CITY COUNCIL AGENDA REPORT

MEETING DATE: MARCH 6, 2012 **ITEM NUMBER: ____**

SUBJECT: **PROFESSIONAL ENGINEERING SERVICES FOR DESIGN OF HARBOR BOULEVARD AND GISLER AVENUE INTERSECTION IMPROVEMENTS**

DATE: **FEBRUARY 23, 2012**

FROM: **PUBLIC SERVICES DEPARTMENT - TRANSPORTATION SERVICES DIVISION**

PRESENTATION BY: **RAJA SETHURAMAN, MANAGER, TRANSPORTATION SERVICES**

FOR FURTHER INFORMATION CONTACT: **RAJA SETHURAMAN, MANAGER, TRANSPORTATION SERVICES DIVISION, (714) 754-5343**

RECOMMENDATION:

1) Award a Professional Services Agreement (Attachment 1) to Onward Engineering, 300 S. Harbor Boulevard, Anaheim, CA 92805, in the amount of $171,938.
2) Approve Budget Adjustment BA 12-010 in the amount of $172,500.
3) Authorize the Mayor and the City Clerk to execute the Professional Services Agreement and the Budget Adjustment.

BACKGROUND:

The intersection of Harbor Boulevard/Gisler Avenue is significantly congested during peak periods. Harbor Boulevard carries a significant amount of regional as well as local traffic. Access to the I-405 Freeway is immediately north of the Gisler Avenue intersection and consequently there are significant eastbound left-turn movements from Gisler Avenue during the morning peak period and southbound right-turn movements to Gisler Avenue during the evening peak period. The City has received a number of requests from residents to address traffic issues related to the freeway access from Gisler Avenue and Harbor Boulevard. While the City has implemented signing and striping modifications to address these issues, the following measures may be implemented to improve traffic operations and the level of service for this intersection:

- Convert eastbound optional through-right lane to optional through-left lane
- Addition of eastbound right-turn lane
- Addition of southbound right-turn lane
- Extension of northbound optional through-right lane

In January 2011, the City applied for Measure M2 grant funding for engineering design for improvements at the intersection of Harbor Boulevard and Gisler Avenue. In July 2011, the City was awarded Measure M2 grant funds for engineering design for improvements at this intersection.

ANALYSIS:

In December 2011, the City issued a Request for Proposals (RFP) to several consulting firms for civil engineering design and right-of-way engineering services. Nine (9) proposals were received to provide the intended engineering services. Proposals were reviewed for compliance with the City's RFP, and consultants were evaluated based on project

understanding, depth of experience, technical expertise, and associated factors. After careful review of all the proposals, staff finds Onward Engineering well qualified to perform the final engineering design and right-of-way engineering services. The proposal submitted by Onward Engineering represents a thorough understanding of the project, complies with the project specifications, and documents technical ability and experience with similar projects.

ALTERNATIVES CONSIDERED:

One alternative would be to perform the design work in-house. However, the scope of work and demands of the project exceed staff's resources and time.

A second alternative would be not to undertake this project. However, this will result in significant traffic flow issues to remain at this intersection and will also result in relinquishing Measure M2 grant funds captured for this project.

FISCAL REVIEW:

The City of Costa Mesa has secured Measure M2 funding in the amount of $112,500 toward the design of improvements for the intersection of Harbor Boulevard and Gisler Avenue. Traffic Impact Fee funds will also be utilized for the balance of funds necessary for engineering design. The attached Budget Adjustment BA 12-010 recognizes the grant funding and unencumbered fund balance and appropriates it for the project. Following the conclusion of the design phase, staff will pursue future Measure M2 funding for right-of-way acquisition and the construction phases of the project.

LEGAL REVIEW:

The City Attorney's office has prepared the attached Professional Services Agreement and has approved the document relative to form.

CONCLUSION:

After careful review of nine (9) proposals submitted for civil engineering design and right-of-way engineering services for improvements at the intersection of Harbor Boulevard and Gisler Avenue, it is recommended that the City Council award the Professional Services Agreement to Onward Engineering. Staff also requests approval of Budget Adjustment BA 12-010 to appropriate funding for the project.

Raja Sethuraman

RAJA SETHURAMAN
Manager, Transportation Services Division

ERNESTO MUÑOZ
Public Services Director

BOBBY YOUNG
Finance and I.T. Director

ATTACHMENTS:
1 - Professional Services Agreement
2 - Budget Adjustment BA 12-010

DISTRIBUTION:
Chief Executive Officer
Assistant Chief Executive Officer
City Attorney
City Clerk

PROFESSIONAL SERVICES AGREEMENT
FOR ENGINEERING SERVICES

THIS AGREEMENT is made and entered into this 6th day of March, 2012 ("Effective Date"), by and between the CITY OF COSTA MESA, a municipal corporation ("City"), and ONWARD ENGINEERING, a California Corporation ("Consultant").

W I T N E S S E T H :

A. WHEREAS, City proposes to utilize the services of Consultant as an independent contractor to provide engineering services for Harbor Boulevard and Gisler Avenue intersection improvements as more fully described in Consultant's Proposal attached as Exhibit "A"; and

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

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

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

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

1.0. SERVICES PROVIDED BY CONSULTANT

1.1. Scope of Services. Consultant shall provide the professional services described in Consultant's Proposal, a copy of which is attached hereto as Exhibit "A" and incorporated herein by this reference.

1.2. Professional Practices. All professional services to be provided by Consultant pursuant to this Agreement shall be provided by personnel experienced in their respective fields and in a manner consistent with the standards of care, diligence and skill ordinarily exercised by professional consultants in similar fields and circumstances in accordance with sound professional practices. It is understood that in the exercise of every aspect of its role, within the scope of work, consultant will be representing the City of Costa Mesa, and all of its actions, communications, or other work, during its employment, under this contract is under the direction of the department. Consultant also warrants that it is familiar with all laws that may affect its performance of this Agreement and shall advise City of any changes in any laws that may affect Consultant's performance of this Agreement.

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

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

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

(c) Terminate the Agreement as hereinafter set forth.

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

1.5. Non-discrimination. In performing this Agreement, Consultant shall not engage in, nor permit its agents to engage in, discrimination in employment of persons because of their race, religion, color, national origin, ancestry, age, physical handicap, medical condition, marital status, sexual gender or sexual orientation, except as permitted pursuant to Section 12940 of the Government Code.

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

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

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

2.0. COMPENSATION AND BILLING

2.1. Compensation. As compensation for the provision of services outlined in Exhibit

"A" and in accordance with this agreement, Consultant shall be paid in accordance with the fee schedule set forth in Exhibit "B," attached hereto and incorporated by reference. Consultant's total compensation shall not exceed One Hundred Seventy One Thousand Nine Hundred Thirty Eight Dollars ($ 171,938.00).

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

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

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

3.0. TIME OF PERFORMANCE

3.1. Commencement and Completion of Work. The professional services to be performed pursuant to this Agreement shall commence within five (5) days from the Effective Date of this Agreement. Said services shall be performed in strict compliance with the Project Schedule approved by City as set forth in Exhibit "C," attached hereto and incorporated herein by this reference. The Project Schedule may be amended by mutual agreement of the parties. Failure to commence work in a timely manner and/or diligently pursue work to completion may be grounds for termination of this Agreement.

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

4.0. TERM AND TERMINATION

4.1. Term. This Agreement shall commence on the Effective Date and continue for a period of twenty (20) months ending on December 31, 2013, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties. At the end of the term period,

Consultant and City may mutually agree, in writing, to renew the contract for up to four (4) term periods of one (1) year each.

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

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

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

5.0. INSURANCE

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

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

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

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

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

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

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

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

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

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

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

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

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

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

6.0. GENERAL PROVISIONS

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

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

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

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

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

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

IF TO CONSULTANT:	IF TO CITY:
Onward Engineering	City of Costa Mesa
300 S. Harbor Blvd. Suite 814	77 Fair Drive
Anaheim, CA 92805	Costa Mesa, CA 92626
Tel: (714) 533-3050	Tel: 714-754-5017
Fax: (714) 948-8978	Fax: 714-754-5028
Attn: Majdi Ataya, P.E. President	Attn: David Cho

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

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

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

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

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

authorized subcontractors are specifically named or otherwise asserted to be liable. Notwithstanding the foregoing, the Consultant shall not be liable for the defense or indemnification of the City for claims, actions, complaints or suits arising out of the sole active negligence or willful misconduct of the City. This provision shall supersede and replace all other indemnity provisions contained either in the City's specifications or Consultant's Proposal, which shall be of no force and effect.

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

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

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

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

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

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

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

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

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

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

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

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

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

6.22. Construction. The parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement, this Agreement shall be construed as if drafted jointly by the parties and in accordance with its fair meaning. There shall be no presumption or burden of proof favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

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

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

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

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

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

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

CITY OF COSTA MESA,
A municipal corporation

_____ Date: _____
Mayor of Costa Mesa

CONSULTANT

_____ Date: _____
Signature

_____
Name and Title

_____
Social Security or Taxpayer ID Number

ATTEST:

_____
City Clerk and ex-officio Clerk
of the City of Costa Mesa

APPROVED AS TO FORM:

_____ Date: _____
City Attorney

APPROVED AS TO INSURANCE:

_____ Date: _____

Risk Management

APPROVED AS TO CONTENT:

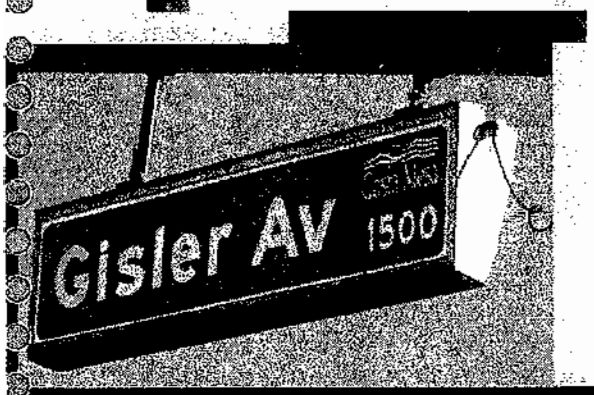
_____ Date: _____

Project Manager

EXHIBIT A

CONSULTANT'S PROPOSAL

ENGINEERING



ONWARD ENGINEERING PROPOSAL

to Provide Engineering Services for Harbor Boulevard and Gisler Avenue Intersection Improvements

IN THE CITY OF COSTA MESA

January 20, 2012

ONWARD ENGINEERING
300 S. HARBOR BLVD.
SUITE 814
ANAHEIM, CA 92805

16

ONWARD ENGINEERING
300 S Harbor, Suite 814 Anaheim, CA 92805

City of Costa Mesa
Transportation Services- 4th Floor
77 Fair Drive
Costa Mesa, CA 92628
Attn: David Cho- Assistant Engineer

January 20, 2012

Subject: **Proposal for Engineering Services for Harbor Boulevard and Gisler Avenue Intersection Improvements**

Onward Engineering is intelligent engineering; pushing the industry progressively forward without sacrificing quality, cost, schedule or safety. We are pleased to submit three copies of our proposal to provide engineering services on the Harbor Boulevard and Gisler Avenue Intersection Improvements in the City of Costa Mesa. In addition, Onward Engineering has also submitted two separate proposals for the Harbor Boulevard and Victoria Street Intersection Project and the Baker Street and Bristol Street Intersection Project. Onward Engineering provides unrivalled quality coupled with an aggressive fee. Also, Onward Engineering can offer the City and additional cost savings if selected for more than one of these projects. Onward Engineering is dependable and reliable, and we believe that each contract is a **partnership**. Key areas by which we will be assessed include:

1. **Our ability to perform the specific tasks outlined in the RFP:** Onward Engineering has put together a solid team with decades of experience working on projects of similar scope and size. We understand what tasks will be necessary to complete this project successfully and are ready to act as the City's advocate on this important project.

2. **The methods and techniques we will employ on the project or problem at hand:** Onward Engineering has visited the project site, conducted a preliminary field investigation, met with City staff, and visited City Hall to review the City's Traffic Signal Plans and Roadway Improvement Plans. Our work up front will allow us to hit the ground running and ensure a seamless transition if we are selected as the City's consultant on this project.

3. **The qualifications of our key staff:** Onward Engineering has highlighted our staff's experience on similar projects in their resumes. Additionally, the project understanding was prepared jointly by our team to showcase the team's ability to understand a project of this scope.

4. **Our Resource Allocation:** We pride ourselves on being a responsive and committed firm. Therefore, we have made each member of our key staff committed to this project.

5. **Our record of success as a firm:** Our firm has been in business providing quality service to our clients since 2004. Furthermore, our firm has a strong local presence in Orange County

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and has provided civil and traffic engineering services to public and private sector clients throughout the region. Onward Engineering is a local firm, which allows us to be responsive in a way that is unparalleled by other firms. We have provided the City of Costa Mesa with successful design services in the past.

6. **Our QA/QC Program:** Our QA/QC process is achieved through the efforts of qualified professionals effective in employing their skills and following a deliberate program of quality assurance to monitor and verify that the quality control plan is being implemented. Our firm has in place an internal Quality Assurance Program (QAP) that will be tailored towards this project. This means that the City will benefit from a personalized QAP that ensures accuracy, efficiency, and document control.

Onward Engineering has put together what we think is a winning proposal. We are confident in the quality of our work, and we stand behind our past experience as proof of our ability to complete all of the projects on time, within budget, and at the highest level of quality. Our proposal shows a staffing plan that was specifically tailored with this project in mind. The proposed team is experienced in providing design services on similar projects. Our submittal discusses our approach for this project; which was derived from the preliminary field walk conducted by our design team. Upon selection, our team is excited to discuss what we believe are key issues on this project and to demonstrate our commitment to the City.

Onward Engineering thanks the City of Costa Mesa for the opportunity to submit this proposal. We look forward to continuing our relationship with the City of Costa Mesa! If you have any questions regarding this proposal, our firm or any other item, please feel free to give me a call at (714) 457-2994.

Sincerely,

Majdi Ataya

Majdi Ataya, PE
President

1: PROJECT UNDERSTANDING

1a. Firm Profile:

Onward Engineering is committed to providing the City of Costa Mesa with the finest Engineering Services on the Harbor Boulevard and Gisler Avenue Intersection Improvement Project. In addition to this submittal, Onward Engineering has submitted two separate proposals for Harbor Boulevard and Victoria Street Intersection Improvements and Bristol Street and Baker Street Intersection Improvements. Our proposal demonstrates an unrivalled understanding of the project scope, intimate knowledge of the City's needs, and a qualified staff capable of successfully delivering this project at a high quality. Additionally, you will find that our fee is very competitive. Through economies of scale, we can offer the City an even more competitive fee if selected for all three projects.

Onward Engineering has a full grasp of the scope of work and timeframes required on this project and a detailed work plan and approach have been provided in this submittal for your review. We believe that our services will be of great benefit to the City of Costa Mesa, not only because of the quality of plans and specifications which are produced, but also because of the level of attention we provide to your specific needs. Our experienced staff will keep your project budget intact by using our extensive database of cost indices to budget a project in the planning phase, instituting effective cost control measures during design. We will make every effort possible to work with you on all of your needs and we ensure that a full QA/QC program will be incorporated, monitored and documented throughout the entire project.

Our staff is comprised of highly trained and experienced professionals with backgrounds as City Engineers, Directors of Public Works, County Division managers, and County/City Public Works Inspectors. This means that our proposed team has had experience working on a variety of projects both as agency representatives and as consulting professionals with Onward Engineering. Our internal open-door policy coupled with our focus on open lines of communications with clients allows us to efficiently communicate project challenges, successfully respond to complex project goals, and deliver the highest quality and most cost-effective solutions for this project.

In 2004, Onward Engineering was founded and headquartered in Anaheim, CA as a professional consulting firm offering a broad array of services with a personalized approach to clients. By combining a versatile and deep staff, state-of-the-art technology, and local offices, we have emerged as a consultant that understands the needs of the agencies we serve. The City of Costa Mesa is no exception, as we have successfully provided engineering services to the City.

OE Mission:
"Our mission is to provide the very best engineering services to public agencies by being a leader in innovation, efficiency, quality, and customer service. In doing so, we wish to improve the quality of life in the communities we serve."

OE Vision:
"Moving you forward, by building a better tomorrow, today"

Firm Information:
Founded: 2004
Form: "C" Corporation
Staff Size: 20

Address:
300 S. Harbor Blvd.
Suite 814
Anaheim, CA 92805
(714) 533-3050

1b. Project Understanding:

The City of Costa Mesa is requesting proposals from qualified civil engineering firms to provide professional engineering services for the detailed topographic and preliminary design, Right-of-way engineering and PS&E preparation for the Harbor Boulevard and Gisler Avenue Intersection Improvement Project. We understand that the City is seeking a firm that can be trusted to provide turn-key full quality civil engineering design and right-of-way acquisition services with minimal supervision along the course of the project.

Based on our preliminary research, Harbor Boulevard, within the vicinity of Gisler Avenue, has a northbound ADT of 61K and a southbound ADT of 55K vehicles per day. Additionally, it has been noted that Gisler Avenue has an ADT of 11K vehicles per day with a majority of the traffic flow occurring at the peak travel hours for morning and evening commute. Due to the close proximity of this intersection to the I-405 Harbor on-ramp, there are extremely high turn movements both eastbound on Gisler Avenue turning left onto Harbor Boulevard as well as southbound on Harbor Boulevard turning right onto Gisler Avenue which creates heavy congestion during peak traffic hours. In order to mitigate the congestion noted at this intersection, the following improvements are being proposed:

A
1. Convert the eastbound optional through-right lane to an optional through-left turn lane
2. Widen eastbound Gisler Ave. to accommodate a minimum 12' wide-right turn lane

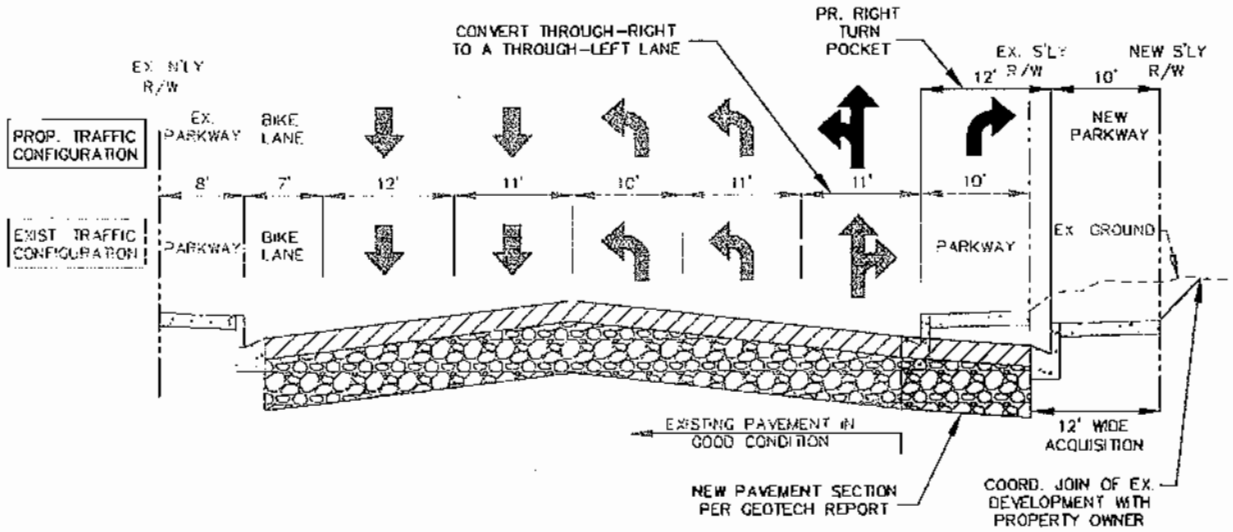
B
3. Widen southbound Harbor Blvd. to accommodate a minimum 12' wide-right turn lane
4. Widen & extend the existing northbound optional through-right lane to the south

It is understood that the design of this project will need to be completed in such a manner that items A1 & A2 on Gisler Avenue are constructible as a separate project from items B3 & B4 on Harbor Boulevard. Additionally, as part of these widening projects, the existing street lighting, traffic signal, and substructure utilities will need relocation as may be deemed necessary depending on the final width and length of the widening alignment chosen. Finally, offsite improvements such as drainage structure modifications, landscaping adjustments, driveway, and parking lot pavement reconstruction, will need to be designed in order to adequately tie-in to the existing improvements.

