed multiple high-rate proprietary biofilters as treatment segment of multifamily development storm drain system. Performed hydraulic analysis for proper design of inlet/outlet control features, biofilters media bed, and underdrain system. Site constraints required excessive burial depth and unique sloped slab design to meet structural and grading requirements.

Stormwater Design Engineer

LAX Taxiway T Improvements | Los Angeles, CA

Collaborated with local consulting firm on specification and design of large-scale StormFilter media stormwater filtration system for improvements to Los Angeles International Airport taxiway. Unique project constraints required hydraulic design to minimize head loss through the system, a structural design to meet aircraft loading requirements and evaluation of the filtration media to target pollutants of concern.

Stormwater Engineer

Civita Park | San Diego, CA

Provided engineering expertise to local consulting firm on design and construction of a 98,670 cu ft underground modular concrete stormwater hydromodification vault for City of San Diego. Design included hydraulic analysis and design of integrated high-capacity overflow system along with structural review.

Stormwater Engineer

Jefferson at Platinum Triangle | Anaheim, CA

Designed modular concrete underground infiltration sand filters for a 400-unit luxury multifamily residential site in Orange County. System requirements included design of sedimentation forebay and volume/flow-based analysis to provide both treatment and storage of the water quality volume. Underground design allowed maximization of site use while still meeting Orange County's stormwater quality and quantity regulations.

Stormwater Design Engineer
Amazon Distribution Center | San Bernardino, CA
Provided consulting assistance to local engineering firm with the design of three large-scale underground corrugated metal pipe stormwater detention systems for high-profile industrial development. Design requirements included hydraulic analysis, structural evaluation, and soils analysis.

Stormwater Design Engineer
Villa Metro | Santa Clarita, CA
Performed hydraulic analysis and design of large-scale underground infiltration gallery for single family development. Project requirements included structural evaluation of the system and hydraulic design of accompanying diversion structures.

Project Engineer
Campus Point Drive Storm Drain Replacement | San Diego, CA
Provided hydrology & hydraulics review and report revision of drainage study for replacement of aging stormwater conveyance system.

Stormwater Engineer
Kraft Foods | Fullerton, CA
Developed Stormwater Pollution Prevention Plan (SWPPP) for client as part of compliance with Industrial General Permit.

Stormwater Design Engineer
Otay Ranch Village 2 | Chula Vista, CA
Provided specification and design of Vortechs hydrodynamic separator as end of pipe stormwater treatment solution in compliance with the San Diego County Municipal Stormwater Permit.

Project Engineer
Storm Water Mitigation Plan Review | City of Oceanside, CA
Currently acting as an expert reviewer of Storm Water Mitigation Plans (SWMP) on behalf of the Engineering Division of the City of Oceanside. Reviews have been completed for the 2007 Permit (Order No. R9-2007-0001) and 2013 Permit (R9-2013-0001). GHD is also under contract to develop the City's BMP Design Manual and Storm Water Quality Management Plan template to comply with the 2013 Permit.

Project Engineer
United States Gypsum | Borrego Springs, CA
Completed hydraulic and hydrologic analysis for proposed stormwater conveyance system improvements at 298 acre industrial mining facility. Tasks included delineation of drainage areas, development of site hydrology for various storm events, outlet control structure design, and mitigation effect analysis for improvements to onsite retention basins.

Project Engineer
Morton Salt | Newark, CA
Engineer of record for hydraulic calculations and technical design of two bioretention facilities for stormwater improvements at existing industrial facility. Utilized volume/flow-based design to conform to facility size constraints while still meeting provisions of the City's Municipal Regional Stormwater Permit.

Project Engineer
ConAgra Foods | Azusa, CA
Developed Stormwater Pollution Prevention Plan (SWPPP) and provided guidance to client in transition from Notice of Non-Applicability to Notice of Intent in compliance with New Industrial Stormwater General Permit 2014-0057-DWQ.

Curriculum Vitae

Jessica Hall, PLA

Landscape Architect

Qualified. M.A. Landscape Architecture, California State Polytechnic University at Pomona, 2001; B.A. Architecture, Princeton University, 1992.

Licensed. California Registered Landscape Architect #5780

Connected. Member, American Society of Landscape Architects. Statewide Steering Committee Member, California Urban Streams Partnership, Board Secretary, Friends of the Dunes.

Relevance to project. Ms. Hall has 14 years planning and designing watershed-sensitive landscapes, with a focus on the integration of restored natural systems within urban environments. She has over 18 years of project coordination including interactions with permitting agencies, clients, and public and stakeholder groups. Ms. Hall also has eight years of experience in construction administration, where she has been responsible for ensuring that projects proposed are feasible and constructible.

Irrigation Planner

UCI Medical Center Utilities Master Plan | University of California, Irvine, CA

Calculated water demand for landscape irrigation over multiple construction phases of campus expansion. Drafted chapter summarizing findings including water conservation recommendations and cost estimates.