Finally, it is understood that this project includes all surveying, right-of-way analysis, right-of-way coordination and acquisition, geotechnical investigations, utility coordination, potholing and relocations, PS&E preparation for all civil, traffic signal, street lighting, signing and striping, offsite improvements and drainage analysis in order to fully complete the work as described in the City's RFP. In preparation for this contract, Onward Engineering has conducted a preliminary site visit, met with City staff, and has pulled preliminary records in order to better understand the City's goals for this project. The following pages describe our observations from our field visit and preliminary design research and coordination:

A) Gisler Avenue Widening & Lane Re-Configuration

The section below describes the existing and proposed conditions of Gisler Avenue eastbound. As can be seen from the section, a new 12' wide dedicated right turn pocked will be installed and the existing through-right turn lane will be converted to a through-left turn lane. The existing parkway was noted to be 10' wide joining an existing demolished lot that is currently under development. Due to the fact that the grades are not set on this property, design coordination should be conducted with the Developer to ensure that the proposed widening is considered in the process of the development construction.

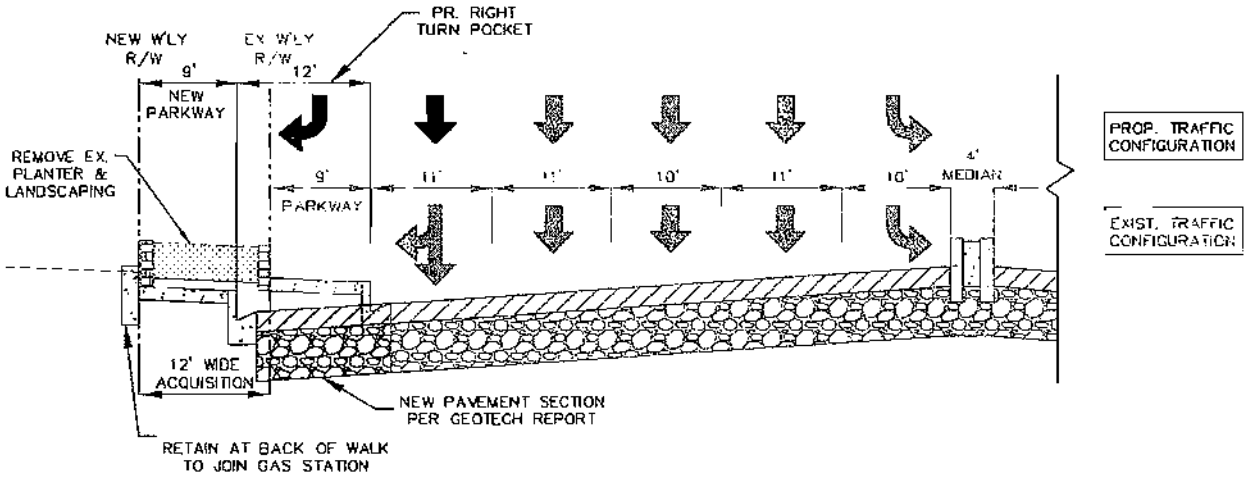


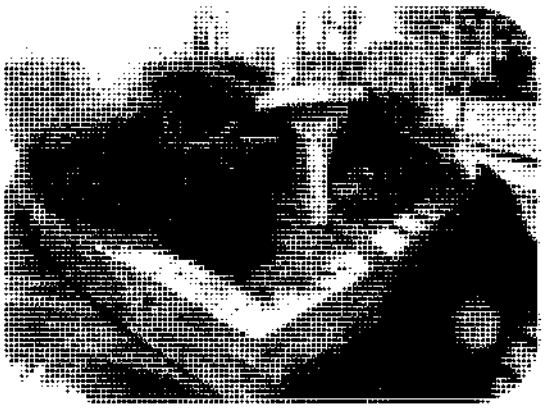
The image to the left depicts the conditions of the previously described development. As can be seen, the join at this location will not be difficult due to the fact that final grades have not been set. Additionally, Onward Engineering will coordinate with the City and Developer Staff to determine if any further improvements are required of the developer on this property.

Another critical item that must be considered on the Gisler Avenue widening is the reconfiguration of the onramp traffic. As can be seen in the image to the right, there are existing freeway guidance signs that must be replaced and reconfigured to describe the proposed traffic flow appropriately. Careful consideration must be given to the turning movements to ensure that the turning radiuses are maintained and that the potential for accidents are mitigated.

B) Harbor Blvd Widening Operations

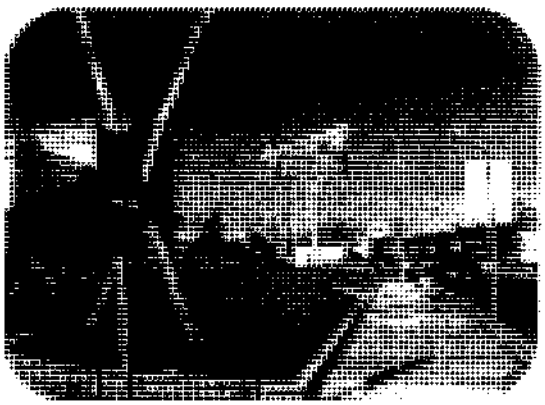
The section below describes the widening operations being conducted on southbound Harbor Blvd. As can be seen from the section, a new 12' wide dedicated right turn pocked will be installed and the existing through-right turn lane will be converted to a dedicated through lane. The existing parkway was noted to be 9' wide joining to an existing Arco gas station. As can be seen from the section, there is an existing planter that will be demolished as part of this widening. Additionally, there are two driveways at both ends of the planter which serve as access points to the gas station. Each access point will need to be carefully considered during the design analysis of this project.



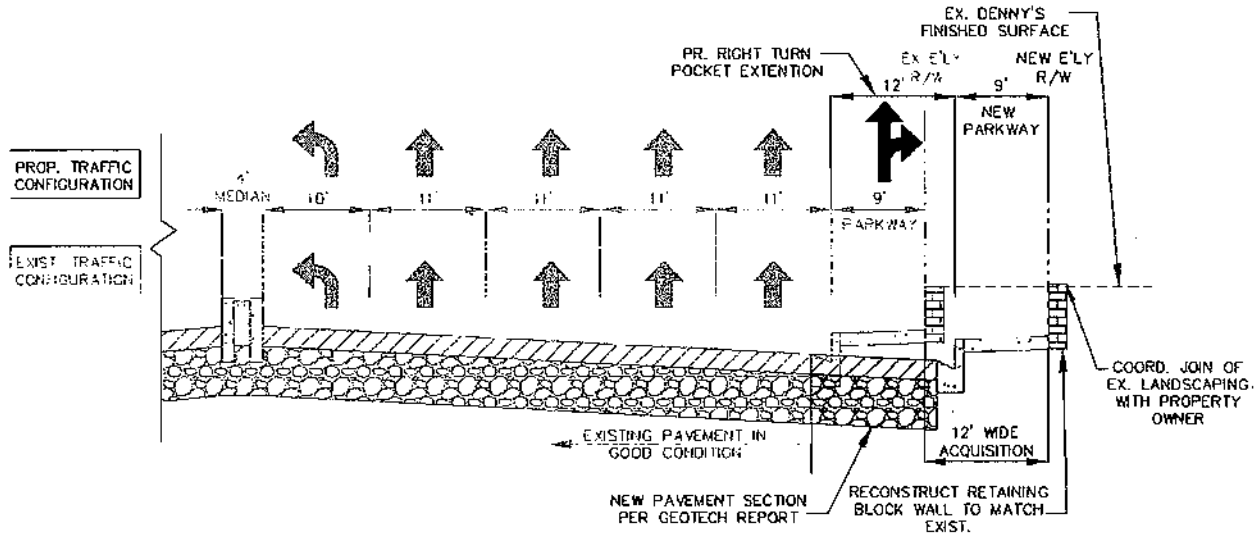


The image to the left shows the condition of the existing planter on the Arco Property. As can be seen, there are existing water appurtenances, landscaping, decorative lighting and other improvements within these limits that will need to be considered during the design and coordination of this widening. Additionally, it was noted that the Arco Property has onsite lighting that will be affected as part of these widening operations. Such lighting will need to be replaced or relocated.

The image to the right depicts the property directly north of the Arco Station. As can be seen, the property is currently being leased by In-N-Out Burger. We noticed during the field walk that it has been developed in such a manner to accommodate the proposed widening. During the analysis of this project the impact to any onsite improvement will need to be considered to ensure that the most cost effective design alternative is chosen.

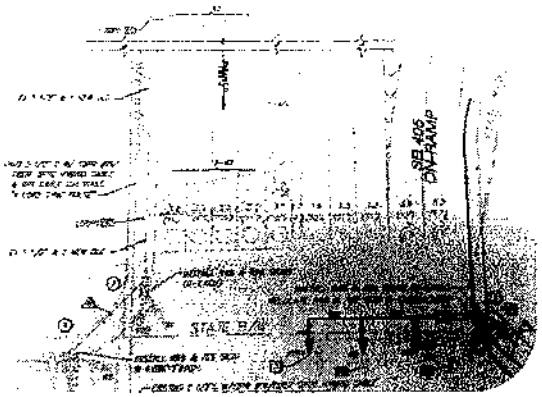


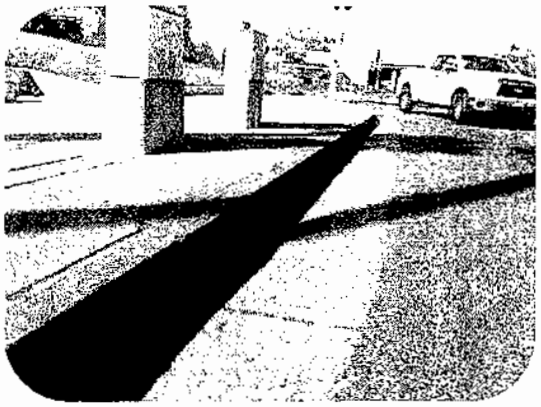
Similar to the southbound Harbor Boulevard, the section below depicts the extension of the existing northbound through-right turn lane to the south. As can be seen, the roadway will need to be widened by approximately 12' in order to adequately accommodate the necessary additional lane and to join the existing conditions. Additionally, the existing parkway was noted to be 9' wide which would need to be replaced in kind.



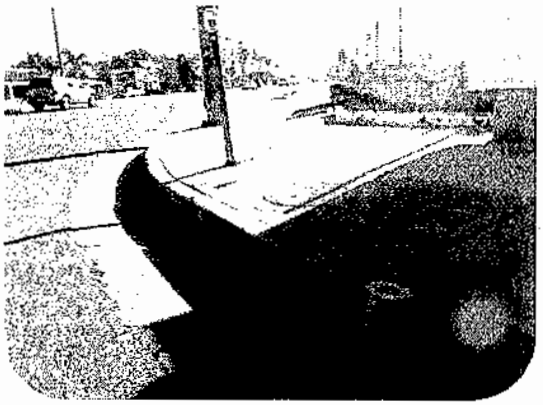
The picture to the left depicts the planter area directly in front of the Denny's property. If the roadway is to be widened to the full width while maintaining current parkway widths, and the planter area is re-installed, the entrance to the Denny's would be impacted and there would be no direct access available from the street. Such impacts can be costly and alternate alignments or minimal parkway/widening widths may be considered to minimize the acquisition costs.

Additionally, one critical item that was noted during our research for this project was the presence of Caltrans Right-of-Way within the southbound widening portions. As can be seen from the image to the right, the state right-of-way extends across Harbor Boulevard near the half delta of the northwest curb return. In order for the City to obtain approval for this design, an encroachment permit will need to be processed through Caltrans for design and encroachment approval. Costs for obtaining the necessary permit have been included as alternate items for this project.

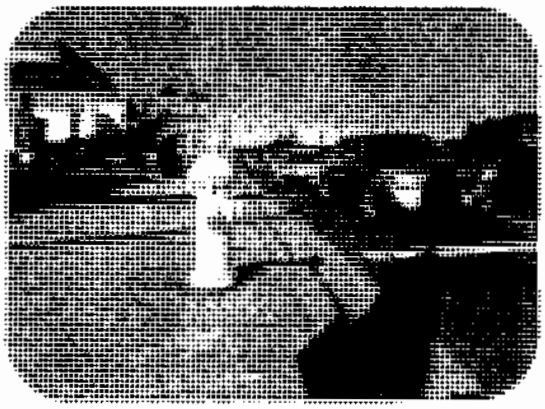




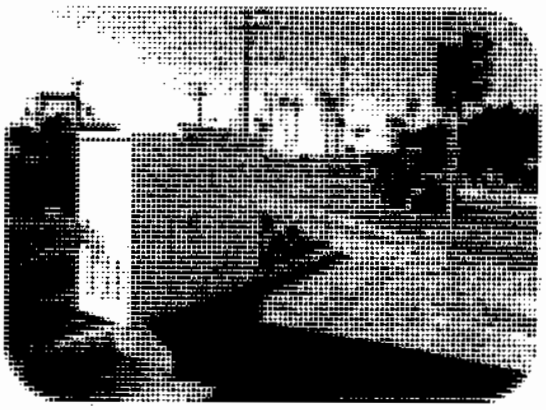
Additional critical items which were noted during our field review include the catch basin which was noted southbound on Harbor Boulevard near the northern limits of the Arco Station. Due to the widening, the existing catch basin will be demolished and the capacity and widths must be analyzed for the final proposed locations. Onward Engineering will note the locations and parameters of the existing catch basins to ensure that an adequate drainage design can be conducted.



The image to the right shows an existing catch basin located at the half delta of the southwest corner of Harbor Boulevard and Gisler Avenue. This catch basin will also be demolished as part of the Gisler Avenue widening and will require reconstruction. Depending on the final grades and elevations, it may be beneficial to install two catch basins at each end of the curb return to keep surface runoff from crossing the ADA curb ramp path.



The image to the left depicts an existing fire hydrant which is located near the southbound BCR or Harbor Boulevard and Gisler Avenue. The proposed widening operations will require the fire hydrant, and potentially the lateral, to be relocated to the ultimate location. Additional parkway improvements such as water valves, traffic signal pull boxes, electric pull boxes, and other vaults will need to be relocated as part of this project.



Another key item for this design will be the traffic signal design. The image to the right shows the existing configuration of the traffic signal pedestal which will require relocation. Additionally, depending on the final phasing configuration of the left turn traffic, protected left and through traffic eastbound and westbound on Gisler Avenue must be considered in order to ensure that safety at the intersection is maintained.

2: WORK PLAN

The City has prepared an excellent and detailed scope of work in their RFP for this project and Onward Engineering has reviewed all items provided. We take no exceptions to the scope of work. Onward Engineering commits to providing all deliverables for each listed work item in accordance with the City's RFP. The following pages are itemizations, clarifications, and descriptions of the requested scope of work. All alternate items have been separately identified and are included in the fee proposal as additions or credits depending on the alternate item. Every effort has been made to present the scope requested in the RFP while also including the necessary alternative and additional items that we believe are essential for the accurate design, right-of-way coordination and completion of this project.

Phase I- Topographic Survey & Preliminary Design Plan

Upon receipt of a notice to proceed, Onward Engineering will immediately initiate the Topographic Survey & Preliminary Design Plan Phase. The following work items and hours are included as part of this phase:

Task 1. Project Meetings, Management & Scheduling

This work item encompasses all project meetings, project management hours, and scheduling updates that will be required as a part of this project. At a minimum, this item will include:

- Design Kickoff Meeting: As a first item of order, our proposed project team will meet with City staff to go over the project background, intent, and to obtain any information necessary for our design team to initiate the design process. This will serve as an opportunity to introduce all key design team members and to ensure that the project is set up in such a way that will ensure adequate coordination and communication protocols are in place. Onward Engineering will prepare the meeting agenda, and meeting minutes, and facilitate the discussion to work towards the development of a design criteria memorandum.

- Project Status Meetings: Onward Engineering will meet with City Staff twice a month for the life of the project to provide updates on the status of the project and to go over the project schedule, critical items and any other discussion topics that may need to be covered. Onward Engineering will prepare an agenda and meeting minutes for each meeting and will distribute for review and approval.

- Project Management & Scheduling: Onward Engineering will provide all necessary project management and scheduling hours required to ensure that the project remains on schedule and that it is completed on time. We believe that project management requires proactive management of the project in order to avoid delays and problems. Our designated Project Manager, Steve Hosford, PE, is a seasoned Project Manager with experience working on multiple street and intersection widening projects. Steve will

ensure that the project remains on schedule, within budget, and that it is completed to the level of detail and quality that is demanded by the City of Costa Mesa. Onward Engineering will also prepare a final approved critical path method (CPM) schedule upon project award based on the preliminary schedule provided as part of this proposal. All schedules will be prepared in Microsoft Office Project and will be presented in bar chart format showing all project milestones, deliverables and subtasks for the duration of the contract. An updated schedule will be submitted to the City on a monthly basis in PDF format for review and comment.

Onward Engineering will commit to the City by allocating all necessary staff and sub-consultant resources to ensure that this project remains on schedule through completion. Onward Engineering's project management staff will actively monitor the project schedule to ensure that any potential issues are flagged ahead of time to avoid slippage to the schedule.

Task 2. Project Research & Permitting

Onward Engineering will conduct extensive existing records research through the City of Costa Mesa public counter, the Orange County Public Works records counter, the OC Geomatics website, and through individual utility agencies and applicable property owners to obtain all necessary existing records within the limits of improvement. All obtained records will be compiled and submitted to the City at the completion of the project.

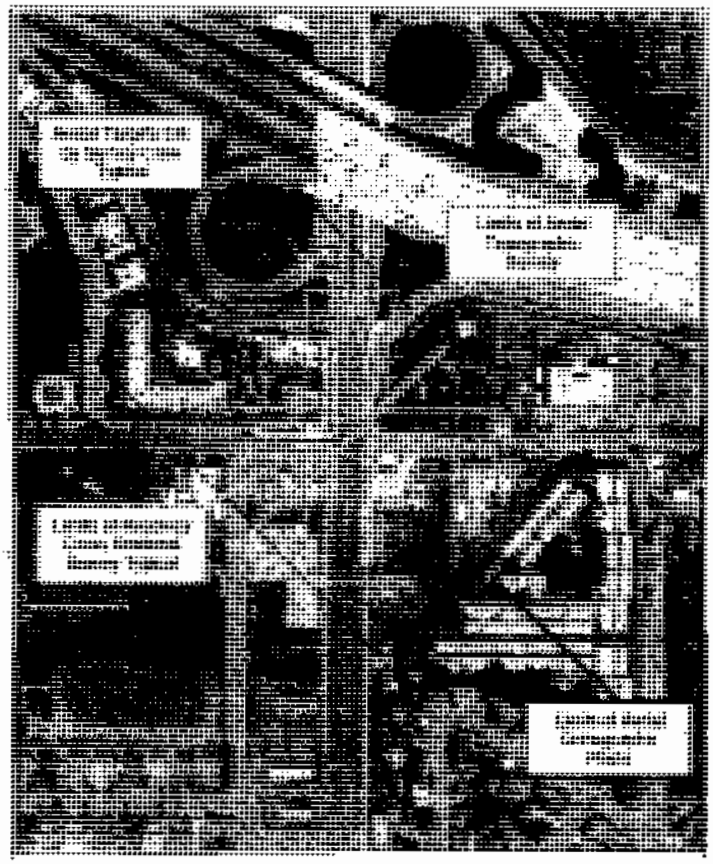
It is assumed that the City will be the ultimate permitting agency for this project. Onward Engineering and each applicable sub-consultant will be responsible for obtaining the required encroachment permit as part of their scope of work. Preliminarily, it is anticipated that an encroachment permit will be required for the design survey and for the geotechnical investigation. Any further field operations will be coordinated through the City to ensure that all necessary business licenses and permits are obtained prior to mobilization.

All right of entry work will be coordinated as part of Phase II – Right-of-Way Engineering.

Task 3. Topographic Survey

Immediately after the notice to proceed is issued, the topographic design survey will be initiated and conducted in accordance with City requirements. Onward Engineering has obtained the services of Guida Surveying Inc. (GSI) to conduct and manage all surveying and monument preservation services outlined in the RFP. GSI has provided recent surveying services for the City of Costa Mesa and is an excellent resource for the accurate depiction and design of this project.

Upon receipt of a notice to proceed, GSI will obtain the required permits and will initiate the topographic field survey. GSI will provide cross sections at 10' intervals per the RFP. Those areas are shown on the provided "Limits of Survey" exhibit to the right which identifies the lane stripe, gutter lip, flowline, top of curb, and back of walk. Any visible grade breaks or other critical features which fall within the cross section will be collected and noted. Sufficient field control will be surveyed to establish roadway centerline, right-of-way, and street geometrics within the project limits. All control will be tied into the latest Orange County Benchmarks. Once the field survey is complete, GSI will prepare a topographic basemap, depicting those items listed in item 7 (page 3) of the RFP along with centerline and right-of-ways, easements, and other topographic/mapping features.



Alternate Task #1. Topographic Survey @ 25' Sections

From our meetings and discussions with the City as well as our review of the project site it has been noted that a 10' vertical control for the survey cross sections is required as part of the RFP. This increment of survey is a significant added cost to the project which may not be needed. As an alternate item, Onward Engineering proposes to provide vertical control at 25' sections along the course of the manual survey limits. The 25' vertical control will allow us to provide the same level of quality design, but will save the City over 55% of the allocated topographic survey work items provided in the base fee schedule. This work item has been included as a credit in the alternate work item fee table.

Task 4. Aerial Topographic Survey

Onward Engineering has obtained the services of GSI to provide the required aerial topographic survey. The limits of the orthographic photo, aerial topographic survey and the proposed target locations are provided in the "Limits of Survey" exhibit above. GSI will set 4 aerial targets, fly Aerial Photography and prepare photogrammetric mapping, at a scale of 1" = 20', with 1' contours, original photography negative, color proof prints, and digital orthographic photography at 0.25 GSM and world coordinates file will be provided.

Task 5. Establish Right-of-Way Boundaries

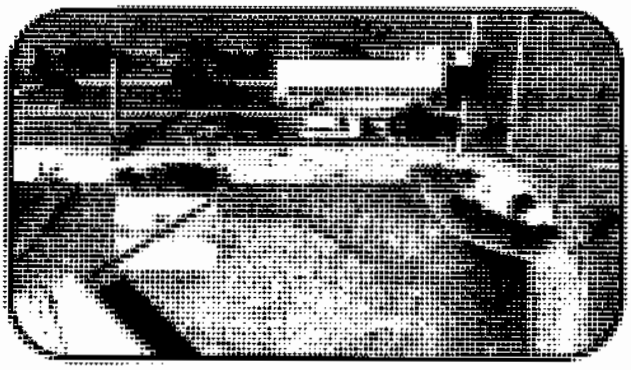
Onward Engineering has obtained the services of GSI to provide the establishment of the public and private right-of-way per the RFP requirements. At a minimum, GSI's scope of work will include:

a) Recovering, reestablishing monumentation of points controlling in the deed description which created the City right-of-way boundary
b) Recovering all existing City right-of-way boundary line monumentation documented in the County and City records
c) Tying all controlling monuments and boundary line monuments to each other and to the Orange County Horizontal Control Network by field survey methodologies.
d) Establishing the existing City right-of-way boundary and document all work in a "Before Condition" Record of Survey.
e) Defining the exact limits of each private parcel that will be affected. – The Cost of obtaining a title report has been included in Phase II – Right-of-Way Engineering Services.

Task 6. Utility Coordination

Onward Engineering has obtained a copy of the City of Costa Mesa "Utility Coordination Procedures" manual and will ensure that all applicable items are complied with during the course of the project. At a minimum, Onward Engineering will research and establish precise locations of all utilities and utility easements within the project limits. Onward Engineering will also coordinate with all utility companies to determine underground, surface, and overhead facilities located within the project limits. As part of this work item, and in coordination with the preparation of the design plan set, Onward Engineering will determine all potential areas of conflict as a result of the widening operations.

At a minimum, it is anticipated that the power pole located at the southwest intersection of Harbor Boulevard and Gisler Avenue (depicted in the image to the right) will require relocation as part of the widening operations. Onward Engineering will coordinate with the pole owner to ensure that the relocation design is coordinated and processed in a timely manner.



Over the course of the design, Onward Engineering will send out 3 utility notices. The first notice will be sent soon after the notice to proceed is issued to confirm the presence of each utility and to obtain all applicable As-Built records. The second notice will be sent out at the 70% plan completion stage and will request that the utilities confirm the current alignment of each line that has been drafted and to check if any unforeseen conflicts exist. Finally, for utilities that have been determined as conflicting with the improvements that are proposed as part of this project, a third and final notice will be sent as a notice to relocate and will inform

the utility of the conflict area, the anticipated construction start date, and will include all other necessary information for the utility to plan and conduct their relocation work.

During the life of the project, Onward Engineering will maintain a utility coordination log and will keep an updated utility coordination matrix with actions, conflicts, records received and other pertinent information. Onward Engineering will keep the City informed of all utility coordination items and will forward all pertinent correspondence to the City. At the completion of the project, Onward Engineering will submit all utility coordination logs, records, and documents to the City as part of the final submittal.

Task 7. Project Basemap

Upon completion of the Exiting Records Research (Task 2), topographic survey (task 3), Aerial Survey (Task 4) and the Right-of-Way Boundary Establishment (Task 5) Onward Engineering will prepare a project basemap at a 40 scale utilizing Civil 3D 2012. The basemaps will be plotted on 24"x36" bond paper and will identify all existing conditions delineated in item Phase I – Item 7 of the RFP. The basemap will also show all centerline and right-of-ways, easements, and other topographic/ mapping features as noted in the RFP. This basemap will be submitted to the City for review upon completion.

Task 8. Preliminary Widening Alignment Analysis

Once the project basemap is complete, Onward Engineering will conduct a preliminary widening alignment analysis for the project area. The analysis will include the following items:

- Queue Length Analysis: For each segment being proposed for widening, the length of the queue will be analyzed to compare the ADT provided by the City with the anticipated loading and length of the queue. Additionally, the impact of the queue length as it pertains to the project cost will be analyzed. Depending on the right-of-way configuration, one of the alignment concepts will be to constrict the length of the queue to a parcel boundary in order to avoid acquisition costs from multiple property owners. Additionally, the transition lengths for the widening must also be analyzed per the highway design manual to ensure that adequate entrance or exit tapers are provided for safe transition.

- Widening Width Analysis: In addition to the queue lengths, the width of the widened portions will be analyzed. For left turn pockets, it is recommended that a minimum 12' lane be maintained. However, widths ranging from 11' to 13' are acceptable and commonly installed throughout Southern California Cities. In addition to the traveled lane widths, the parkway widths will also be analyzed to see if savings can be found by reducing the width of the parkway in areas that would allow for reductions. Onward Engineering will ensure that the final widths of both the roadway and the parkway are in compliance with the City of Costa Mesa, OCTA and State of California design standards.

- Project Impact Analysis: In addition to the geometric analysis of the widening alignments, Onward Engineering will analyze the impact of each alternative to see if any critical items are impacted or obstructed as part of the widening project. Examples of critical items on this project will be the widening on the southbound lanes near the gas station where the widening could have an impact on the outermost pumps as well as the overhang of the gas station. Depending on the widening widths, the cost of replacement or acquisition may be higher and could become cost prohibitive. Such items will be identified and highlighted in the widening analysis.

- Projected Alternative Costs: Finally, as part of the widening alignment analysis, Onward Engineering will prepare construction and acquisition costs for the projected alternatives. The cost of acquisitions will be based on projected construction quantities as well as the estimated impact for each property that may be affected.

Upon completion of the analysis, Onward Engineering will submit the widening alignment concepts along with the correlating cost estimates to the City for review and approval of the final alternative.

Phase II- Right-of-Way Engineering

Upon receipt of the notice to proceed, Onward Engineering will immediately authorize the initiation of the right-of-way engineering work items. The right-of-way engineering phase is central to the successful completion of this project. In order to efficiently and effectively guide the City through the necessary right-of-way engineering, appraisal, and acquisition services, Onward Engineering has obtained the services of California Property Specialists, Inc (CPSI). Upon selection of Onward Engineering as the consultant of Choice, our team will meet with the City to conduct a pre-award meeting in order to discuss the full measures that are anticipated by the City in order to specifically tailor the right of way scope to the full needs of the City. The following are the tasks that are included as part of this proposal:

Task 9. Research Existing Records

As a first item of work, CPSI will review all obtained existing records through the previously completed existing records research (Task 2) and the Title Report Search (Task 11) to gather all necessary information about the parcels which will be affected as part of this widening project. Our team will research the project area for all record data available including record maps, assessors' maps, vesting deeds, centerline ties, corner records, previous field surveys, County surveyor's maps, and existing right-of-way maps from the County or other various public agencies. Preliminary title reports and or litigation guarantees will be obtained and reviewed and all encumbrances (easements) on each title report will be identified and shown on the right of way maps for each alternative alignment.

Task 10. Obtain Right of Entry Agreements

CPSI will advise property owners, in writing, of the City's intent-to-acquire and will acquire a right-of-entry from each affected property owner before initiating the surveying, geotechnical or appraisal/negotiation process. The right-of-entry will be kept on file in the project files and will be referenced for all necessary work through the course of the project.

Task 11. Obtain Title Reports

CPSI will order Preliminary Title Reports for each of the required properties. In the event eminent domain proceedings may be filed, these preliminary title reports will be upgraded to Litigation Guarantees with liability to be determined at that time. The fees previously paid for the preliminary Title Reports will then be credited towards the fee for the Litigation Guarantee. Copies of all recorded documents will be reviewed by our staff to ascertain if there are any title problems that may present possible delays in the acquisition process.

Task 12. Easement Documentation Analysis

Onward Engineering, in coordination with GSI and CPSI will review and take note of all existing easement locations within the project limits. Upon analysis of each alternative, the impacted easements will be highlighted for the City's review and confirmation. All available easement documentation will be compiled and submitted to the City as part of the final submittal.

Task 13. Property Impact Analysis

As part of the preliminary widening alignment analysis (Task 8), Onward Engineering will track and calculate the impact to each required property. The total square footage of the parcel, the impacted square footage and the major impacts to the property based on each alternative will be itemized for the City and property owners review. Additionally, the preliminary cost of such impacts will also be analyzed as part of Task 8 and will be correlated with this work item.

Task 14. Property Owner Interview & Coordination

CPSI & Onward will meet with and interview the required property owners. As part of the interview, CPSI will document all concerns and will coordinate with Onward Engineering, City Staff, and the Owner to alleviate any concerns.

Task 15. Property Acquisition Estimates

CPSI's understands the importance of preparing a credible right of way cost projection, as part of the decision making process, on all capital improvement projects. CPSI has adopted FHWA recommendation to Caltrans of ALWAYS utilize a California Real Estate Broker in the preparation of the cost estimates. CPSI's Real Estate Broker, Kent Jorgensen will prepare the Right of Way Data Sheets with the assistance of Teri Kahlen. In general, the purpose the cost projections will be to analyze the capital cost requirements associated with various project alternatives. CPSI understands the importance of arriving at a realistic and reliable cost projection for each proposed alternative. For example, overestimating may result in the best project alternative being eliminated, and/or underestimating could result in serious funding deficit. CPSI's right of way cost estimating procedure will be broken down as follows:

- Gather data through field visits and interviews with impacted owners and tenants, to assess potential project concerns.
- Complete a visual assessment of improvements, gather data on land values, real estate inflation rates, condemnation rates, and possible damages.
- Quantify parameters such as total real estate requirements for each parcel area.
- Compute cost by applying values to estimate parameters and other line items, including damages, property improvements, etc.
- Additionally, attention will be paid for inflation, uncertainty, and risk.

At the beginning of process, Onward Engineering will prepare, for each alternative, the existing and proposed right of way delineations on an aerial overlay. Each overlay will include adequate information to effectively evaluate each individual parcel. Once the overlays are completed, Teri Kahlen will run a property detail for each parcel. At that time, basic parcel information will be entered onto an excel spreadsheet for each impacted parcel, and for each alternative.

With the overlays and the preliminary data entered onto the excel report, CPSI's Kent Jorgensen and Teri Kahlen will complete a field inspection. As the right way requirements are evaluated notes will be taken in regards to right of way impacts, improvements, damages to remaining property and potential relocation requirements. As necessary, photos will be taken to enhance our documentation in determining cost projections. Attention will also be paid in comparing our property detail information to the actual field inspection to avoid inaccuracies, including a preliminary analysis of potential larger parcel issues and/or impacts. Our field inspection will also include notations and photos of existing utilities impacted by the proposed right of way.

After the completion of the field inspection, Kent and Teri will have a good understanding of the project area and the right of way impacts to each parcel. They will then begin compiling data in regards to real property values for computing the cost projections. This process includes compiling recent sales data from Data Quick, Loop Net, Multiple-listing sources, and at least three general appraisers in the immediate area. From this process, we will arrive at value charts for each category, including values for land, values for each type of improved property, including severance damages to the remainder property (i.e. severance damage for lost parking).

In addition to completing the costs to acquire the real property, Kent Jorgensen will utilize his expertise in completing realistic cost projections as it relates to relocating potential residential and business displacements. Not only is Mr. Jorgensen a Certified Relocation Specialist, he can rely on over ten year's expertise of his actual relocation cost data for all types of business enterprises. Experience has shown that many consultants fail to realistically address relocation costs and loss of business goodwill, whereby substantially underestimating capital cost expenditures. Specific notations will be made on the excel spreadsheet regarding each displacement and the applicable relocation costs.

After we have gathered all the appropriate data, completed the field visit and market survey, we will complete the right of way cost information as shown on the sample excel spreadsheet below (partial spreadsheet is shown below). Once the totals for each category are complete, we will transfer the information to the Right of Way Data Sheets. By adopting this methodology, we are able to support all the information included in the Caltrans Report.

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TR-005-01	245-161-32	California Auto Dealers-Exchange Inc.	1225 N. Tustin Avenue, Anaheim, CA 92807-1635	13,913	Waterline Easement	Commercial	$0	$108,855	$27,028	$1,250,000	$136,913	
TR-005-02				73,439	TCE		$0	$527,903	$146,990		$674,533	
TR-005-03				11,583	Storm Drain Easement		$0	$169,440	$22,592		$192,032	
TR-005-04				45,934	Major Utilities Easement		$0	$668,810	$91,858		$761,658	
					Calif. Auto Dec. Subtotal		$0	$1,755,018	$269,396	$1,250,000	$3,335,042	$3,888,547
TR-006-01	245-161-03	County of Orange/FFRD	West Side of Tustin Ave 630+/- feet South of Orangethorpe Ave	3,647	Fee	Public Utility	N/A	$10,000	$2,500	$0	$12,500	$24,000
TR-007-01	245-161-02	Orange County Water District	1887 N. Tustin Avenue, Anaheim, CA 92807	82,182	Fee	Public Utility	N/A	$846,096	$15,000	$0	$861,096	
TR-007-02				4,252	TCE			$39,807	$3,500	$0	$43,307	
TR-007-03				2,062	Aerial Easement			$28,850	$1,000	$0	$29,850	
					Orange County Water District Total			$913,771	$18,500	$0	$932,271	$991,071
TR-008-01	000-000-00	Orange County Flood Control District	On Tustin Ave 310+/- feet South of Orangethorpe Ave	5,107	Aerial Easement (West Portion)	Public Utility	N/A	$71,498	$0	$0	$71,498	
TR-008-02				11,355	TCE (West Portion)		N/A	$104,820	$0	$0	$104,820	
TR-008-01	000-000-00	Orange County Flood Control District	On Tustin Ave 310+/- feet South of Orangethorpe Ave	5,107	Point Easement (East Portion)	Public Utility	N/A	$71,498	$0	$0	$71,498	
TR-008-02				27,582	TCE (East Portion)		N/A	$258,535	$0	$0	$258,535	
					OCFCD TOTAL		N/A	$506,451	$0	$0	$506,451	$527,451
TR-010-01	000-000-00	BNSF Railway Company	On Tustin Ave 310+/- feet South of Orangethorpe Ave	7,423	Aerial Easement (West Portion)	Public Utility	N/A	$109,894	$0	$0	$109,894	
TR-011-01	000-000-00	BNSF Railway Company	On Tustin Ave 310+/- feet South of Orangethorpe Ave	7,275	Aerial Easement (East Portion)	Public Utility	N/A	$95,125	$0	$0	$95,125	
TR-011-02				48,330	Temp Construction License (TCE)		N/A	$354,169	$0	$0	$354,169	
TR-011-03				407	Permanent Easement (Utility Above Ground)		N/A	$11,356	$0	$0	$11,356	
TR-011-04				835	Permanent Easement (Utility Below Ground)		N/A	$23,100	$0	$0	$23,100	
					BNSF TOTAL		N/A	$775,666	$0	$0	$775,666	$796,666
											$28,006,835	$29,270,639

$29,270,639
$2,927,064
$32,197,703

General Notes: Projections above are for planning purposes only. While this information is deemed reliable for planning purposes, it is not guaranteed and the ultimate user should verify the costs by means of conclusive due diligence and appraisal process.