Landscape Architect

Old Tujunga Wash Restoration | Burbank, California

Restoration design of a small concreted stream within an existing city park setting, and integration with park master planning effort. Produced stream assessment and reference site analysis. Proposed conceptual restored stream alignment and planting plan. Reviewed and coordinated site design and landscape plants with project prime. Public and client meetings including assisting design charettes.

Landscape Architect

Walnut Creek Habitat and Open Space Conceptual Trails Alignment and Plant Palette | West Covina, CA

As a sub to another firm, assessed undeveloped large open space area to determine trail alignments for a variety of users and challenge levels, including elders and ADA, equestrians, and fitness buffs. Also, in conjunction with an ecologist, prepared a locally-appropriate plant palette to use in different zones of the future park. This included a native oak savannah concept area, denser coastal sage scrub, and using habitat plantings that will support endangered species as visual and fire buffers.

Landscape Architect and Watershed Coordinator

Ballona Creek Greenway Plan | City of Los Angeles, CA

Greenway plan covering 8 miles included trails, upland landscaping, stormwater remediation and channel naturalization feasibility analysis for eight miles of concreted Ballona Creek channel in Los Angeles and Culver City, California. Led community site assessment walks and design charettes, drafted concepts and planning document. Site specific designs included integration of traffic calming, beautification and bike facilities into streets adjacent to pocket parks and trails. Project managed completion of final draft. Project won Honor Award in 2011 from the Westside Urban Forum.

Watershed Planner

Distributed Stormwater Project Sites | City of Los Angeles, CA

Identified over 100 green infrastructure stormwater project sites to assist the City of Los Angeles in the development of their Ballona Creek Watershed Implementation Plans for Bacteria and Metals Total Maximum Daily Loads (TMDLs) compliance.

Designer and Project Manager, 10th Street Reading Gardens | City of Los Angeles, CA
Converted asphalt patio to native landscaped oasis with two small reading amphitheaters. Plant palette included locally-appropriate native plants sensitive to sun-shade microhabitats.

Landscape Architect
Loleta Main Street Park and Playground | City of Loleta, CA
Designed layout for community park in the center of Loleta including play and fitness equipment, picnic areas, pit courts, community gardens, parking, basketball and a small performance space. Worked with existing mature trees and drainage pattern for minimal site disturbance. Worked with client on site lighting. Developed conceptual drainage concepts to address runoff using Low Impact Development techniques through the site.

Landscape Architect
Morton Salt Biodetention Facility | Newark, CA
Provided 90% landscape planting plan for biodetention facility at industrial salt plant on an accelerated schedule. Planting challenges included variable levels of salinity anticipated in runoff, addressed through selection of range of salt tolerant native species.

Landscape Architect and Environmental Planner
Waterfront Drive Trail Project| City of Eureka, CA
Landscape architecture responsibilities included leading planting design for approximately one mile of bike trail along Eureka's industrialized waterfront and at mitigation sites, including 100% design plans and specifications. Planting considerations included narrow planting beds, hardiness and survivability with no available irrigation, and extreme winds. Also produced 50% landscape plans for a trailhead park including parking, children's play area, and bioretention lawn. Environmental planning encompassed development of the Mitigation and Monitoring Plan. The project is entirely within the California Coastal Zone.

Landscape Architect
Rohnerville Road | City of Fortuna, CA
Planting design for bioswale and streetside landscaping to accompany Rohnerville Road realignment.

Landscape Architect
Private Residence Landscape Design | San Diego, CA
Provided an entirely native landscape plant palette and design for a coastal residential property with existing Torrey Pines. The project included review of soils tests, and selection of plants appropriate to saline and acidic soils, shade, and the owners' desired uses of the property.

Other related areas of interest

- Fluent in **Spanish.**
- **IT savvy.** Proficient in AutoCAD, Adobe CreativeSuite, VectorWorks, and PowerCADD.
- **Recognised.** 2012 Award of Excellence, Santa Monica Bay Restoration Commission; 2007 Earth Day Award, City of Los Angeles. Work covered by Los Angeles Times, Los Angeles Weekly, High Country News, KCET, SCPR, Telemundo Channel 52.
- **Published.** With A. Haden. Development of Bankfull Regional Relationships in the Los Angeles Area for Application in Local Stream Restoration Projects. Urban Coast, Vol. 2, No 1. 2010. Los Angeles CreekFreak, Co-Founder. 2008-2014.
- **Engagement through Media.** Produced and co-hosted weekly Coastal Currents show on commercial radio (10/2012-11/2013). Produced and hosted monthly Econews Report show on public radio (10/2012-11/2013).
- **Community Service.** Board Member, Friends of the Dunes.

Vince Cruz, EIT

Transportation Staff Engineer

Qualified. BS in Civil Engineering.

Connected. Member of American Society of Civil Engineers.

Relevance to project. Mr. Cruz has over ten years of civil engineering experience to include formulating full design plans and contract documents for public and private projects, street designs, street reconstruction, water, sewer, and storm drain designs. Additionally, Mr. Cruz has provided engineering counter services for the Cities of San Gabriel, and Diamond Bar for numerous periods of assignment with our firm in processing private development plans, encroachment permits, and plan check processing and coordination.

Staff Engineer
Ball and Sunkist Intersection Improvements | Anaheim, CA
Project Design Engineer for the preparation of the City's Intersection widening including Street light relocation, right-of-way acquisition, Storm Drain, utility relocation, pavement rehabilitation, curb, gutter and sidewalk, and curb ramp replacement. Project utilized ACAD 2014 Civil 3-D. Ongoing project.

Project Design Engineer
Telegraph Road Improvements | Pico Rivera, CA
Design Engineer for the preparation of PS&E for the rehabilitation and reconstruction of 3/4 miles of poor condition major arterial roadway. Project includes pavement rehabilitation, curb, gutter and sidewalk repair, and addition of curb ramps. Project utilized ACAD 2011 Civil 3-D.

Project Design Engineer
Orange Avenue Street Improvements | Long Beach, CA
Design Engineer for the preparation of PS&E for the rehabilitation and reconstruction of 1/2 miles of poor condition residential collector roadway. Project includes pavement rehabilitation, curb, gutter and sidewalk repair, and addition of curb ramps. Project utilized ACAD 2011 Civil 3-D. Ongoing project.

Project Design Engineer
Artesia Boulevard Street Improvements | Long Beach, CA
Design Engineer for the preparation of PS&E for the rehabilitation and reconstruction of 3/4 miles of poor condition major arterial roadway. Project includes pavement rehabilitation, curb, gutter and sidewalk repair, and addition of curb ramps. Project utilized ACAD 2011 Civil 3-D.

Staff Engineer
Cycle 6 and 7 Citywide Pedestrian and Bicycle Facility Enhancements | City of Moreno Valley
Staff Engineer responsible for the design for roadway widening, addition of sidewalk, adding Class II bike lane and ADA ramps improvements.

Staff Engineer
Palm Avenue Roadway Improvements | San Diego, CA
Staff Engineer for the preparation of P&E for the rehabilitation and reconstruction of 1/2 miles of poor condition residential collector roadway. Project includes landscape medians, pavement rehabilitation, curb, gutter and sidewalk repair, storm drain, bus pads, and addition of curb ramps. Project utilized Microstation V8i and ACAD 2012 Civil 3-D. Completed in 2014.

Staff Engineer

Streamview Drive Improvements | San Diego, CA

Staff Engineer for the preparation of P&E for the construction of new landscaped medians, rehabilitation and reconstruction of 1/2 miles of poor condition residential collector roadway. Project includes landscaped medians, pavement rehabilitation, curb, gutter and sidewalk, and addition of curb ramps. Project utilized Microstation V8i and ACAD 2012 Civil 3-D.

Project Design Engineer

Chino Hills Entrance Road and Facilities | Chino Hills State Park, Chino Hills, CA

Project Design Engineer for the preparation of the State Park's 2.5 mile asphalt concrete road including retaining walls and drainage culvert systems. Project utilized ACAD 2011 Civil 3-D.

Project Design Engineer

Twin Hills Road | El Mirage, CA

Project Design Engineer for the preparation of the Bureau of Land Management's new 6-mile loop unpaved road. Project utilized ACAD 2012 Civil 3-D.

Project Design Engineer

Chino Hills Parkway and Chino Avenue Street Rehabilitation | Diamond Bar, CA

Project Design Engineer for the Chino Hills Parkway and Chino Avenue Street Rehabilitation. Project includes pavement rehabilitation, curb and gutter repair.

Project Design Engineer

Area 3, Area 4, Area 5, Zone 3, Zone 4, and Zone 5 Annual Street Maintenance Projects) | City, State, Country

Project Design Engineer for the annual resurfacing of over 60 streets including residential and arterial Slurry Seal Project. Project included field investigations and delineations of varying pavement rehabilitation strategies.

Project Design Engineer

Pavement Management Program | San Juan Capistrano, CA

Project Design Engineer for the preparation of the City's Pavement Management Program including 257 streets and over 65 centerline miles of paved streets. Project utilized MicroPaver version 6.1 software.

Project Design Engineer

Pavement Management Program | San Gabriel, CA

Project Design Engineer for the preparation of the City's Pavement Management Program including 144 streets and over 79 centerline miles of paved streets. Project utilized MTC StreetSaver version 7.5 software.

Staff Engineer

Complete Streets Project | Petaluma, CA

Staff Engineer for the preparation of plans for the rehabilitation and reconstruction of 1 mile of poor condition arterial collector roadway. Project includes pavement rehabilitation, curb, gutter, driveway and sidewalk repair, and reconstruction of curb ramps. Project utilized ACAD 2014 Civil 3-D.

Staff Engineer

Sonoma Road Rehab | Sonoma, CA

Staff Engineer for the preparation of plans for the rehabilitation and reconstruction of 1/2 miles of poor condition residential collector roadways. Project includes pavement rehabilitation, curb, gutter and sidewalk repair, and reconstruction of curb ramps. Project utilized ACAD 2012 Civil 3-D.