Task 16. Provide Legal Description and Right-of-Way maps:

Upon approval of the final alignment of the proposed improvements, legal descriptions will be written to clearly describe the parcels to be acquired without gaps and overlaps so that a competent surveyor can precisely locate the property in the field; to ensure a title company will insure it and that it will hold up in a court of law. Sketches that accompany the legal description will have all pertinent information that conforms to the legal description including the underlying subdivision information, bearings, and distances around the parcel when described as a metes and bounds and ties to street centerlines or other boundary lines where applicable. A traverse closure is run directly from a metes and bounds legal description to ensure mathematical closure. All legal descriptions are reviewed and signed and sealed by a California Licensed Land Surveyor. Maps shall be prepared to accompany each legal description on 8-1/2" x 14" vellum per City standard layout using AutoCad. Per the RFP, Onward Engineering will submit to the City 5 copies of the final legal description, deed, exhibit, and right of way map for each parcel that will be acquired for the City's execution.

Phase III- PS&E Preparation

Upon completion of the preliminary widening alignment analysis and after the City has selected a final alternative and the right-of-way acquisitions have begun, Onward Engineering will initiate the PS&E Preparation phase. The following tasks have been prepared in accordance with the work items listed in the RFP:

Task 17. Final Project Basemap:
Upon initiation of the PS&E preparation phase, Onward Engineering will update the previously prepared basemap with any further information that has been received. All items listed in the RFP shall be provided as part of our basemap. The final basemaps will be the integration of roadway, right-of-way and utility basemaps.

Task 18. Geotechnical/ Materials Report
Onward Engineering has obtained the services of Twining, Inc. (Twining) to conduct and prepare all necessary geotechnical/materials investigations and reports. At the earliest practicable time, Onward Engineering will authorize the completion of the geotechnical/materials report per the specifications provided in the RFP. Once the approximate limits of the widening area have been determined, Onward Engineering recommends the authorization of the geotechnical investigation in order to better estimate the paving and widening costs. The geotechnical report will include at a minimum:

- Analyze and document geologic and engineering data averaging five feet in depth for the project area (Estimated 10 locations) and develop R-value and pavement design recommendations.
- Report shall include the review of readily available background materials including published geologic maps and literature, in-house information, and stereoscopic aerial photographs. Our team will also review preliminary project plans, as-built project plans and specifications, log of test boring sheets, and existing structure foundation reports as they are available.
- Perform geotechnical site reconnaissance to observe the geotechnical conditions along the proposed alignment and perform borings at 10 locations determined and recommended by our technical team and approved by the City. Borings will be a minimum of 6" wide and average 5' deep, with cores backfilled and compacted at 95% with AC materials immediately following work. We will provide boring log and maps showing dimensions of cores and horizontal distances from identifiable roadway points.
- Establish existing structural section, R-value, moisture content, expansiveness, caving potential, water level, traffic indices, and sand equivalency. We will also determine estimated range and degree of soil contamination if encountered. It is our understanding that the City will provide the average daily traffic volume data.

- Prepare a Geotechnical Report presenting the results of the data review and findings, consultations and recommendations relative to the geotechnical aspects of the project design and construction. We will identify recommendations for treatment and tabulate soil information in table format for existing and proposed conditions.

Task 19. Hydrologic/ Hydraulic Report

Onward Engineering will prepare a hydrologic and hydraulic report for the project area. The report will include an analysis of the longitudinal and cross fall drainage to ensure that the existing runoff will be adequately conveyed to the existing or relocated drainage inlets. It is assumed that the City will provide Onward Engineering with the existing master drainage plan and the currently experienced flows into the existing inlets. Utilizing this data, Onward Engineering will conduct a capacity analysis for the storm drain inlet as well as the storm drain lateral to ensure that both adequate cross fall is encountered within the gutters and that adequate openings are provided both for the storm drain inlets as well as the lateral. All drainage improvements will be specifically detailed and called out on the plans for removal, replacement, relocation or new construction.

Task 20. Title Sheet, Details & Roadway Widening Plan & Profile

Onward Engineering will prepare the PS&E in accordance with City of Costa Mesa standard plan preparation guidelines and the RFP requirements. The plans will be prepared on 24"x36" bond paper and will include, at a minimum, the following sheets:

Description:	Scale:	Sheet Count:
Title Sheet	No Scale	1 Sheet
Details & Typical Sections	No Scale	2 Sheets
Roadway Widening Plans	1"=20' H, 1"=2' V	4 Sheets
Cross Section Sheets (25' O.C.)	1"=20' H, 1"=2' V	4 Sheets
Intersection Grid Grade Plan	1"=10' H	1 Sheet
Signing & Striping Plans	1"=20' H	2 Sheets
Traffic Signal Modification Plans	1"=20' H	1 Sheets
Drainage Plans	1"=20' H, 1"=2' V	2 Sheets
Offsite Improvement Plans	1"=20' H	As Needed
On Site/Off Site Electrical Design Plans	1"=20' H	As Needed
Landscape Modification Plans	1"=20' H	As Needed
Utility Relocation Plans (By Owners)	As Needed	As Needed

It is understood that this project will require a 70%, 90% & 100% submittal of the full plan set. Onward Engineering has included the necessary submittal hours as well as plan check meetings in each task to ensure full review and incorporation of the plan check comments.

- Title Sheet, Details & Typical Sections: The title sheet will incorporate all City of Costa Mesa general provisions, project key map, project vicinity map, project legend, benchmark and basis of bearing information, project signatures, revision dates, and any other information that may be required by the City. Onward Engineering will also provide typical sections for each leg of the improvement showing the proposed work,

existing and proposed roadway widths, and any other pertinent information for the construction of the project. Additionally, details will be provided for all necessary items such as pavement joins, catch basins, offsite improvements and other non-standard construction items. We believe that the additional hours spent on drafting a special detail will translate into savings encountered during construction due to the clarity that is provided. Onward Engineering commits to providing all necessary details, notes and revisions to the detail sheets as may be required.

- Roadway Widening Plans: The roadway widening plans will be prepared in 1"=20' horizontal and 1"=2' vertical scale. The plans will depict all improvements within the project limits and will profile, at a minimum, the roadway centerline (per aerial survey) and the proposed top of curb (per topographic survey).

Task 21. Cross Section Sheets (25' O.C.)

Final cross sections will be provided at 25' intervals, including vertical and horizontal cross falls, elevations, analysis of super elevations/ highway design speed calculations, and join elevations and details to private property will be provided based on the City standards. Cross sections will be submitted at the first plan check.

Task 22. Intersection Grid Grade Plans

Final intersection grid grades will be provided at 10' intervals with elevations at TC, FL, EG, EP, BCR, ECR, ¼ and ½ curb returns at a 1"=10' scale. Applicable construction notes within the intersection will be called out in addition to the grid grade elevations to provide clarification to the final conditions of the intersection. All necessary level of detail will be provided on the plans to ensure that the widening can be constructed to the lines and grades proposed on the plans.

Task 23. Signing & Striping Plans

Onward Engineering will prepare final signing and striping plans in accordance with the City's design standards and the CA-MUTCD. The striping plans will include the modification of existing freeway guidance signage, addition of new striping for the turn pockets, revision of existing striping as may be needed and the replacement of all damaged striping and legends. Signing and striping plans will be prepared in a 1" = 40' horizontal scale.

Task 24. Traffic Signal Modification Plans

Onward Engineering has obtained the services of Hartzog & Grabill, Inc. (HCI) to provide all necessary traffic signal analysis, design and plan preparation. HCI staff will complete the necessary fieldwork to verify and photograph existing conditions at the project signal in order to begin preparing for the traffic signal modification design effort. The preliminary traffic signal modification design will include careful assessment for locating new conduit and new traffic signal pole equipment. The preliminary plan will take existing and proposed intersection geometry into consideration and other factors that may influence the design or operation of the signal system. HCI will also coordinate with SCE for the relocation of the

service cabinet. All work shown on the plans will be designed in conformance with Section 86 of the State of California (Caltrans) Specifications and Standard Plans, latest editions, and will also be compliant with the City of Costa Mesa's design criteria and standards. The preliminary traffic signal modification plan will include: General and construction notes, phase diagram, conductor, detector and pole schedules, and other details necessary for construction. The traffic signal modification plan will be prepared at 20-scale using AutoCAD and plotted on a standard 24"x36" sheet with standard City title block. If necessary, the signal modification plan will include applicable traffic signal interconnect details incorporated into the signal modification design (no separate plan).

Task 25. Drainage Plans

Onward Engineering will provide the necessary drainage plans for the construction of the new catch basins, laterals and other drainage appurtenances. If necessary, profiles of all new laterals will be provided as part of this work item. If the distance of connection from the lateral to the main line is a short distance, invert callouts at the connection points will be used in lieu of a profile.

Task 26. Offsite Improvement Plans

Offsite improvement plans are a critical part of every widening project. The means and methods of tying into the existing property must be analyzed and coordinated with the property owners as well as the City staff for final approval. Onward Engineering has accounted for the necessary hours to conduct such coordination, analysis and design and will provide the necessary details for retaining curb, grading and minor improvements which will be required as part of this project. All major modifications that may be required (such as structure demolition or re-design) are excluded as part of this work item. Onward Engineering will provide as many necessary additional sheets for minor offsite improvements to ensure the full satisfaction and success of this widening project.

Task 27. On Site/Off Site Electrical Design Plans

HCI will field review and prepare a 40-scale electrical design plan for the relocation of existing SCE lighting in the parkway showing new location of poles, conduit, and pullboxes our preliminary review of the intersection shows that as a result of the widening improvements relocation of one or possibly two SCE roadway luminaires on wood utility poles along Gisler Avenue will be required. HCI will also field review on-site electrical affected by the improvements on the southwest corner and include details on the electrical design plan for relocating the lighting fixtures at the gas station. HCI will coordinate the design with Onward/City staff to determine if the existing fixtures can be re-used/relocated or if replacement will be required. HCI will prepare a 70%-complete electrical design plan showing relocation details for the following existing electrical components affected during the widening:

- Off-Site SCE Roadway Light Standards on Gisler Avenue
- On/Off-Site Electrical Wiring for Irrigation & Landscaping
- On-Site Electroliers, Conduit, & Pullboxes (Private Property)

Alternate Task #2. Landscape Modification Plans

After our review of the project site, we noted that the impact to the existing landscaping is minimal and will require only the removal and capping of the existing irrigation systems (if applicable). However, if the City desires landscaping improvements on the offsite properties, Onward Engineering has made Guy Stivers, RLSA available for this project on an on-call basis. Guy is a registered landscape architect as well as a registered arborist who has extensive experience in public road construction as well as green street improvements. Onward Engineering has worked extensively with Guy and is confident in his abilities to cost effectively provide design, analysis, and recommendations for all necessary landscaping improvements that may be needed on this project. This work item has been included as an added cost based on a not to exceed hour allocation in the alternate work item fee table.

Task 28. Field Walk-Through

Onward Engineering will conduct a field walk with City personnel after the first and second plan checks per RFP requirements.

Task 29. Utility Relocation Coordination

All base utility coordination hours have been included in Phase I - Utility Coordination (Task 6). This work item shall include the necessary hours to coordinate all relocations which are deemed necessary based on the final alignment of the widening. It is anticipated that the power pole and street lighting relocations, at a minimum, will be required as part of this project. Onward Engineering will coordinate with each respective utility company, conduct relocation meetings, and coordinate with City staff to ensure that the relocations are designed, approved, and conducted prior to the start of the City's project. If it is not practical for the relocations to be conducted prior to the start of construction, Onward Engineering will draft the necessary text in the specifications to allow for a given timeframe during construction for the relocation of the utilities by their respective owners. Onward Engineering has had recent experience with the design, coordination and relocation of utilities including water, gas & oil mains as well as SCE power and lighting poles and is guaranteed to provide the best level of services to the City of Costa Mesa on this project.

Task 30. Utility Potholing

Onward Engineering has obtained the services of "SAF-r-DIG" for potholing existing utilities. Potholing of existing utilities will be performed by SAF-r-DIG to determine the exact location and depth of utilities, City storm drain and traffic signal conduit potentially conflicting with the project. Twelve potholes will be included in the scope of services.

It has been assumed that all potholing will be done in the outside lane or the parkway portions of the roadway being proposed for widening. Furthermore, it has been assumed that traffic control will be done per WATCH manual and detailed traffic control plans will not be required due to the fact that all traffic control will be on the outside lane or in the parkway.

Task 31. Technical Specifications

Clarity of bid items, site control, and payment method for each item of work are crucial in the preparation of the project specifications. Onward Engineering will prepare the technical portion of the project specifications utilizing the most recent version of the SPPWC Green Book Specifications. We will ensure that each pay item is clearly referenced and described in each applicable section of work. It is understood that the City will provide Onward Engineering with the general boiler plate specifications for the project. Onward Engineering will compile the final set of specifications and construct the technical specifications.

The specifications will include a utility coordination section that describes all actions needed by the contractor to facilitate or coordinate any and all utility relocation or adjustment items. Our staff will coordinate directly with each conflicting utility to get, at a minimum, a date or time-frame for relocation completion. The specifications will have all necessary contacts for utilities or residents that have special concerns and will delineate all items needing relocation on the Contractor's part. If specific details or photographs need to be included in the specifications, our staff will gladly prepare and document all necessary measures.

Also, close attention must be paid to the delineation of each bid item to ensure that the specified project scope covers the full project intent of the City. As an added clarification to the specifications, we have found that the addition of a column in the bid schedule noting the applicable payment clause section adds great value and clarity to the bidding process for the contractor. Finally, we believe that it is crucial to ensure that each bid item has a specific payment clause that describes the item of work and all special conditions that may be attached. This ensures that the contractor is aware of all required work and that there are no costly change orders during construction.

Finally, the specifications will carefully delineate all necessary traffic control and phasing parameters for the project to ensure that the construction phase proceeds smoothly and that confusion during the bidding and construction process is not encountered.

Task 32. Water Pollution Control Documentation

Onward Engineering has obtained the City's preferred water pollution control documentation text from previous projects. Onward will modify the provided text to ensure that the specifications share the required stipulation to ensure full water pollution control is incorporated as part of this project. At a minimum, Onward Engineering will specify that the Contractor prepare a SWPPP and provide a QSP during the construction process for storm water monitoring. The City will be responsible for inputting the obtained data into the SMARTS system and for filing the required NOI prior to the start of construction.

Task 33. Engineers Estimate

The cost estimate development will be a continuous process which begins at project inception and will continue through design completion. Our office constantly updates the unit price records from recent local projects in order to provide the most accurate project cost estimates.

Also, it is important to take into consideration the size and location of the current project in comparison to our past experience working on baseline projects. Onward Engineering will provide an updated cost estimate with each submittal. Also, with the use of our modern civil software, we are able to track the quantities and costs while preparing the plan set. This allows us to keep cost in mind as we conduct our design. Onward Engineering will provide an estimate with each design submittal.

Task 34. Monumentation

GSI will be responsible for providing all necessary monumentation details and documentation for this project. Onward Engineering will take all provided documentation and incorporate the required details into the plans or specifications.

Alternate Task #3. Caltrans Encroachment Permit Application

It has been assumed that the City of Costa Mesa is the governing body and permitting agency for this project. However, based on our existing records research, it has been noted that the Caltrans right-of-way encompasses the entire northern leg of Harbor Boulevard including the portions proposed for widening. In order for the city to proceed with construction, an encroachment permit from Caltrans must be coordinated to get approval on the design. Onward Engineering, as an alternate item, proposes to coordinate directly with Caltrans during the design phase to obtain approval for the design and to obtain the initial rider permit. By obtaining the permit during the design phase, the City can be assured that further revisions will not need to be done during the construction phase and that the Contractor can actively and quickly pull the double permit once the construction contract has been awarded.

The preparation of the encroachment permit shall include:

- Coordination with Caltrans for design review
- Preparation of the encroachment permit application
- Preparation of traffic control plans for the Caltrans right-of-way Portions
- Submittal of the encroachment permit application to Caltrans
- Processing of Plan Check Comments (If Applicable)

This work item has been included as an added cost in the alternate work item fee table.

Task 35. Resident Engineer's File

Onward Engineering will prepare and submit a Resident Engineer's file containing, at a minimum, final construction quantities and cost estimate with background calculation work sheets; soil and hydrology reports; survey data; utility file; right-of-way file, and all related project information.

Task 36. Construction Technical Support

Onward engineering will prepare addenda if necessary and provide clarification to plans and specifications. We will attend the pre-construction meeting and we will be available for consultation and assistance during construction of the project to clarify or explain items relating to the design.

Project QA/QC

Finally, on each phase and task of this project, Onward Engineering will implement our internal QA/QC plan. For this project, Onward Engineering has specifically designated Majdi Ataya, P.E. as the QA/QC professional who will be responsible for ensuring the highest of quality services for each phase of the project. Majdi, having firsthand experience on multiple widening projects both as a City Engineer as well as a private consultant, understands the workflow and needs of a project such as this one. As can be seen from his resume as well as from his reputation throughout the local engineering community, the City can be confident that all submittals will be prepared to the highest of quality and will be free of errors.

Our QA/QC process is achieved through the efforts of qualified professionals effective in employing their skills and following a deliberate program of quality assurance to monitor and verify that the quality control plan is being implemented. Onward Engineering outlines the definition of roles, responsibilities, expectations, review requirements, and quality standards of all documents and procedures within the firm. Onward Engineering's approach to project controls is to achieve estimating, cost control and scheduling objectives through conscious planning and execution of the work and the continuous monitoring of cost, schedule, quantities, and performance.