Other related areas of interest

- **Registered.** Engineer in Training, CA.
- **PE Pending in CA**

Steven R. Marvin, P.E.

Principal Engineer - Pavement
RCE 30659
RQE 5463

Mr. Marvin has more than thirty five years of experience in the area of pavement engineering. His experience includes pavement management, engineering design, construction inspection, and material testing. Mr. Steven R. Marvin, currently President of LMI as of 1985, has received numerous honors for his work with asphalt concrete and teaches at local Colleges and Universities along with conducting seminars for pavement and material design. Mr. Marvin oversees final quality control for all data and inspections performed by LMI operations of the asphalt concrete laboratory, field sampling, pavement evaluations, and testing of roadway, aggregate and subgrade materials, soil stabilization design and evaluation, pavement design, rehabilitation design for existing pavement systems, and complete investigations of material and/or design caused pavement failures.

Education:
California State University – Long Beach BSCE
Orange Coast College – AA
Tau Beta Pi – Engineering Honor Society
Chi Epsilon – Civil Engineering Honor Society

Professional Registration:
Civil Engineer – State of California (RCE 30659)
Quality Engineer – State of California (RQE 5463)

Associations:
American Public Works Association – Current 2016 President of Southern California
American Society of Civil Engineers – National Technical Activities Committee
American Society of Civil Engineers – National Committee on Government Affairs
ASCE – OC Branch, Past Treasurer, Secretary, Vice President & President
American Society of Civil Engineers – Los Angeles Section –Past Vice President and President
Asphalt Pavement Association
Asphalt Recycling and Reclaiming Association
Association of Asphalt Paving Technologists
Associated General Contractors
California Society of Civil Engineers – Treasurer
California State Council ASCE – Chairman
Institute for the Advancement of Engineering Inc.
Maintenance Superintendents Association
Orange County Engineers Club – Secretary/Treasurer and President
Rotary International

Honors:
1991 Engineer of Merit – American Society of Civil Engineers – Orange County Branch

LaBelle Marvin

2001 Engineer of the Year – American Society of Civil Engineers – Orange County Branch
2002 Engineer of Merit – Orange County Engineering Council
2007 American Public Works Association Leader of the Year
2013 American Society of Civil Engineers – Engineer Life Member
2014 American Society of Civil Engineers – Outstanding Life Member
2015 American Society of Civil Engineers – Life Time Achievement
2015 California Transportation Award

Teaching Engagements:

Calif. State University	– Los Angeles – Asphalt Laboratory Procedures, Asphalt Concrete Inspection
Calif. State University	– Long Beach – Pavement Design, Asphalt Concrete Design
Santiago College	– Asphalt Technology, Soils and Foundations, Introduction to Public Works
University of Calif, Irvine	– Professional Registration Review – Portland Cement Concrete Design.

Saul Melgarejo Jr., LSIT
Project Manager - Surveying

CALVADA SURVEYING INC

Education

- B.S. Civil Engineering with an Emphasis in Geospatial Engineering California State Polytechnic University, Pomona (2008)

Registrations / Certifications

- Land Surveyor In Training, State of California, United States, L.S.I.T. No. 7771

Areas of Expertise

- Land Surveying
- Office and Field Management
- Utility Coordination
- Third Party Coordination
- CAD Drafting Standards

Availability: 60%

Mr. Melgarejo has worked in the field of land surveying since June of 2006, in the capacity of Project Manager for the Environmental Division and has managed projects for some of the industry's largest clients. He is experienced in topographic mapping, boundary survey, environmental compliance and analysis as well as High Definition Laser Scanning.

Mr. Melgarejo's educational background is well rounded to include photogrammetry, highway engineering, public land surveys, vector dynamics, fluid mechanics, hydraulic engineering, water supply engineering, structure analysis and geotechnical engineering.

In Mr. Melgarejo's present capacity as Environmental and Topographic Survey Project Manager he is responsible for CAD team oversight, QA/QC, Management and Technology development, project coordination, supervision and delivery.

Representative Project Experience
METRO Division 1 – Maintenance Facility
Los Angeles, CA
Project Manager

Mr. Melgarejo was the Project Manager for this project, which consisted of the following 3 phases:

I. Topographic Survey

A detailed topographic survey of Division 1 METRO Bus Station and Maintenance Facility for design purposes was completed and the office management and client coordination was under the supervision of Mr. Melgarejo. The map included detailed cross sections of the major streets surrounding the site. It also included topographic information of all the curbs, gutters, flow lines, sidewalks, buildings and all visible utilities. The topographic survey also included contours that were utilized by

the design group to aid in the design of a new bus station. The project also included a boundary analysis based on the provided title report, the plotting of all existing easements and street dedication exhibits. Mr. Melgarejo also performed some of the QA/QC of the topographic survey and aided the Senior Project Manager on various tasks, including the supervision of the survey technicians and field scheduling.

II. Utility Survey:

A utility investigation where a third party performed a geophysical investigation of all the underground utilities was also performed. Some Field and Office coordination was under the supervision of Mr. Melgarejo. Calvada Surveying surveyed all the observations made and reported the findings on a utility map. The utilities included water lines, gas lines, storm drain lines and sewer lines. An in depth research of As-Built utility maps was performed to accurately provide the design team a clear representation of the underground utilities. Depths were measured at all manholes and drain inlets within the project boundaries to show the flow in every storm drain and sewer lines.

III. Property Survey:

A property investigation was performed where a third party provided all the legal documentation. Calvada Surveying then used all the legal documentations and reported the findings on a boundary map. An in depth research of record maps and legal deeds were performed to accurately provide the METRO legal team a clear representation of the property boundaries.

Approximately 15 acres

City of Sierra Madre Street Improvements
Sierra Madre, CA
Project Manager

Mr. Melgarejo was the Project Manager for this project which consisted of performing a Topographic Survey Design Topographic Survey for Street Rehabilitation Purposes. The project consisted of surveying 1,700 linear feet in Rialto and 4,200 linear feet in Sierra Madre. Calvada generated a Planimetric site plan along with contours for engineering design. Mr. Melgarejo managed the field and office work along with following up with the client and ensuring that the project was on schedule and on budget.

Susan A. DeSantis

Senior Project Manager – Public Outreach

Education
Bachelor of Arts, Liberal Arts, University of California, Los Angeles

Executive Management Program, John E. Anderson Graduate School of Management, University of California, Los Angeles

Years with Current Firm
7

Years of Experience
30

Areas of Expertise

- Public Policy
- Strategic Planning
- Public Meeting Facilitation
- Urban Planning
- Project Management
- Education and Training

Professional Summary

Ms. DeSantis has thirty years of experience as a consulting professional in public policy, urban and transportation planning, stakeholder engagement, strategic communications, video production and education/training. Ms. DeSantis has a particular expertise in managing large, multijurisdictional projects at the regional and sub-regional levels of government, and specializes in cutting edge issues, including green technology, sustainable communities' strategies, and integrating land use, transportation, air quality and housing. Ms. DeSantis' key qualifications include project management, strategic planning, consensus building, public meeting facilitation, and education.

Project Experience

City of Long Beach Housing Action Plan, Long Beach, CA
2016

The City of Long Beach hosted two community workshops as part of the City's Housing Action Plan project (HAP). The HAP addressed the potential use of a variety of funding sources available to the City, established a strategy for the development of sites currently owned by the Long Beach Community Investment Company, and establish target populations for various city programs. Ms. DeSantis led the City and project partners in four team meetings throughout the course of the project to discuss project information, structure and parameters for two public workshops. In addition, Ms. DeSantis drafted a summary report documenting the public involvement and communication process.

Metro/South Bay Cities Mobility Matrix Project Los Angeles County
2014 – 2015

Ms. DeSantis serves as Senior Project Manager for Communications and Stakeholder Engagement for the Subregional Mobility Matrix Project for North Los Angeles County. AA participates as part of a team to produce accessible, transparent, technically rigorous, mutually agreeable matrices of subregional priorities, positioning the South Bay Cities' transportation priorities to compete regionally, statewide, and nationally for valuable funding resources. AA is responsible for facilitating a Project Development Team (PDT) that meets monthly to review and provide input to Metro on subregional goals and priorities, priority projects, and subregional performance measurements among other things.

Metro Performance Measurements Project
2014 – 2015

Ms. DeSantis is Senior Project Manager for this Metro Project. AA was responsible for engaging the region's transportation stakeholders in a constructive dialogue that led to consensus on priority needs and goals. The Outreach Approach involves a Technical Working Group that advises the Project Team throughout the development of the Countywide Performance Measurement

Program Concept; One-on-one outreach to targeted stakeholders (subregions) who provide input on goals and objectives, document user needs and requirements; provide input into gap analysis. Participants in the project include Gateway Cities; San Gabriel Valley; South Bay; and North County Westside Cities/Las Virgenes-Malibu.

Metro/Gateway Cities Council of Governments (GCCOG) Strategic Transportation Plan, Los Angeles County, CA

2013 – Current

Ms. DeSantis serves as Project Manager for Communications and Stakeholder Engagement for the Metro/Gateway Cities Strategic Transportation Plan Project. The purpose of this planning effort is to develop a unified, subregional multimodal transportation improvement strategy. Arellano Associates created a brand for the project that is being used for all communications. AA is the lead on developing educational and training programs for the Gateway Cities Council of Governments (GCCOG) Board of Directors, Committees, City Councils and Staff for its 28 cities. This includes production of videos that discuss each of the Strategic Transportation Plan elements, electronic NewsBriefs and News Magazines, webinars, Model Board Reports and other specialized briefing materials geared towards educating elected officials and city managers.