Our team will use our company's well-defined and proveu procedures and sophisticated computer-based tools designed to facilitate effective cost and schedule control by addressing planning, scheduling, budgeting, performance measurement, and performance evaluation. These procedures entail the early establishment of a work breakdown structure (WBS) that clearly defines discreet subtasks and milestones, and the preparation of corresponding schedule and budgets. Cost estimates will be prepared using computer spreadsheet templates to expedite the turnaround time between the project manager's request for an estimate and its delivery. The goals we strive to achieve in this step while proactively managing the various aspects of project controls include:

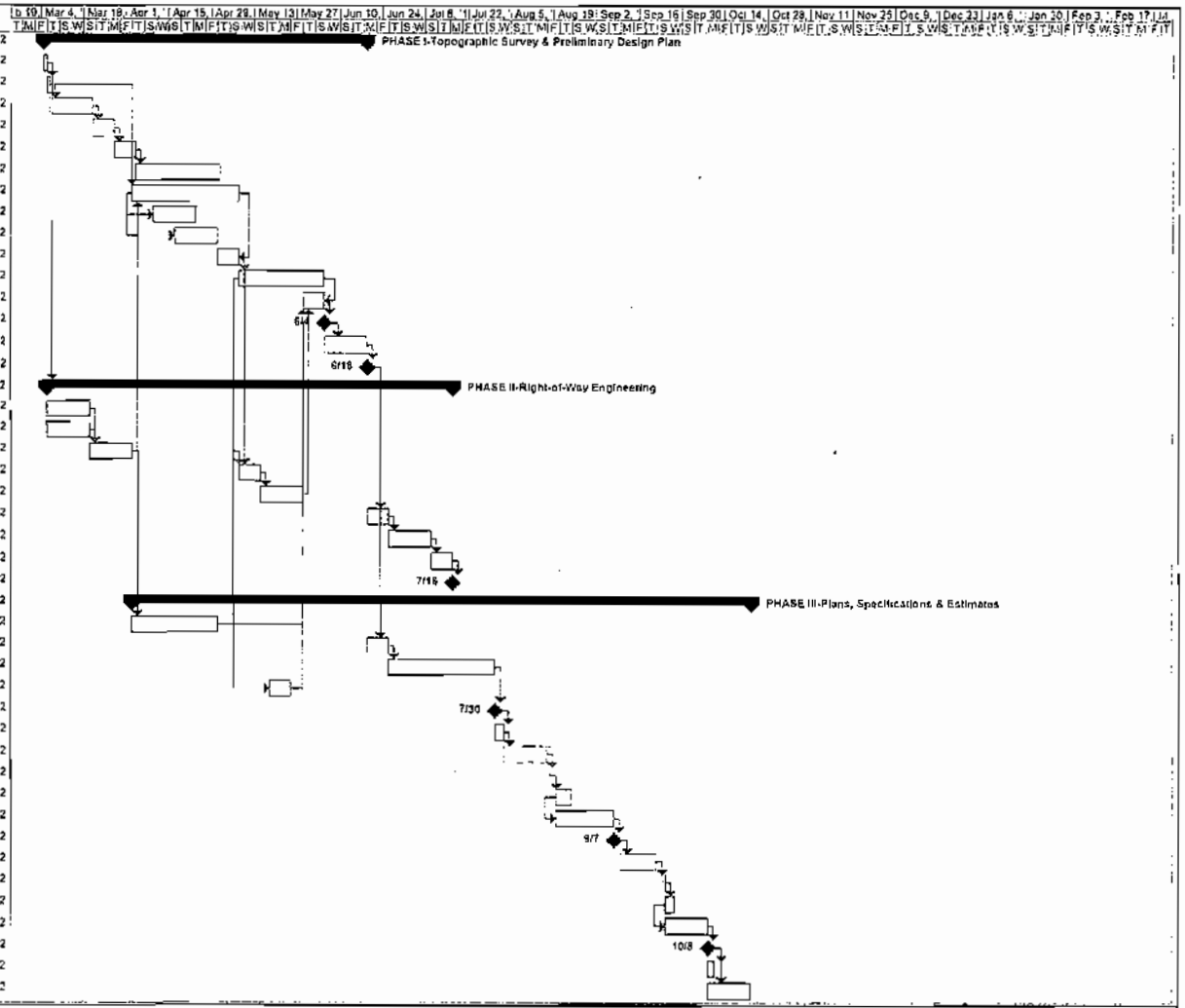
- Provide the control tools and documents that will allow them to accurately estimate, plan, and monitor their work to meet the project's cost, schedule, and performance objectives.
- Identify opportunities in a timely fashion so that impacts to cost, schedule, quantities, and performance are realized and then minimized or avoided. The primary focus is the early identification of opportunities or potential risks and providing alternative solutions.
- Facilitate communications on the project in an effort to provide the City with the long-term visibility necessary to make proactive and informed decisions.
- Implement tools and control documents to support the Change Management Process and the preparation/review of change orders for City approval. The Change Management Control is used for early warning and approval control of deviations in engineering cost, cost of material and equipment, and construction during all phases of the project.

The four (4) key categories that are considered the backbone of our QA/QC Program are: quality, schedule, cost, and documentation. Through close monitoring and control of each of these categories, we are able to ensure that the project is designed according to both our own internal standards as well as those of the City of Costa Mesa.

3: SCHEDULE

The following schedule has been prepared in accordance with the requirements in the RFP. Upon selection as the consultant of choice, Onward Engineering will meet with the City to modify and adjust the schedule to meet any necessary internal or external deadlines to ensure that the project is completed within the schedule requested by the City.

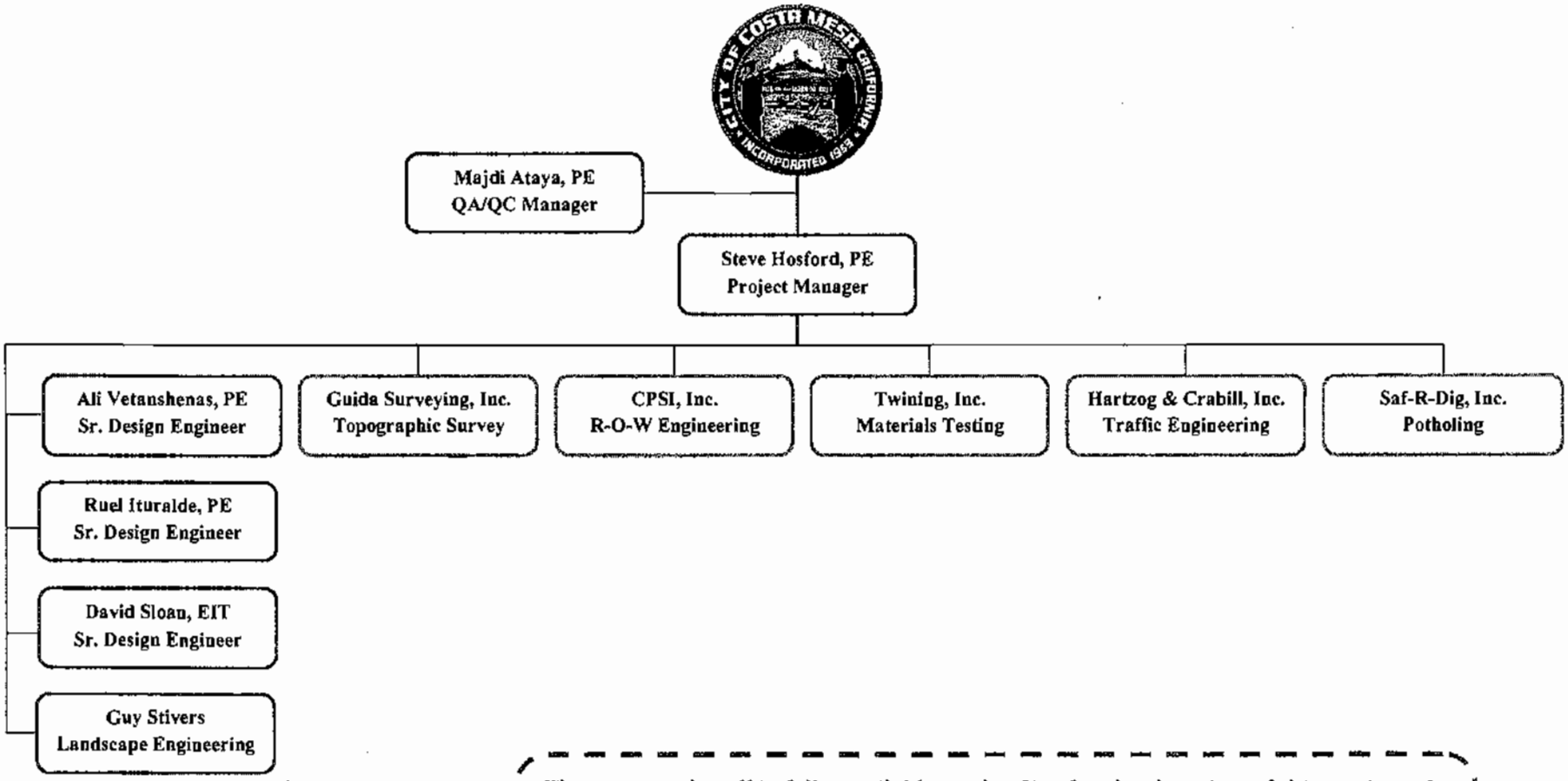
ID	Task Name	Duration	Start	Finish
1	PHASE I-Topographic Survey & Preliminary Design Plan	76 days	Mon 3/5/12	Mon 6/18/12
2	Notice to proceed	1 day	Mon 3/5/12	Mon 3/5/12
3	Design Kickoff Meeting	1 day	Tue 3/6/12	Tue 3/6/12
4	Research & Review Records	10 days	Wed 3/7/12	Tue 3/20/12
5	Utility Research & Coordination	5 days	Wed 3/21/12	Tue 3/27/12
6	Send 1st Utility Notice	5 days	Wed 3/28/12	Tue 4/3/12
7	Respond to 1st Utility Notice	20 days	Wed 4/4/12	Tue 5/1/12
8	Topographic Survey	25 days	Tue 4/3/12	Mon 5/7/12
9	Aerial Photographic and Photogrammetric mapping	10 days	Tue 4/10/12	Mon 4/23/12
10	Establish City and private right of way boundaries	10 days	Tue 4/17/12	Mon 4/30/12
11	Provide Detail Survey Plan	5 days	Tue 5/1/12	Mon 5/7/12
12	Prepare Preliminary Alignment and Concept Designs	20 days	Tue 5/8/12	Mon 6/4/12
13	Prepare Concept Design Estimates	5 days	Tue 5/29/12	Mon 6/4/12
14	Submit Concept Designs to City	0 days	Mon 6/4/12	Mon 6/4/12
15	City Review Concept Designs	10 days	Tue 6/5/12	Mon 6/18/12
16	City Select Alternative of Choice	0 days	Mon 6/18/12	Mon 6/18/12
17	PHASE II-Right-of-Way Engineering	95 days	Tue 3/6/12	Mon 7/16/12
18	Obtain Title Reports	10 days	Tue 3/6/12	Mon 3/19/12
19	Research and study all existing right-of-way documentation	10 days	Tue 3/6/12	Mon 3/19/12
20	Prepare & Send Right of Entry Agreements	10 days	Tue 3/20/12	Mon 4/2/12
21	Identify areas that are affected	5 days	Tue 5/8/12	Mon 5/14/12
22	Prepare Cost Estimate for Land acquisition	10 days	Tue 5/15/12	Mon 5/28/12
23	Interview with owners and tenants	5 days	Tue 6/19/12	Mon 6/25/12
24	Prepare Legal Descriptions & Plats for Final Alternative	2 wks	Tue 6/26/12	Mon 7/9/12
25	Compile Right of Way Documentation File	1 wk	Tue 7/10/12	Mon 7/16/12
26	Submit Final Right-of-Way documents to City (5 Copies)	0 days	Mon 7/16/12	Mon 7/16/12
27	PHASE III-Plans, Specifications & Estimates	145 days	Tue 4/3/12	Mon 10/22/12
28	Geotechnical Analysis & Report	20 days	Tue 4/3/12	Mon 4/30/12
29	Prepare Final Base Map	5 days	Tue 6/19/12	Mon 6/25/12
30	Prepare 70% PS&E	25 days	Tue 6/26/12	Mon 7/30/12
31	Potholing of existing utility facilities	5 days	Fri 5/18/12	Thu 5/24/12
32	Submit 70% PS&E	0 days	Mon 7/30/12	Mon 7/30/12
33	Send 2nd utility Notice	3 days	Tue 7/31/12	Thu 8/2/12
34	City Review 70% PS&E	10 days	Fri 8/3/12	Thu 8/16/12
35	Field review with City	1 day	Fri 8/17/12	Fri 8/17/12
36	Incorporate Comments	5 days	Mon 8/20/12	Fri 8/24/12
37	Prepare 90% PS&E	15 days	Mon 8/20/12	Fri 9/7/12
38	Submit 90% PS&E	0 days	Fri 9/7/12	Fri 9/7/12
39	City Review 90% PS&E	10 days	Mon 9/10/12	Fri 9/21/12
40	Field Review with City	1 day	Mon 9/24/12	Mon 9/24/12
41	Incorporate Comments	3 days	Tue 9/25/12	Thu 9/27/12
42	Prepare Final PS&E	10 days	Tue 9/25/12	Mon 10/8/12
43	Submit Final PS&E	0 days	Mon 10/8/12	Mon 10/8/12
44	Send 3rd Utility Notice	2 days	Tue 10/9/12	Wed 10/10/12
45	Finalize & Submit Resident Engineers File	10 days	Tue 10/9/12	Mon 10/22/12



Onward Task | City Task | Sub Task | Milestone | General Summary Item

4: STAFFING PLAN

4a. Organizational Chart:



The proposed staff is fully available to the City for the duration of this project. In an effort to ensure compliance with the design schedule, full resources have been dedicated to the project & will remain until completion. Key personnel will be available to the extent proposed for the duration of the project. No person will be removed or replaced without the prior written concurrence of the City.

4b. Staffing Plan:

Guida Surveying, Inc. (Surveying)
Guida Surveying Inc. (GSI) is a Professional Land Surveying firm, incorporated in California, with offices in the Bay Area, San Diego County, and Irvine (corporate headquarters). Since 19BB, GSI has been providing Professional Land Surveying services as their primary work product.

CPSI (Right-of-Way)
California Property Specialists (CPSI) has become a leader in the Right-of-Way industry by focusing on tailored approaches to fit each city's needs. They construct unique solutions to cater to the diverse demands and nuances of each project. Their team has over 50 years of combined experience and their client base includes federal, state, county, and cities.

Twining, Inc. (Materials Testing)
For over 100 years, Twining has taken pride in its reputation for quality, reliability and expertise in providing geotechnical, materials testing and construction inspection services. As one of California's largest service providers, Twining has the in-house resources to meet the changing needs of complex construction projects.

Hartzog & Crabill, Inc. (Traffic Engineering)
Since its inception in 1993, HCI has proven itself as a leader in client satisfaction through successful project completion. This is evident in the continued and long-standing relationships they have maintained with client cities. The successes are due to the "hands on" approach demonstrated by their principals.

SAF-r-DIG (Potholing Services)
SAF-r-DIG has earned its reputation as the pioneering innovator in precise three-dimensional subsurface utility information. Since 1987, SAF-r-DIG has been providing subsurface utility engineering services on multiple similar street improvement projects.

Guida Surveying, Inc.
Attributes of the Firm

- Over 20 years of experience
- Experience working with the City of Costa Mesa & Exclusivity with Onward Engineering
- Intersection Improvement and Street Widening Experience

CPSI, Inc.
Attributes of the Firm

- Caltrans, FHWA, and HUD Experience
- Timely Delivery and Minimized Cost
- Public Relations Experts with City familiarity
- Exclusivity with Onward Engineering

Twining, Inc.
Attributes of the Firm

- Caltrans Certified
- 250 Multi-Licensed Inspectors
- LAPM and Federal Experience
- Working Relationship & Exclusivity with Onward Engineering

Hartzog & Crabill, Inc.
Attributes of the Firm

- Caltrans Certified
- 250 Multi-Licensed Inspectors
- LAPM and Federal Experience
- Working Relationship & Exclusivity with Onward Engineering

SAF-r-DIG, Inc.
Attributes of the Firm

- Federally Certified
- California General Engineering Contractor's License
- Hazardous Substances Removal and Remedial Actions Certification

4c. Why Onward Engineering:

Given the current market conditions, public agencies currently have a wide gamut of consultants to sift through and choose from. In the midst of all of this, Onward Engineering has continued to shine and stand out amongst the rest of the consultants for a number of key reasons, including:

1. **Engineer Owned & Engineer Operated:**
   Onward Engineering is a company that is owned and operated by engineers. Our greatest concern is the quality of the projects we deliver. We make sure your projects are designed to a level of quality that is required of our industry and expected by your client. In order to accomplish this, we actively review the latest specifications for projects in order to suggest improvements and modifications for better contract pricing and quality. Most importantly, we are actively available to you throughout the project.

2. **Versatility and Depth of Staff:**
   As can be seen from our staffing chart and resumes, our staff at Onward Engineering is versatile and capable of taking on multiple roles. Over the past decade, there has been a large technology shift which has required project managers and senior designers to be much more active in the day to day design and management of projects. At Onward, due to our dedication to modernization and commitment to quality, we have a perfectly blended team of technology conscious engineers and well seasoned project managers with over three decades of engineering experience. We guarantee that our staff will be self-competent engineers who require no hand holding and who are capable of taking your project from A to Z while staying in communication with you to ensure that your full satisfaction is achieved.

3. **QA/QC Program:**
   Another reason that Onward Engineering should be your consultant of choice is our rigorous QA/QC program which focuses on the four key areas of Design, Scheduling, Cost and Document Control. Above all else, what allows our firm to actively implement a successful QA/QC program is the excellent senior engineering staff that we employ which includes former City Engineers, County Engineering Division Managers and Public Works Directors. With the seasoned eyes of our technically qualified team, the City of Costa Mesa can be confident in our ability to demonstrate a concerted and sustained commitment to provide a high quality final design product.

4d. Resumes:

Onward Engineering has proposed a team with the experience and knowledge necessary to take on this project with vigor and dedication. At Onward Engineering, we believe that the firm is only as good as the people it employs; and based on that, Onward Engineering is unrivalled. Resumes for our full staff, firm, and sub-consultants can be found on the following pages. Based off of the experience of our proposed staff, the City can be confident that this project will be completed efficiently, accurately, and at the highest level.

Majdi Ataya, PE- QA/QC Manager

Qualifications:

- ☑ BS Civil Engineering, CSULB
- ☑ Completed all classes for the MPA at CSULB
- ☑ RCE 39392
- ☑ Past Chairman of La Habra's Traffic Commission
- ☑ Member of ASCE
- ☑ Member of National Society of Professional Engineers
- ☑ Member of APWA

Majdi Ataya is the President and founder of Onward Engineering, and is a Principal-In-Charge for Onward Engineering. Majdi Ataya PE, ex-Deputy Director of Public Works/City Engineer for the City of La Habra, is a seasoned engineer with over 30 years of solid and diversified experience in the public works sector. He is extremely familiar with the process of project management and design. An added quality is that he is a highly effective communicator and manager with outstanding assimilation ability, able to adapt and relates to all levels of management, while retaining high energy levels and enthusiasm for the project at hand. Majdi understands the importance of excellent communication with public agencies. Furthermore, Majdi has prior experience and a proven history with the City of Costa Mesa and is ready to be an extension of City staff. Majdi will be the person designated to negotiate the contract on behalf of Onward Engineering.