Metro/Gateway Cities Council of Governments (GCCOG) Interstate 710 Air Quality Action Plan, Los Angeles County, CA

2010 – 2013

Ms. DeSantis served as Project Manager for Communications and Stakeholder Engagement for the Gateway Cities Air Quality Action Plan. In this role, Ms. DeSantis provided strategy and outreach support for the project. Central to the successful completion of the Air Quality Action Plan (AQAP) was this Participation Plan that provided a blueprint to educate and engage stakeholders. The Plan supported the technical project schedule and milestones with ongoing opportunities for two-way communication between Metro, Gateway Cities Council of Governments (GCCOG), local jurisdictions and stakeholders. The stakeholders were invited to stay involved throughout the project by participating in working groups and roundtable discussions. Stakeholder Educational and Training sessions were provided on technical information related to health impact assessments and air quality improvement programs.

Southern California Association of Governments (SCAG) Regional Comprehensive Goods Movement Project, Southern California

2010 – 2012

Ms. DeSantis served as Project Manager for Communications and Outreach for the SCAG Regional Comprehensive Goods Movement Strategy and Plan Project. In this role, Ms DeSantis provided strategy and outreach support for the goods movement component of the 2012 Regional Transportation Plan (RTP). For this effort, Arellano Associates provided outreach support services to the participating agencies. The Plan was developed in collaboration with transportation partners and stakeholders across the region. AA worked with SCAG and the project team to establish a Steering Committee of highly qualified professionals to guide the Work Plan and navigate the challenges of this study. The Steering Committee comprised of representatives of local and state agencies together with key industry stakeholders, assisted SCAG in developing policies and strategies that will shape the goods movement issues for years to come. Interviews with CEOs of all transportation agencies and San Pedro Bay Ports were conducted and incorporated into a Goods Movement Video used to inform elected officials on key issues.

Appendix B

Signed Certifications

APPENDIX 2– 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

Paul Hermann
Name of Authorized Representative

Principal
Title of Authorized Representative

APPENDIX 4 - 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.** 1078-17

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: GHD Inc.

By: _____

(Authorized Signature) Type Name: Paul Hermann

Title: Principal

Date: 8/15/16

www.ghd.com

GHD 2016/2017 Hourly Rate Schedule

Title/Labor Classification	Hourly Rate
Engineer F1 (Principal/QC Manager)	$205
Engineer E3 (Project Manager)	$195
Engineer E2 (Project Manager)	$185
Engineer E1 (Senior Engineer)	$180
Engineer D3 (Senior Engineer)	$175
Engineer D2 (Senior Engineer)	$170
Engineer D1 (Senior Engineer)	$165
Engineer C3 (Project Engineer)	$155
Engineer C2 (Project Engineer)	$145
Engineer C1 (Project Engineer)	$135
Engineer B3 (Staff Engineer)	$125
Engineer B2 (Staff Engineer)	$115
Engineer B1 (Staff Engineer)	$110
Engineer A3 (CAD Designer)	$110
Engineer A2 (CAD Designer)	$105
Engineer A1 (CAD Designer)	$100
Admin Support	$80