Plan Check Imperial Smart Street Project: City of La Habra
As QA/QC Manager, Majdi was responsible for reviewing and commenting on street and intersection widening design plans and specifications submitted by the City's consultant. Smart Streets are designated roadways that serve as the backbone to Orange County's Master Plan of Arterial Highways. The Imperial Highway Smart Street corridor (SR-90) runs for approximately 8.5-miles from the Los Angeles County line to Rose Avenue passing through the cities of La Habra, Fullerton, Brea, Placentia, and Yorba Linda. Imperial Highway is a State Route, and as such involves Caltrans coordination, adding to the level of complexity to the project.

Intersection Widening at Beach Boulevard and Lambert Road: City of La Habra
As QA/QC Manager, Majdi's duty was to review and comment on design plans, specifications and engineer's cost estimate submitted by a city consultant. The project included the widening of the intersection at Beach Boulevard and Lambert Road to improve the traffic level of service and increase the vehicular capacity at this intersection. Work items consisted of intersection widening, raised median removal and re-striping to provide dual left turn lanes on all approaches and separate right turn lanes on all approaches except for the southbound approach, upgrading and relocation of traffic signal equipment and appurtenant work. The potential for including a southbound right turn was also investigated.

Intersection Widening at Imperial Highway and Idaho Street: City of La Habra
Majdi served as the QA/QC Manager of Orange County Sanitation District's $475,000 project to install an east bound right turn lane while they were working on their Miller-Holder Trunk Sewer System in the City of La Habra. The work consisted of constructing Asphalt pavement, sidewalk, curb and gutter, bus pad, retaining walls, drainage facilities, traffic signal modifications, landscaping and pavement re-striping.

Beach Boulevard Smart Street: City of La Habra
Majdi served as the QA/QC Manager for the design, construction and construction management of Beach Boulevard Smart Street improvements between Hillsborough Drive and Imperial Highway in the City of La Habra. The Orange County Transportation Authority (OCTA) was responsible for funding this $1.3 million dollar project, which included preparation of Plans, Specifications & Engineer's Cost Estimate (PS&E). The work completed included: Intersection widening, traffic signal modification, widening of Beach Boulevard, removal of conflicting existing improvements, excavation, grading, backfilling, restoration of existing improvements, landscaping and appurtenant work.

Imperial Highway Smart Street from the LA/OC Line to Rose Drive: City of La Habra
As QA/QC Manager, Majdi was responsible for the precise alignment and design of Imperial Smart Street Project, the segment traverses the Cities of Yorba Linda, Placentia, Fullerton, Brea and La Habra for a distance of 8.5 miles. The limits of Imperial Highway Smart Street are from the Los Angeles/Orange County line in La Habra to Rose Drive in the City of Yorba Linda. The design for the $1.4 million dollar project consisted of roadway widening and striping to six through lanes, additional turn lanes, signal interconnection, bus turnouts and other improvements to increase the operational capacity, efficiency and safety of Imperial Highway

Schoolwood Drive Street Widening Project: City of La Habra
As QA/QC Manager, Majdi was responsible for overseeing the preparation of design plans and specifications & engineer's estimate (PS&E). The project involved removal of rolled curb along Schoolwood Drive and widening the street seven feet to the west. The project also entailed installing conventional type curb and gutter and sidewalk. The design effort had to be coordinated with the La Habra School District and the City of La Habra. The children attending Imperial Middle School and the adjacent Las Positas Elementary School use Schoolwood Drive to walk to school and parents used it to drop off and pick up their children.

Euclid Street Bridge/Street Widening Project: City of La Habra
As QA/QC Manager, Majdi was responsible for overseeing the preparation of design plans and specifications & engineer's estimate (PS&E). This project involved widening the sidewalk on both sides of Euclid Street, which bridges over the Imperial Channel (County of Orange facility). This widening was done to add a northbound right turn lane at Euclid Street and Imperial Highway (a state highway). Additionally, the plans included signal modification and striping.

Bay Street Alley Reconstruction Project (CDBG): City of Costa Mesa
Majdi was the QA/QC Manager in providing design engineering, topographic survey and geotechnical investigation services to the City of Costa Mesa for this Alley Reconstruction Project. This project was funded by the Community Development Block Grant (CDBG). Responsibilities included preparing plans, specifications, and engineer's estimates to Reconstruct Bay Street Alley from Parsons Street to Ford Road. Cost analysis was required to determine the most cost effective alternative, with service life of the alley in mind. A full depth PCC alley section was determined to be the most cost effective method and was implemented throughout.

Steve Hosford, PE- Project Manager

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Qualifications:

- ☑ BS Civil Engineering, Cal Poly Pomona
- ☑ Certificate Management from Chaffey College
- ☑ Certificate Supervision from Chaffey College
- ☑ ASCE & APWA Member
- ☑ Registered Professional Engineer

☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆

Steve Hosford has extensive experience in the field of transportation and roadway design. His experience encompasses transportation projects of various types, sizes and scope. Steve has over 20 years of project management experience and 27 years of roadway design experience. He's also served as a project manager for more than 25 roadway projects in the last 10 years. Steve is responsible for overseeing and the preparation of engineering studies, civil design, and the preparation of final plans and specifications for a variety of transportation and municipal projects. Having taken charge of over 50 street improvement projects in Southern California, Steve has a working knowledge of Caltrans and various cities design code standards. Below is a summary of his relevant project experience.

Ironwood Avenue and Box Springs Road: City of Moreno Valley
As Project Manager, Steve was responsible for preparing a Project Report to establish the feasibility for proposed roadway widening of Box Springs Road and the preparation of plans, specifications, and construction cost estimate for the Ironwood Avenue to an ultimate street configuration with curb, gutter, sidewalk, street lights, new and modified traffic signals and drainage improvements. Major elements included preparing plans for various phases of construction, traffic control, traffic studies, drainage studies, coordination with Caltrans and EMWD, with private development, right of way engineering, and environmental clearance.

Heacock and Frederick Street: City of Moreno Valley
As the Project Manager, Steve was responsible for the preparation of plans, specifications, and estimate for the reconstruction of the two separate project sites. Heacock Street consisted of ultimate widening improvements along the US Army Corps' Heacock Channel and new pavement covering approximately 90,000 square feet. Frederick Street improvements consisted of approximately 85,000 square feet of new pavement including two major local street intersections and fronting the SR-60 Freeway Ramps. With Frederick Street within the SR-60 Interchange, extensive coordination and permitting by Caltrans was performed for the multi-staged construction staging which included temporary closures of the East Bound Off-Ramp.

Santa Ana Avenue and Alder Avenue: Bloomington Area, San Bernardino County
As Project Manager, Steve was responsible for the preparation of plans, specifications and estimate for over one half mile of widening and fully improving the north side of Santa Ana Avenue from Alder Avenue to Laurel Avenue and the east side of Alder Avenue from Santa Ana Avenue to Otilla Street fronting Bloomington High School requiring close coordination with Colton Joint Unified School. Special coordination was necessary with both the County and the school district to develop the configuration of the parking lot from the perspective of traffic circulation, safety, and right of way availability.

Armstrong Road/Sierra Avenue Beautification: Riverside County Development Agency
As Project Manager, Steve was responsible for the preparation of plans, specifications and estimate for the reconstruction, widening and parkway improvements to over one mile of the Major Arterial, Armstrong Road and major street improvements totaling over 9,000 linear feet to nine residential streets involving widening, pavement reconstruction, new curb, gutter and sidewalk.

Tract 29425 & Off-Site Facilities, Harmony Grove: City of Perris & Riverside County
As Project Manager, Steve was responsible for the design, multi-agency coordination, and the approval of engineering drawings for a 318 Lot housing tract at the eastern edge of the City of Perris. Engineering included one mile of 18" VCP Sewer in Nuevo Road, approved by EMWD including Traffic Control and Detour Plans; one mile of Off-Site Street improvement involving street reconstruction, widening, sidewalks, medians, street lights, signing and striping, requiring approval by the City and RCTD; and over two and half miles of residential streets, sewer & water service, and on-site drainage facilities approved by the City and EMWD. Steve was indirectly involved with the engineering a mile of ultimate and interim drainage systems maintained and approved in parts by the City, RCFC&WCD, and RCTD.

Pine Street, from Little Third Street to Monterey Avenue: San Bernardino County
As Project Manager, Steve was responsible for the preparation of plans, specifications and estimate for the construction of curb, gutter and sidewalk with various drainage improvements for almost 1000 linear feet of Local Street fronted by driveways and garages. Full improvements were made to the street intersections of Pine Street and Couth Street, Pine Street and Fourth Street, and at Pine Street and Monterey Avenue fronting an Elementary School.

Interim Lytle Creek Road Realignment, Duncan Canyon Road Widening: City of Fontana
Steve served as Project Manager for the preparation of plans, specifications, and estimate for the interim realignment of approximately 2700 linear feet of Lytle Creek Road to provide clearance for the proposed I-15 South Bound Off-Ramp and PS&E for a 1600 foot long pavement transition from the end limits of the proposed Freeway Interchange improvements to the two lane intersection at Citrus Avenue. Project included coordination with San Bernardino County Department of Public Works concerning the proximity of the Hawker-Crawford Channel.

Home Gardens Beautification, Phase II: Riverside County Economic Development Agency
As Project Manager, Steve was responsible for the preparation of plans, specifications, and cost estimate to Magnolia Avenue, Indiana Street, Lincoln Street, and McKinley Street in the Home Gardens Community. This project included roadway widening, curb, gutter, sidewalk, and drainage improvements to over 4,000 feet of major arterial roadway, and sidewalk and landscaping improvements to several neighboring streets.

Central Avenue Widening: Riverside
As Project Manager, Steve's duties were to prepare the PS&E for the widening and pavement rehabilitation of over 8,000 linear feet of a major arterial. This project includes new curb and gutter and sidewalk, raised medians, signing and striping, drainage improvements, an improved traffic signal, crossing of a UPRR track, and coordination with Metropolitan Water District.

Ali Vatanshenas, PE- Senior Design Engineer

Qualifications:

- ☑ BS Civil Engineering, Tehran University, Iran
- ☑ MS Transportation Engineering, Tehran University, Iran
- ☑ RCE 67105
- ☑ General Contractors License A and B

Ali has 15 years of experience in a variety of Civil and Transportation Engineering projects. He received a Bachelors of Science in Civil Engineering and a Masters of Science in Transportation Engineering. He has worked extensively on roadway design and construction projects in California throughout his career. His experience includes numerous street improvement, widening, public works, and land development projects. Ali is also a licensed General Building and Engineering Contractor in the State of California which gives him a unique perspective on public works construction projects that enables him to provide exceptional quality control during the construction phase of the project.

Kauffman & Dorothy Avenue Widening and Median Island on Firestone Boulevard:
City of South Gate
Ali acted as Project Engineer and Resident Engineer for this project for preparing PS&E for widening of Kauffman and Dorothy Avenue. The preparation of PS&E required the plotting of all physical features of the street geometrics including the beginning and end of the curb returns, flow-lines, centerlines, and adjacent properties. This Project was next to a newly constructed elementary school and required close coordination to ensure normalcy for day-to-day activities. The project included many elements including whole width reconstruction, new curb & gutter, curb ramps and driveway improvements, catch basins relocation, utilities coordination with several local agencies and utility companies and street lighting adjustments. Also included in the work items was the construction of a raised Median Island on Firestone Boulevard to provide safety for motorists and the aesthetics the City desired. As Resident Engineer for this project, Ali was heavily. involved during construction, overseeing the contractor's work to ensure compliant operations and creating a final report outlining construction quantities and right-of-way information. This report was later submitted to the City of South Gate for their records. The project was designed and constructed and was completed in 2010.

Park & Ride: City of Temecula
Ali acted as Project Engineer for this project for preparing PS&E for this land development project to provide ridesharing opportunities for citizens of Temecula. The project's objective was to lessen the City's dependency on passenger cars for commutes and promote convenient means of carpooling. This project included developing a parking lot for the City of Temecula for the purpose of park & ride. The plans were created with landscaping and hydrologic details, including cross fall analysis to ensure adequate drainage. As Project Engineer, Ali's responsibilities included multi-agency coordination with the Riverside County Transportation Commission (RCTC), securing right-of-way, and developing the parking lot plans. The parking lot plans included parking stall layouts ranging in size to accommodate passenger vehicles to transit buses, lighting fixtures, and electrical plans. The project was designed in 2010 and had an approximate construction cost of $1,550,000.

Elm Street Widening: City of Brea
Ali acted as Project Engineer for this project for preparing plans, specifications, and estimate (PS&E) for widening of Elm Street in the City of Brea. Work included temporary lane closures and Ali's responsibility was to oversee the traffic control plan developed by the contractor. To prepare the PS&E, plan and profile drawings were created at 1" = 25' scale to include curb, gutter, sidewalk, street light, traffic signal, and striping details. As the Project Engineer, Ali performed the necessary research to establish the precise location of all utility companies and possible easements. This research heighted awareness and helped prevent facilities from conflicting with construction. Because of his experience with AutoCAD, Ali was able to oversee all street design plans and verify conformance to City and local standards. The project was designed in 2010 and had an approximate construction cost of $300,000.

Street Improvements (CDBG): City of Bell Gardens
Ali acted as Project Engineer for this project for preparing plans, specifications, and estimate for street improvements. The scope of work consisted of curb & gutters, driveways, sidewalks, street lights, signing and striping, and various drainage improvements for arterials fronted by diverse property owner, including commercial and residential. Also, some streets required the improvement of existing landscaping, including planters and irrigation. Ali's experience with AutoCAD allowed him to review the topographic survey to begin the street design plans. The project was designed and constructed in 2009 and had an approximate construction cost of $960,000, where funding was Community Development Block Grant funded.

Aquatic Center: City of Maywood
Ali acted as Project Engineer for this project for preparing PS&E for civil and lighting design for the City of Maywood's Park Aquatic Center and acted as an extension of Maywood's Parks, Recreation, & Community Services Department. Also he managed the coordination with all pertinent personnel including the architect, electrical engineer and mechanical engineer for this complex job. To prepare the PS&E, Ali ensured that all City and local codes/standards were used during the project's design. The project was designed and constructed in 2009 and had an approximate construction cost of $1,200,000.

10th Street and Maple Avenue Improvements: City of Montebello
Ali acted as Project Engineer for this project for preparing roadway PS&E for two streets in the City of Montebello. This project includes curb & gutters, driveways, cross gutters, curb ramps improvements, pavement rehabilitation and spot pavement reconstruction. As Project Engineer, Ali was responsible for ensuring that the curb ramp designs were ADA compliant, and that the reconstruction was properly called out in the plans for the contractor. Furthermore, Ali had to verify that all street design plans were according to City and local design standards. The project was designed and constructed in 2011 and had an approximate construction cost of $600,000.

Ruel Ituralde, PE- Senior Design Engineer

Qualifications:

- ☑ Engineering Management for Construction, 1987
- ☑ University of California Los Angeles
- ☑ Bachelor of Science in Civil Engineering
- ☑ Bachelor of Science in Environmental and Sanitary Engineering
- ☑ Registered Civil Engineer No. 51580, State of California
- ☑ American Society of Civil Engineers (ASCE)

Ruel Ituralde has more than 25 years of civil engineering design, detailed engineering and project management experience. Ruel's recent 12 years of professional experience involves extensive public works and rail transportation projects. Ruel served in different capacities from Design Engineer to Project Manager responsible for numerous highway engineering, dam and water resource engineering, and right-of-way engineering. He was involved in public and private development projects ranging from street improvement, highway & freeway design, grading and drainage, water supply, utilities, parking facilities, taxiway improvement, light rail and heavy rail facilities, to prison facilities and similar projects. He has implemented quality control and quality assurance procedures and project controls (progress report, schedules and cost status) with the aid of computer programs and schedule tracking softwares.

Heacock and Frederick and Pigeon Pass Road Reconstruction: City of Moreno Valley
Ruel served as the Senior Designer for the preparation of plans, specifications, and estimate, and quantities for the reconstruction of the paving and widening of Heacock Street from Gentian to Poppystone and for the reconstruction of Frederick /Pigeon Pass from Sunnymead Boulevard to Hemlock Avenue, through the SR-60 Interchange. Because the project limits pass through the SR-60, close coordination with Caltrans was required to obtain an Encroachment Permit during the design phase. As the Senior Designer, Ruel was responsible for ensuring that the Encroachment permit and other necessary permits were obtained and thoroughly reviewed.

I-10 Haven Ave Interchange and Freeway 101 Valley Circle Interchange: City of Los Angeles
As Project Engineer, Ruel was tasked with upgrading existing freeway interchanges including the widening of an existing freeway, realignment and construction of new on and off ramps, relocation of existing utilities, grading, soundwall, right-of-way, and local street improvements. Before work was conducted, Ruel made certain that all necessary right-of-way documentation and permits had been secured and reviewed. Also, Ruel's duty as Project Engineer was to prepare the plans, specifications and estimate (PS&E) related to civil and utilities engineering including engineering support during construction. The PS&E package conformed to the Manual on Uniform Traffic Control Devices (MUTCD), Caltrans and local standards. The package was prepared in AutoCAD and included details on signing, striping, utility relocations, and drainage.

Long Beach Boulevard Improvements: City of Lynwood
As the Design Engineer for this project, Ruel was responsible for street improvements from Lynwood Road to Orchard Avenue. The project's scope of work included the design and construction management of street widening and median, including upgrading of existing water mains, sewer lines and street lighting. Because the anticipated work included widening the street, Ruel's task as the designer was to secure the necessary right-of-way acquisition before the design

could proceed. The City of Lynwood desired a raised median to increase motorist safety and to add to the street's aesthetics. Project divided into three (3) phases - Phase I and Phase IIA funded by the City fund and Phase IIB funded by FAU fund. Lastly, Ruel was responsible for preparing the plans, specifications, and estimate package.

Route 110/91 HOV Park and Ride Project: City of Gardena
Ruel served as Project Engineer for the preparation of plans, specifications and estimates for the Perimeter Roadway Network Improvement, Park and Ride and Bus Terminal which includes layout, paving and grading, drainage, detour and construction staging plans. Ruel's duty as Project Engineer was to ensure that daily activities were performed close to normalcy during construction. PS&E preparation was in strict conformance to California Department of Transportation standards. Included in the PS&E package were details pertaining to drainage, signage, striping, and traffic control plans. Construction cost is approximately $18 million.

Street Improvements for Day Street: City of Moreno Valley
Ruel served as Designer for this project which consisted of street improvements on Day Street from Alessandro Boulevard to Cottonwood Avenue and staff supervisor for the preparation of the street design including offsite improvements residential fences, driveways, walkways, retaining walls, & drainage facilities.

Industry Business Center: City of Industry
As Project Manager, Ruel was responsible for the proposed 600-acre industrial and commercial development owned by the City of Industry Urban Development Agency. His duties included engaging/managing services of sub-consultants (geotechnical, land planners and engineers), coordination with utility agencies and meeting with city managers and prospective tenants. Additional task includes preparation of grading studies, building pad and slope grading, street, storm drain, sewer and street lighting plans. Land development cost including building pad grading, roadway, sewer, drainage and other utilities is approximately $90 million.