EXHIBIT B
APPROVED FEE SCHEDULE

CITY OF MANHATTAN BEACH - MANHATTAN AVE/HIGHLAND AVE IMPROVEMENTS PROJECT
COMPENSATION AND FEE SCHEDULE - Revised

TASK	Task Description	Principal F2 (PIC, QC Manager) 205 /HR	Associate F1 (Project Manager) 195 /HR	Engineer D3 (Senior Engineer) 165 /HR	Engineer C2 (Project Engineer) 145 /HR	Engineer B3 (Staff Engineer) 125 /HR	Admin Support 80 /HR	Total GHD Hours	GHD Labor COSTS	Subconsultants: CALVADA (SURVEYING) including	Subconsultants: LA BELLE MARVIN (PAVEMENT) 2%	Subconsultants: ARELLANO (PUBLIC OUTREACH) markup	Total Fee
TASK 1	PROJECT MANAGEMENT AND MEETINGS												
1	**PROJECT MANAGEMENT**												
1.1	Project Coordination		8		22			30	$ 4,750	$ -	$ -	$ -	$ 4,750
1.2	Project Management throughout the life of the project		22					22	$ 4,290	$ -	$ -	$ -	$ 4,290
	Subtotal		30		22			52	$ 9,040	$ -	$ -	$ -	$ 9,040
2	**PROJECT MEETINGS**												
2.1	Attend Kick off meeting		3		3			6	$ 1,020	$ -	$ -	$ -	$ 1,020
2.2	60% Design Progress Meeting		3		3			6	$ 1,020	$ -	$ -	$ -	$ 1,020
	Subtotal		6		6			12	$ 2,040	$ -	$ -	$ -	$ 2,040
SUBTOTAL TASK 1													$ 11,080.00
TASK 2	PROJECT PS&E PACKAGE												
3	**TOPOGRAPHIC SURVEY**												
3.1	Field topographical survey (Calvada)		1					1	$ 195	$ 8,160	$ -	$ -	$ 8,355
	Subtotal		1					1	$ 195	$ 8,160	$ -	$ -	$ 8,355
4	**UTILITY RESEARCH**												
4.1	Desktop utility research					2		2	$ 250	$ -	$ -	$ -	$ 250
	Subtotal					2		2	$ 250	$ -	$ -	$ -	$ 250
5	**PAVEMENT REPORTS**												
5.1	FWD TEST and Report		2				2	4	$ 550	$ -	$ 16,376	$ -	$ 16,926
	Subtotal		2				2	4	$ 550	$ -	$ 16,376	$ -	$ 16,926
6	**60% PLANS, SPECIFICATIONS AND ESTIMATES**												
6.1	Street Improvement Plans				16	24		40	$ 5,320	$ -	$ -	$ -	$ 5,320
6.2	Signing and Striping Plans					4		4	$ 500	$ -	$ -	$ -	$ 500
6.3	Utility Relocation and Connection Plans				8			8	$ 1,160	$ -	$ -	$ -	$ 1,160
6.4	Engineer's Estimate			2				2	$ 330	$ -	$ -	$ -	$ 330
6.5	Technical Specifications Table of Contents			1				1	$ 165	$ -	$ -	$ -	$ 165
6.6	Quality Control	4						4	$ 820	$ -	$ -	$ -	$ 820
	Subtotal	4		3	24	28		59	$ 8,295	$ -	$ -	$ -	$ 8,295
7	**95% PLANS, SPECIFICATIONS AND ESTIMATES**												
7.1	Street Improvement Plans				8	32		40	$ 5,160	$ -	$ -	$ -	$ 5,160
7.2	Signing and Striping Plans					8		8	$ 1,000	$ -	$ -	$ -	$ 1,000
7.3	Traffic Control Plans			8		16		24	$ 3,320	$ -	$ -	$ -	$ 3,320
7.4	Utility Relocation and Connection Plans				16			16	$ 2,320	$ -	$ -	$ -	$ 2,320
7.5	Engineer's Estimate			4				4	$ 660	$ -	$ -	$ -	$ 660
7.6	Technical Specifications			4				4	$ 660	$ -	$ -	$ -	$ 660
7.7	Quality Control	4						4	$ 820	$ -	$ -	$ -	$ 820
	Subtotal	4		16	24	56		100	$ 13,940	$ -	$ -	$ -	$ 13,940
8	**100% PLANS, SPECIFICATIONS AND ESTIMATES**												
8.1	Street Improvement Plans				8	8		16	$ 2,160	$ -	$ -	$ -	$ 2,160
8.2	Signing and Striping Plans					2		2	$ 250	$ -	$ -	$ -	$ 250
8.3	Traffic Control Plans			8		16		24	$ 3,320	$ -	$ -	$ -	$ 3,320
8.4	Utility Relocation and Connection Plans				8			8	$ 1,160	$ -	$ -	$ -	$ 1,160
8.5	Engineer's Estimate			4				4	$ 660	$ -	$ -	$ -	$ 660
8.6	Technical Specifications			8				8	$ 1,320	$ -	$ -	$ -	$ 1,320
8.7	Quality Control	4						4	$ 820	$ -	$ -	$ -	$ 820
8.8	Services Rendered Necessary by the City Engineer			16	16			32	$ 4,960	$ -	$ -	$ -	$ 4,960
	Subtotal	4		36	32	26		98	$ 14,650	$ -	$ -	$ -	$ 14,650
SUBTOTAL TASK 2													$ 62,416
TASK 3	PUBLIC OUTREACH												
9	**Public Outreach**												
9.1	Public Outreach including 4 meetings		4					4	$ 780	$ -	$ -	$ 9,561	$ 10,341
	Subtotal		4					4	$ 780	$ -	$ -	$ 9,561	$ 10,341
SUBTOTAL TASK 3													$ 10,341
TASK 4	BID AND CONSTRUCTION PHASE												
10	**BID SUPPORT**												
10.1	Provide on-going support during bidding phase		4		2			6	$ 1,070	$ -	$ -	$ -	$ 1,070
	Subtotal		4		2			6	$ 1,070	$ -	$ -	$ -	$ 1,070
11	**CONSTRUCTION SUPPORT**												
11.1	Provide on-going support during construction phase		10		4			14	$ 2,530	$ -	$ -	$ -	$ 2,530
	Subtotal		10		4			14	$ 2,530	$ -	$ -	$ -	$ 2,530
SUBTOTAL TASK 4													$ 3,600
	REIMBURSABLE EXPENSES (NOT TO EXCEED)												
	Reimbursable expenses								$ -	$ -	$ -	$ -	$ 3,000
	Subtotal								$ -	$ -	$ -	$ -	$ 3,000
Total Task 1 through 4		12	57	55	114	112	2	352	$53,340	$8,160	$16,376	$9,561	$ 90,437