Red Line Subway Project and Pasadena Blue Line Light Rail Project: City of Los Angeles
Ruel served as the Senior Civil Engineer for the preparation of plans, specifications and estimate and construction management. The work involves system wide program management for the development of rail transportation in the County of Los Angeles (part of a $30 billion / 30 year program) including implementation of design criteria, monitoring of section designers progress of work, performing/implementing quality assurance/quality control procedures. Task includes coordination with MTA, City and County of Los Angeles, public utility agencies, other related disciplines and sub-consultants

David Sloan, EIT- Senior Design Engineer

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Qualifications:

- ☑ BS Civil Engineering, USC
- ☑ BS Physical Science, Biola
- ☑ Chi Epsilon & Tau Beta Pi Honor Society

☆☆☆☆☆☆☆☆☆☆

David plays a critical role in each of our design projects by managing all CAD data. David received his first degree in Civil Engineering from USC and was inducted into both Chi-Epsilon and Tau-Beta-Pi Engineering Honor Societies. David is fully versed in both the modern AutoCAD Civil3D design software as well as the AutoCAD Land Desktop platform for design of roadway rehabilitations. During his time at Onward Engineering David has performed detailed designs on arterial roadways, conducted utility coordination for major relocations on high profile projects and assisted in coordination and project management efforts on many projects.

Virginia Avenue Road Widening Project: City of Bellflower
David was the Sr. Design Engineer on this project providing design engineering services to prepare plans, specifications, and engineers' estimate to the widening of an area of the road fronting a property to be demolished at 15929 Virginia Avenue. The scope of work included re-alignment of the existing crown of the road to ensure proper drainage is carried out and a design that smoothly transitions the proposed alignment of the road. Also, this long awaited project includes the installation of curb, gutter, sidewalk, grading, and ensuring that improvements do not affect the businesses and residences adjacent to the project limits. Utility coordination was done to coordinate relocation of utility lines for this high profile project.

Rosini Neighborhood Rehabilitation Project: Commerce, CA
David was the Design Engineer & Project Coordinator for this project which provided design services to the City of Commerce. The Rosini Neighborhood Project is a Community Development Block Grant (CDBG) project and required familiarity with CDBG contract compliance and labor relations contract compliance. The project encompasses approximately 9,050 L.F. of streets & sidewalk rehabilitation. Before design work began, David prepared and notices for the affected utility companies within the project limits. Also, he conducted a comprehensive survey of the existing sidewalk and ramp conditions were noted and repairs and new portions of sidewalk were designed. David was responsible for incorporating ADA curb ramp analysis and design, and curb, gutter and sidewalk replacements and provided recommendations.

Foster Road Rehabilitation Project: La Mirada, CA
David acted as a Sr. Designer for this roadway rehabilitation project planned to be constructed with ARRA stimulus funds. As part of David's responsibility, he prepared the plans, specifications, and estimate at a scale of 1" = 20' and roadway cross sections at 25' intervals. The project required a quick turnaround for a 1.5 mile rehabilitation design of Foster Road which included PCC repairs, ADA ramp design analysis and roadway striping. Foster road, being a multi lane collector street required careful analysis of existing striping to ensure a successful construction project.

Culver Drive Pavemeut Rehabilitation Project: Irvine, CA
David is a Sr. Designer and Project Coordinator on this project to provide design engineering services to the City of Irvine. The project limits are on Culver Drive from the north railroad tracks to Walnut Avenue. David's principal responsibility was the preparation of street improvement plans, specifications and construction cost estimates (PS&E). The limits on Culver Drive maintain a continuous landscaped median, except at a fire access lane, located approximately 1,400' south of

Walnut Avenue. The project calls for a localized pavement reconstruction at the Northbound #3 lane and the Southbound #1 lane; this alternative also includes a full width 2" grind, and a 2" AC leveling course and 2" ARHM overlay. The project also entails the removal and replacement of the existing median shed gutter with a standard 8" median curb and the incorporation of landscaping improvements throughout the project limits.

Rosewood Neighborhood Rehabilitation Project: Commerce, CA

David was the Design Engineer and Project Coordinator for this project which provided design and construction management services to the City of Commerce. The Rosewood Neighborhood Project is a Community Development Block Grant (CDBG) project and required familiarity with CDBG contract compliance and labor relations contract compliance. The project encompasses a total of approximately 5,125 Linear Feet of collector street & sidewalk rehabilitation. A comprehensive survey of the existing sidewalk and ramp conditions were conducted and repairs and new portions of sidewalk were designed. To provide a sustainable design, David conducted utility research to determine where interfaces with existing facilities will occur as a result of construction. Specifications included sidewalk and ADA curb ramp analysis and design, and curb and gutter improvements, striping, signage replacement, street resurfacing and/or reconstruction. All of the roadways require cold-milling and pavement replacement.

ARRA Hacienda & East Road Project: La Habra Heights, CA

David acted as the Design Engineer & Project Coordinator on this ARRA Funded project which included providing design and construction management and inspection services for a rehabilitation project in La Habra Heights. This project included the rehabilitation of roadway, restoration of street shoulder & walkways, analysis of any existing curb ramps, hazard elimination & incidental drainage improvement to protect from street erosion.

Red Hill Avenue Rehabilitation Project: Irvine CA

David acted as the Design Engineer & Project Coordinator for this project that included street resurfacing and reconstruction as well as curb and gutter and sidewalk and curb ramp replacement. To have a clear work plan and a better understanding of the City's desires, David met with City staff and reviewed each project aspect. Due to stringent Irvine ADA regulations, ADA ramps were photographed, annotated and specifically designed for ADA compliance. The primary area of work was in the project coordination and research phases for the design of the project. The project was both in the City of Irvine and the City of Santa Ana which required the plans to be compliant to both City standards and required extra coordination in order to comply with any needs or requirements.

Las Palomas Drive Street Reconstruction Project: La Habra Heights, CA

David acted as a Design Engineer for this project that provided design and construction management services funded with Proposition 1B. This included preparing plans, specifications and engineers estimate to reconstruct 2,550 linear feet of Las Palomas Drive between West Road and El Cajonita Drive. The reconstruction included pulverizing asphalt, lime treating the base, drainage improvements, replacing curbs, and ensuring ADA compliance at all access ramps and walkways.

Bay Street Alley Reconstruction Project (CDBG): Costa Mesa, CA

David was the Project Coordinator responsible for design engineering on this Alley Reconstruction Project. David met with the City to get a better understanding of project intentions. This project was funded by the Community Development Block Grant (CDBG). Scope of work included reconstructing Bay Street Alley from Parsons Street to Ford Road.

5: FIRM EXPERIENCE

Schoolwood Drive Street Widening Project

City of La Habra
Jack Miller
Director of Public Works
201 E. La Habra Blvd.
La Habra, CA 90633
(562) 905-9720 ext 271

Project Cost: $117,000
Project End: July, 2006

Onward Engineering provided design engineering services on this project for the city of La Habra. The work entailed preparing design plans and specifications & engineer's estimate (PS&E). The project involved removal of a rolled curb along Schoolwood Drive and widening the street seven feet to the west. The project also entailed installing a conventional type curb and gutter and sidewalk. The design effort had to be coordinated with the La Habra School District and the City of La Habra. The children attending Imperial Middle School and the adjacent Las Positas Elementary School use Schoolwood Drive to walk to school and parents used it to drop off and pick up their children. This was a high profile project involving extensive coordination and interfacing with affected stakeholders. Onward Engineering was a strong advocate for the City ensuring that slippages in schedule did not occur.

Euclid Street Bridge/Street Widening Project

City of La Habra
Jack Miller
Director of Public Works
201 E. La Habra Blvd.
La Habra, CA 90633
(562) 905-9720 ext 271

Project Cost: $150,000
Project End: March 2006

Onward Engineering provided design engineering services to the City of La Habra on this project. Our staff was responsible for preparing design plans and specifications & engineer's estimate (PS&E). This project involved facilitating the execution of the necessary right-of-wau acquisition to allow widening the sidewalk on both sides of Euclid Street, which bridges over the Imperial Channel (County of Orange facility). The intent of the widening was to add a south bound right turn lane on Euclid Street south of Imperial. The plans included signal modification and striping. We were able to deliver this design project without delay.

FHWA Road Improvements & Slope Stabilization Project

La Habra Heights
Amad Qattan
City Engineer
1245 N. Hacienda Road
La Habra Heights, CA 90631
(951) 232-1790

Project Cost: $1.6 Million
Project End: March 2010

Onward Engineering provided design engineering, construction management and inspection services for this roadway improvement and slope stabilization project which was funded through the Federal Highway Administration (FHWA) Emergency Relief program and was administered through Caltrans. The project required the preparation of environmental documentation (PES), the design of the roadway rehabilitation plans, soil nail wall installation plans, storm drain plans, traffic control and detour plans and erosion control and mitigation plans as well as the preparation of the construction specifications and estimates & obtaining an E-76 and project completion approval. Onward contacted and extensively coordinated and oversaw all required relocations by the Oil, Gas, and Electric companies to ensure that the construction of the project was not in conflict. The proposed repairs on Hacienda Road between Skyline Drive and Canada Sombre Road (Hacienda Upper) stabilized the failing soil mass through a combination of drilled soil nailing, drilled micropiling and drainage improvements. The proposed repairs on Hacienda Road between West Road and East Road (Hacienda Lower) stabilized the failing roadway embankment through a combined method of a retaining wall atop launched soil nails and turf reinforced mats. The proposed repairs on Fullerton Road stabilized the failing roadway embankment.

Virginia Avenue Road Widening Project

City of Bellflower
Jerald "Jerry" Stock, PE-
City Engineer
16600 Civic Center Drive
(562) 804-1424 X2218

Project Cost: $80,000
Project End: February 2012

Onward Engineering is providing design engineering services to prepare plans, specifications, and engineer's estimate to the widening of an area fronting a property to be demolished at 15929 Virginia Avenue. The scope of work included re-alignment of the existing crown of the road to ensure proper drainage is carried out and a design that smoothly transitions the proposed alignment of the road. Also, this long awaited project includes the installation of curb, gutter, sidewalk, grading, and ensuring that improvements do not affect the businesses and residences adjacent to the project limits. Utility coordination was done to coordinate relocation of utility lines for this high profile project.

Las Palomas Drive Street Reconstruction Project

La Habra Heights
Amad Qattan
City Engineer
1245 N. Hacienda Road
La Habra Heights, CA 90631
(951) 232-1790

Project Cost: $425,000
Project End: April 2010

Onward Engineering provided design, construction management and inspection services on this project which was funded by Proposition 1B. The work included preparing plans, specifications and engineer's estimate to reconstruct 2,550 lineal feet of Las Palomas Drive between West Road and El Cajonita Drive. The reconstruction included pulverizing the asphalt surfacing, lime treating the underlying soil, constructing 900 feet of storm drain pipe and drainage inlets, replacing curbs and ensuring ADA compliance at all access ramps and walkways. Deflection testing was performed on Las Palomas Drive between West Road and El Cajonita Drive to assess the structural adequacy of the pavement. Our design and construction team extensively coordinated with local gas, oil, electric, cable, and water agencies in order to analyze, suggest and manage the relocations of all conflicting portions of existing lines. Due to the careful coordination of our team, no conflicts were discovered during the course of construction.

Irvine Center Drive Pavement Rehabilitation Project

City of Irvine
Kal Lambaz
Project Manager
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618-5202
(949) 724-7556

Project Cost: $3.7 Million
Project End: January 2009

Onward Engineering provided design engineering services for this pavement and median rehabilitation project in the City of Irvine. The work included preparing street improvement plan and profile, striping and signing plans, traffic control and phasing plans and landscaping plans, as well as construction specifications and engineer's estimate. The project scope included approximately 1.5 miles of roadway and median improvements on Irvine Center Drive from Jeffrey Road to Culver Drive. Irvine Center Drive is a major thoroughfare in the City of Irvine and is a 6 lane arterial with a raised and landscaped median. The design phase included designated stretches of full depth reconstruction combined with a grind and overlay of the entire roadway. Also included in the scope was the removal and replacement of curb, gutter, sidewalk, medians and landscaping and replacement of access ramps in compliance with ADA regulations. The design required the extensive coordination with utility companies and stakeholders in order to ensure full approval and compliance of all proposed improvements. Onward Engineering was required to submit draft plans to utility agencies to ensure conflicts were not encountered during the design.

Bay Street and Ford Road Alley Reconstruction Projects (CDBG)

City of Costa Mesa
Fariba Fazeli
Senior Civil Engineer
PO Box 1200
Costa Mesa, CA 92628
(714) 754-5378

A/E Cost: $20,337
Project End: February 2010

Onward Engineering provided design engineering, topographic survey and geotechnical investigation services to the City of Costa Mesa for these Alley Reconstruction Projects. This contract was funded by the Community Development Block Grant (CDBG). Onward Engineering was charged with preparing plans, specifications and engineer's estimates to reconstruct Bay Street Alley from Parsons Street to Ford Road and Ford Road Alley from Ford Road to Parsons Street. Onward Engineering conducted a detailed topographic survey and a design site walk to assist in the successful preparation of a full set of PS&E which included plan and profile, cross sections and special details. Cost analysis was required to determine the most cost effective alternative, with service life of the alley in mind. Alternatives considered included ARAM, ARHM, CIR, Full Depth Reclamation & Sub-grade treatments. A full depth PCC alley section was determined to be the most cost effective method and was implemented throughout the project limits. Due to the extremely degraded existing condition of the alley, our team was required to analyze the drainage patterns of the alley to ensure that all drainage would be adequately conveyed through the project site. This also included the analysis and design of the adjoining AC pavement on private property to ensure that the necessary drainage from the private property was also conveyed to the alley. This project also required the coordination of utility relocations. Our project team coordinated with SCE to schedule and conduct necessary relocations prior to the start of construction in order to ensure that conflicts were not encountered.

Campus Drive Bikeway Construction Project

City of Irvine
Darrell Hartman
Senior Civil Engineer
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618-5202
(562) 804-1424 ex 2217

A/E Cost: $72,737
Project End: December 2011

Onward Engineering was retained to design a bikeway for the City of Irvine. The project limits are from the south side of Campus Drive between Culver Drive and California Avenue. The project limits experience a traffic volume of just under 20,000 vehicles per day. The first order of work was to verify the existing right-of-way, obtain the E-76 to secure Federal Funding, preliminary design of the existing slope near the project's eastern limits, and determination of required easements from the University of California, Irvine (UCI). Due to the number of stakeholders involved, extensive coordination including utility coordination was required to increase awareness for the anticipated work. Additionally, research was necessary to ensure the design adhered to the City of Irvine's Standard Plans, City Design Manual, Caltrans Standard Plans, and environmental regulations. The off street bikeway was constructed at 11 feet wide, 6 inches thick, and approximately 1,600 feet in length. The design also included a 3.5 foot high split face block retaining wall for an average slope of 13% at the back of the City right-of-way. The wall was designed using the 2010 California Building Code. A trail lighting system was installed along the bikeway to help maintain cyclist safety. Landscaping was a critical component of design for this project. Considering the bikeway's proximity to the University, it was essential that the design be aesthetically pleasing to all stakeholders.

GUIDA
SURVEYING INC.

Firm Overview

Guida Surveying Inc. (GSI) is a Professional Land Surveying firm, incorporated in California, with offices in the Bay Area, San Diego County, and Irvine (corporate headquarters). Since 1988, GSI has been providing Professional Land Surveying services as their primary work product. GSI currently has a staff of 35 employees, as distributed below:

Guida Surveying Inc.
Corporate Headquarters
9241 Irvine Blvd.
Ste: 100
Irvine, Ca. 92618
949-777-2000 P - 949-777-2050 F
Employees: 19

President: Ralph Guida IV

Guida Surveying Inc.
Bay Area Operations
4695 Chabot
Ste: 200
Pleasanton, Ca. 94588
925-558-2756 P - 925-558-2701 F
Employees: 12

Director: Adrian Trespando

Guida Surveying Inc.
San Diego Operations
1026 W. El Norte Pkwy.
Ste: 147
Escondido, Ca. 92026
760-624-8432 P - 760-749-3988 F
Employees: 4

Director: Richard Allen

KEY PERSONNEL/ROLE	Total Years Experience	License
RALPH GUIDA, IV, PLS, PRINCIPAL LAND SURVEYOR	23	PLS 7076
TIM FETTIG, PLS, CHIEF OF SURVEY PARTIES (SR MANAGER)	23	PLS 7542
DEAN BOULDIN, PLS, PROJECT SURVEYOR	28	PLS 7842
JOHN MILLER, PLS, PROJECT SURVEYOR	20	PLS 7897
ADAM D'ALVIA, PLS, PARTY CHIEF	15	PLS 8141
RALPH GUIDA III, PLS, PARTY CHIEF	45	PLS 5288
GUILLERMO ARREDONDO, CAD SUPPORT TEAM LEADER	12	--

All work for this effort will be performed from the Irvine Corporate Headquarters, which will have the primary responsibility for execution of this project.

PROJECT EXPERIENCE

523 Charlie Street
Costa Mesa, Ca.
Guida Surveying Inc. provided the City of Costa Mesa with a topographic design survey, roadway cross sectional survey, established Right of Way lines for Charlie Street, Hamilton Street, Established the Centerline for Harbor Boulevard and Bernard Street, and filed a Record of Survey, all in conformance with the City of Costa Mesa requirements and County of Orange standards for filing of a Record of Survey.

FDC Soccer Fields
Costa Mesa Ca.
Guida Surveying Inc. provided Costa Mesa with a Topographic Design Survey for Civil Design Improvements to this park. Referenced elevations were tied to the Orange County Benchmark (OCBM) system, and horizontal control was tied to the California Coordinate System.

Avenida de la Carlota
Laguna Hills Ca.
Guida Surveying Inc. provided Bureau Veritas with Topographical/Design Surveys and Right of Way delineation, roadway cross-sections, and utility surveys for the Basemap development for Avenida de la Carlota. This major collector adjacent to I-5 and the Laguna Hills Mall was re-designed to incorporate additional lanes for capacity upgrades. Guida is currently providing construction staking for this project.

Garden Grove Sanitation District Projects 12& 13, Brookhurst Street
Garden Grove Ca
Guida Surveying Inc. provided Topographic/Design Surveys, Right of Way Delineation, Roadway cross-sections, record property lines, and utility surveys for Basemap development for this project. Bureau Veritas utilized our topography for development of Civil Engineering plans for roughly 3500 LF of upgraded sewer lines.

STATE ROUTE 55 PR/ED
ORANGE COUNTY, CA
Guida Surveying is providing design and topographic surveying in preparing a Project Report & Environmental Services (PR/ED) for proposed improvements to northbound State Route 55 (SR-55) between Interstate 405 (I-405) and Interstate 5 (I-5) for the Orange County Transportation Authority. We are conducting all surveying and mapping in accordance with Caltrans standards to complete the Project Report. This includes horizontal and vertical control, drainage surveys, topographical surveys, cross sections, open-ended traverses, profile data sheets, and required documentation.