CITY OF MANHATTAN BEACH - PARKVIEW AVE IMPROVEMENTS PROJECT
COMPENSATION AND FEE SCHEDULE - Revised

TASK	Task Description	Principal F2 (PIC, QC Manager) 205 /HR	Associate F1 (Project Manager) 195 /HR	Engineer D3 (Senior Engineer) 165 /HR	Engineer C2 (Project Engineer) 145 /HR	Engineer B3 (Staff Engineer) 125 /HR	Admin Support 80 /HR	Total GHD Hours	GHD Labor COSTS	CALVADA (SURVEYING) Subconsultants Including 2% markup	Total Fee
TASK 1	PROJECT MANAGEMENT AND MEETINGS										
1	**PROJECT MANAGEMENT**										
1.1	Project Coordination		8		10			18	$ 3,010	$ -	$ 3,010
1.2	Project Management throughout the life of the project		10					10	$ 1,950	$ -	$ 1,950
	Subtotal		18		10			28	$ 4,960	$ -	$ 4,960
2	**PROJECT MEETINGS**										
2.1	Attend Kick off meeting		3		3			6	$ 1,020	$ -	$ 1,020
2.2	60% Design Progress Meeting		3		3			6	$ 1,020	$ -	$ 1,020
	Subtotal		6		6			12	$ 2,040	$ -	$ 2,040
SUBTOTAL TASK 1											$ 7,000.00
TASK 2	PROJECT PS&E PACKAGE										
3	**TOPOGRAPHIC SURVEY**										
3.1	Field topographical survey (Calvada)		1					1	$ 195	$ 2,550	$ 2,745
	Subtotal		1					1	$ 195	$ 2,550	$ 2,745
4	**UTILITY RESEARCH**										
4.1	Desktop utility research					2		2	$ 250	$ -	$ 250
	Subtotal					2		2	$ 250	$ -	$ 250
5	**60% PLANS, SPECIFICATIONS AND ESTIMATES**										
5.1	Street Improvement Plans				8	8		16	$ 2,160	$ -	$ 2,160
5.2	Landscaping and Irrigation Plans					12		12	$ 1,500	$ -	$ 1,500
5.3	Utility Relocation and Connection Plans				4			4	$ 580	$ -	$ 580
5.4	Engineer's Estimate			1				1	$ 165	$ -	$ 165
5.5	Technical Specifications Table of Contents			1				1	$ 165	$ -	$ 165
5.6	Quality Control	2						2	$ 410	$ -	$ 410
	Subtotal	2		2	12	20		36	$ 4,980	$ -	$ 4,980
6	**95% PLANS, SPECIFICATIONS AND ESTIMATES**										
6.1	Street Improvement Plans (including retaining wall design)				8	8		16	$ 2,160	$ -	$ 2,160
6.2	Landscaping and Irrigation Plans					16		16	$ 2,000	$ -	$ 2,000
6.3	Utility Relocation and Connection Plans				4			4	$ 580	$ -	$ 580
6.4	Engineer's Estimate			2				2	$ 330	$ -	$ 330
6.5	Technical Specifications			2				2	$ 330	$ -	$ 330
6.6	Quality Control	2						2	$ 410	$ -	$ 410
	Subtotal	2		4	12	24		42	$ 5,810	$ -	$ 5,810
7	**100% PLANS, SPECIFICATIONS AND ESTIMATES**										
7.1	Street Improvement Plans				2	8		10	$ 1,290	$ -	$ 1,290
7.2	Landscaping and Irrigation Plans					8		8	$ 1,000	$ -	$ 1,000
7.3	Utility Relocation and Connection Plans				4			4	$ 580	$ -	$ 580
7.4	Engineer's Estimate			2				2	$ 330	$ -	$ 330
7.5	Technical Specifications			2				2	$ 330	$ -	$ 330
7.6	Quality Control	2						2	$ 410	$ -	$ 410
	Subtotal	2		4	6	16		28	$ 3,940	$ -	$ 3,940
SUBTOTAL TASK 2											$ 17,725
TASK 3	RIGHT OF WAY ENGINEERING										
8	**RIGHT OF WAY**										
8.1	Prepare R/W legal and plats (Calvada)				1			1	$ 145	$ 816	$ 961
	Subtotal				1			1	$ 145	$ 816	$ 961
SUBTOTAL TASK 3											$ 961
TASK 4	BID AND CONSTRUCTION PHASE										
9	**BID SUPPORT**										
9.1	Provide on-going support during bidding phase		4		2			6	$ 1,070	$ -	$ 1,070
	Subtotal		4		2			6	$ 1,070	$ -	$ 1,070
10	**CONSTRUCTION SUPPORT**										
10.1	Provide on-going support during construction phase		4		4			8	$ 1,360	$ -	$ 1,360
	Subtotal		4		4			8	$ 1,360	$ -	$ 1,360
SUBTOTAL TASK 4											$ 2,430
	REIMBURSABLE EXPENSES (NOT TO EXCEED)										
	Reimbursable expenses								$ -	$ -	$ 500
	Subtotal								$ -	$ -	$ 500
Total Task 1 through 4		6	33	10	53	62		164	$24,750	$3,366	$ 28,616