STATE ROUTE 57 PR/ED, PS&E
ANAHEIM, CA
Guida Surveying provided design and topographic surveying in preparing a Project Report & Environmental Services (PR/ED) for proposed improvements to northbound State Route 57 (SR-57) between Katella Avenue and Lincoln Avenue for the Orange County Transportation Authority. We conducted all surveying and mapping in accordance with Caltrans standards to complete the Project Report. This includes horizontal and vertical control, drainage surveys, topographical surveys, cross sections, open-ended traverses, profile data sheets, and required documentation. Guida completed the Plans, Specifications and Estimates (PS&E) phase upon completion of the PR/ED and the project was recently put out for bid for construction.

With the knowledge and practical wisdom gained from over 20 years of Land Surveying experience, the staff at Guida Surveying understands the importance of:

- A complete and accurate exchange of information
- The relationship between schedule, cost, and scope
- Responsible leadership, with our clients objective first
- Our professional responsibilities
- Properly staffing projects
- Keeping open lines of communication

Their goal on every contract is to complete the project to the satisfaction of the client; their track record in this area is excellent. Listed below is a partial list of clients they have performed similar work for:

Educational Facilities:

- Rio Hondo Community College District
- Cal State Polytechnic University, Pomona
- Coachella Valley Unified School District
- Coastline Community College District
- College of the Desert
- Glendora Unified School District
- Long Beach Community College District
- Orange Coast Community College District
- San Diego Community College District
- University of California – San Diego
- Orange Unified School District

Cities:

- ***City of Costa Mesa***
- City of Corona
- City of Indio
- City of La Palma
- City of Laguna Niguel
- City of Los Angeles
- City of Moreno Valley
- City of Newport Beach
- City of Palm Desert
- City of Pasadena
- City of Piedmont
- City of San Bernardino
- City of Santa Monica
- City of Vallejo

Other Municipalities:

- Cox Communication
- Irvine Ranch Water District
- Metropolitan Transportation Authority
- Metropolitan Water District
- Orange County Fire Authority
- Pacific Bell
- Southern California Edison
- Sprint PCS
- AT&T
- County of Orange
- County of Los Angeles
- State of California
- California Department of Transportation

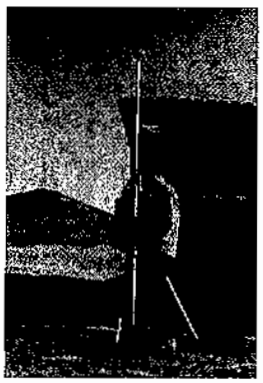
Private Clients:

- Bureau Veritas of North America
- Brehm Communities
- CH2M Hill
- David Evans & Associates
- First American Title Company
- Griffith Company
- The Irvine Company
- Jacobs – Carter Burgess
- Kimley-Horn and Associates
- Lennar Homes
- SEMA Construction
- Tetra Tech

List of Project Personnel

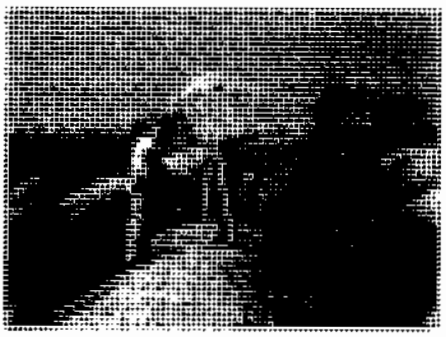
Guida Surveying Inc.'s has reserved an expert team to provide our services to the City of Costa Mesa / Onward Engineering for this project. This team represents our best and brightest for the particular scope of services requested. We are certain you will find these individuals to be qualified, courteous, and attentive to the needs of the City, as well as proactive to the other team members assigned by the City to this project.

Guida Surveying Inc. currently has 35 employees, including 10 Professional Land Surveyors, each having more than 15 years experience in the land surveying and mapping industries. Supporting these professionals are 10 well trained survey technicians/CAD drafters utilizing the latest in CAD technology. Using the most advanced equipment in the industry, Guida Surveying's highly skilled field crews are able to perform field surveys accurately and efficiently, getting the job to the client on time and mistake free. Guida Surveying employs 12 fully equipped survey field crews, including Party Chiefs who are Professional Land Surveyors. In addition, our team has the ability to respond and mobilize teams within 24 hours. Since we typically provide on-call staffing resources to our existing clients, we are accustomed to working in this capacity.



A key component to a successful project is the consultants understanding of the client's needs, industry, and business practices. Our model for a successful project contains the involvement of senior staff to insure client satisfaction. Management experience, knowledge, and problem solving techniques will provide quick solutions, as well as creative ideas, to insure your projects efficient and timely completion.

The key individuals listed in the following resumes will be assigned to this project. As the workload fluctuates, so will their involvement. If the workload volume should increase beyond the identified staff capacity, additional personnel will be assigned to this project to fill the project needs.



DEAN BOULDIN, PLS
PROJECT SURVEYOR

Professional Registration
Professional Land Surveyor, California, No. 7842, 2002

Education
AA, Surveying and Mapping, Santiago Canyon College 1995
Civil Engineering coursework, California State University at Long Beach, 1992-1994

Technical Workshops
Instructor, Santiago Canyon College course instructor, Land Surveying courses, 1996-2006
Instructor, Pacific Land Seminars, Land Surveying Workshops, 2006-present

Affiliations
California Land Surveyors Association, Orange County Chapter, Corporate Member
California Foundation for Land Surveying Education, Treasurer

Industry Tenure

Total years	27
Years with firm	6

Summary
Dean Bouldin has 25 years experience including mapping and design with a concentration in public works projects. Responsibilities have included design and drafting of civil plans including streets and highways, water, sewer and storm drain improvement plans. He has been responsible for developing traffic signal plans and striping plans, calculating quantities and cost estimates for projects, and has acted as a liaison between utility companies and clients.

Project Highlights
Port of Long Beach On-Call Surveying Services, Long Beach, CA. Project Surveyor for this contract, which provides field and office personnel to assist Port staff.

On-Call Contract for Surveying, Mapping, MWD, Los Angeles, CA. Project Surveyor for this 3-year contract includes providing cross-sections, topographic mapping, boundary surveys, map preparation, map checking, control surveys, and global positioning.

City of Pasadena, On-Call Surveying Services Contract, Pasadena, CA. Project Surveyor providing on-call surveying, field and office personnel to assist the City staff in performing map checking and legal descriptions.

Getty Center ALTA, Los Angeles, CA. Project Surveyor/Manager for the Getty Center Museum located in the Santa Monica Mountains.

Topographic Survey, Metropolitan Transportation Agency, Canoga Park, CA. Project Surveyor. Project consisted of a topographic survey of approximately 30 acres for design purposes of a MTA bus terminal. Project Tasks included a GPS horizontal control network, differential level runs, location of above-ground features, a 25 foot topographic grid over the entire site, 25 foot cross sections of the adjoining arterial streets, and measurement of flowline elevations of underground utilities.

On-Call Map Checking Services, Orange County Surveyors Office, Orange County, CA. Support the County Surveyor's office with map checking of Final and Parcel Maps.

El Toro Marine Corps Air Station Record of Survey 97-1038, Orange County Surveyors Office, Orange Vertical Control Network, City of Burbank, Burbank, CA. Level reduction and adjustment for a Second Order, Class I, precise, double run leveling for 50 miles of level lines configured as a network of 12 interconnected loops. Connections were made to nine NGS first order NAVD88 benchmarks located throughout the City. Levels were run to National Geodetic Survey Standards using a Leica NA3000 digital level and certified invar bar code rods.

TIM FETTIG, PLS
CHIEF OF PARTIES

Professional Registration
Professional Land Surveyor, California, No. 7542, 1999

Certification
IOUE Local 12, Certified Party Chief

Education
Rancho Santiago College, Surveying/Mapping
Operating Engineers Surveying Apprentice Program

Affiliations
California Land Surveyors Association, Orange County Chapter

Industry Tenure

Total years	21
Years with firm	21

Summary
Mr. Fettig has over 20 years experience as Chief of Parties, specializing in boundary surveying and construction staking. As Chief of Parties for the Irvine office, Mr. Fettig is responsible for the preparation, communication, scheduling, and management of field survey crews for Guida Surveying. His remarkable organizational skills, coupled with a strong desire to insure client satisfaction, makes him a natural fit for this position.

Project Highlights
County of Orange, San Diego Creek, Irvine, CA. Party Chief on over 1 mile of concrete line channel, providing construction staking for storm drain and grading improvements.

Newport Coast Planning Areas, Newport Beach, CA. Project Surveyor on the boundary, design, construction, and monumentation of a master builder lot within the Newport Coast development.

Portola Parkway, Irvine, CA. Project Surveyor provided the boundary, topographic survey and the construction staking for this two-mile infrastructure project. Construction staking, grading, road construction, storm drain, sewer, domestic water and reclaimed water pipelines.

Irvine Bridges, Irvine, CA. Party Chief providing the boundary, topographic survey and the construction staking on road, railroad and pedestrian bridges over crossings. The projects included topographic surveys for the design and relocation of the existing road, storm drain channel, and utilities.

Avenue H and I-14 Overcrossing, Caltrans, Lancaster, CA. Project Surveyor responsible for directing field crews for the construction of the surface street infrastructure, highway interchange and bridge construction.

Long Beach Airport, Long Beach, CA. Project Surveyor managed field crews for the topographic design surveys and staked lease area for future hangers at Long Beach Airport.

Los Angeles International Airport, Los Angeles, CA. Project Surveyor managed field crews for the topographic design surveys of the arrival and departure areas at LAX.

SR 241/133 Merge/Diverge, Orange County, CA. Provided construction staking for the widening along State Route 241 from Portola Parkway northwest to State Route 133. Calculated in the field grade rates along the highway and projected out to new edge of pavement to maintain the same rate, staked signs, lights, and drainage grates with minimal grade staking. The project was completed on time and under budget.

ADAM D'ALVIA, PLS
PROJECT SURVEYOR

Professional Registration
Professional Land Surveyor, California, No. 8141, 2005

Education
Rancho Santiago College, Survey Courses
Operating Engineers Apprenticeship Program

Affiliations
California Land Surveyors Association, State and local Member

Industry Tenure

Total years	13
Years with firm	13

Summary
Adam D'Alvia brings 13 years of survey and mapping experience with emphasis on boundaries, topographic maps, aerial surveys, subdivisions, and ALTA/ACSM surveys and GPS surveys. He is an expert in field to office automation. In addition, Mr. D'Alvia has provided construction staking and GPS surveying for several large construction projects throughout southern California.

Project Highlights

Irvine Great Park, Irvine, CA. Project Surveyor for the aerial topography ground survey and exterior boundary survey of the El Toro Marine Base, home of the proposed Great Park.

Cal Poly Pomona, Pomona, CA. Project Surveyor for the aerial topography and base design topography map for the proposed Residential Suites Phase II and Lot G.

Cox Communications, Orange County, CA. Project Surveyor for the plats and legal descriptions for the utility easements for Cox to private property owners.

Caltrans District 7, Los Angeles County, CA. Party Chief for several freeway widening projects, including I-405, US-101, and I-210 aerial mapping. Provided design surveys for widening and retrofitting of several bridges along I-405, I-5, and I-110. Provided design survey for redesign of an interchange along US-101 and aerial control for topography of I-210.

Metropolitan Water District of Southern California, Los Angeles, CA. Surveying services for an on-call contract. Performing surveying services for multiple water facilities located throughout Southern California.

Cross Connection, MWD, Los Angeles, CA. Party Chief responsible for the topographic survey, GPS and As-built design for construction improvements from Orange County to San Diego County.

Newport Coast Planning Areas, Newport Beach, CA. Office Project Surveyor on the boundary, design, construction, and monumentation of a master builder lot within the Newport Coast development.

Santiago Canyon Aerial Survey, Orange County, CA. Party Chief for GPS ground control for 4-mile design aerial topographic mapping.

Getty Center ALTA, Los Angeles, CA. Project Surveyor for the Getty Center Museum located in the Santa Monica Mountains.

California Property Specialists, Inc

Teri Kahlen, PLS

Ms. Teri Kahlen is a licensed Professional Land Surveyor with over 25 years experience in the right of way engineering, acquisition and land surveying industry with emphasis on interpreting and preparing legal descriptions for public agencies at the City, County and State levels and in the private sector for large engineering/land surveying firms in Southern California. She served, most recently, as a Real Property Consultant in the Economic Development Department of a city in Los Angeles County. Previous experience includes work as a Survey Analyst, Acquisition Consultant, Project Surveyor, and Right of Way Agent with area engineering firms. In addition, the skills Ms. Kahlen acquired while employed by a title company are quite valuable. A dedicated and diligent professional, her ability to interpret maps, write legal descriptions, and perform other right of way engineering functions is a definite benefit for CPSI clients.

Professional Land Surveyor – California PLS 8746
Registered Professional Land Surveyor – Arizona RLS 39654
California Real Estate Salesperson License No. 01803422
Notary Public, California, Commission No. 1736508
IRWA Course 100 – Principles of Land Acquisition
IRWA Course 105 – The Uniform Act Executive Summary
IRWA Course 205 – Bargaining Negotiations
IRWA Course 400 – Principles of Real Estate Appraisal
IRWA Course 801 – United States Land Titles
IRWA Course 802 – Legal Aspects of Easements
IRWA Course 901 – Engineering Plan Development and Application
Member, California Land Surveyor's Association; **Member,** American Public Works Association
Member, International Right of Way Association

OCTA – Tustin/Rose Grade Separation Project
Ms. Kahlen is currently providing project management, her tasks include the review of legal descriptions, exhibit maps and making recommendations relating to right of way engineering concerns. Reviewing and analyzing preliminary title reports; making recommendations on clearing title issues; and preparing purchase and sale agreements and conveyance documents for various types of interests to be acquired including fee, permanent easements, public utility easements or licenses, temporary construction easements, storm drain easements, aerial easements, etc. In addition, Ms. Kahlen will prepare the right of way certification under Caltrans guidelines for this project.

David Evans & Associates — Ranchero Road Grade Separation
Ms. Kahlen managed the right of way acquisition portion of the Ranchero Road Grade Separation project in the City of Hesperia. This project involved the review of preliminary title reports, appraisals, preparing conveyance documents and agreements, obtaining rights of entry, when necessary; performing right of way acquisition/negotiations for fee, permanent easements, public utility easements or licenses, temporary construction easements, storm drain easements, etc. and preparing the right of way certification under Caltrans guidelines for 40 parcels of land.

Parsons Transportation Group I -15/Ranchero Road Interchange
As Project Manager, Ms. Kahlen is currently managing the right of way acquisition portion of the I-15/Ranchero Road interchange in the City of Hesperia. This project involves the review of preliminary title reports, appraisals, preparation of conveyance documents and agreements, performing right of way acquisition/negotiations, and right of way certification under Caltrans guidelines for 11 parcels of vacant land.

RAILROAD PROJECTS

San Joaquin Hills Transportation Corridor
Ms. Kahlen was responsible for providing right of way engineering services on this project consisting of right of way calculations, title search, right of way mapping, legal descriptions, and grant deed preparation. The project consists of a new toll road which links Route 73 to the I-5 in South OC.

Santa Ana River Mainstem Project
Ms. Kahlen served as right of way technician on this project which involved the widening of the mouth of the river from the Pacific Ocean to 2 miles north. Her involvement on this project included, title search, boundary analysis, right of way mapping, writing legal descriptions, and the preparation of conveyance documents.

State Route 71, San Bernardino County Associated Governments
Ms. Kahlen provided consultant oversight for the right of way services including the review of right of way maps, conveyance documents and legal descriptions. This project involved the widening of existing freeway and the construction of new freeway.

15/40 Interchange, San Bernardino County and I-15 at Lenwood
While employed by Caltrans, Ms. Kahlen provided data research, boundary analysis, review of title reports, right of way maps, appraisal maps, acquisition documents, deeds, resolution of necessity and plats, and other right of way documentation for these widening projects with Caltrans and San Bernardino Associated Governments.

Caltrans District 4 - Bradley Overhead Bridge Replacement
Ms. Kahlen prepared record data research, boundary analysis, review of title reports, right of way maps, appraisal maps, acquisition documents, deeds, resolution of necessity and plats, and other right of way documentation for the Bradley overhead bridge replacement located on Route 140 in the city of Merced.

Roosevelt Park Drain
While employed with a large engineering/land surveying firm, Ms. Kahlen provided right of way engineering services on this project including research of the record data, a boundary analysis, legal description writing, and right of way mapping of the easements for 2,300 feet of this 30" storm drain. The project involved the generation of five right of way maps, three drainage easements, and two ingress/egress easements. The Roosevelt Park drain project was located within street right-of-way and within Roosevelt Park. Several easements were required within Roosevelt Park in favor of the County Flood Control District.

State Rte 210, Segments 3&4 for San Bernardino County Associated Governments
While employed with a large engineering/land surveying firm, Ms. Kahlen prepared record data research, boundary analysis, review of title reports, right of way maps, appraisal maps, acquisition documents, resolution of necessity plats, and other right of way documentation for this new freeway through the Inland Empire.

California Property Specialists, Inc

Kent Jorgensen, Corporate Broker

Kent Jorgensen brings over 25 years of experience in the areas of project management, negotiation, acquisition, relocation assistance, and property management. He has managed and executed nearly 5,000 acquisition/relocation cases. Mr. Jorgensen has written more than 250 acquisition, relocation, and property management policies and procedures for federal, state, and local agencies. His written work is also inclusive of over 350 feasibility, budget, and cost studies for numerous government organizations. Mr. Jorgensen is highly-recognized for his ability to strategically formulate innovative solutions. Drawing on his knowledge and tenure in the Professional Real Estate and Right of Way industries, Mr. Jorgensen is extremely successful at creating plans and procedures that have continuously proven to save our clients an immeasurable amount of time and money.

B.S., Economics, University of Nebraska, Lincoln
LEAD, Nebraska LEAD Program Graduate, fellowships in China, Japan, and Hong Kong
SR/WA Designation, International Right of Way Association
State of California Real Estate Broker License, No. 01174480
Relocation Assistance Certified IRWA Relocation Specialist (R/W-RAC)
Certified Property Manager
Member, International Right of Way Association
Member, American Public Works Association

OCTA Tustin Rose Grade Separation Project 44 Acquisitions, 25 Relocation
Orange County Transportation Authority (OCTA) OC Bridges Projects consists of a grade separation program to separate vehicle and train traffic at the existing at-grade railroad crossings along approximately a 5-mile stretch of the Orangethorpe Corridor. The Orangethorpe Corridor is located in north Orange County and approximately runs parallel to Orangethorpe Avenue between SR-57 and SR-90. CPSI has been awarded contracts for the projects listed below. Mr. Jorgensen provided OCTA with Cost Data Sheets, Project Cost Estimates, and CPSI is also completing acquisition, and relocation services. CPSI is currently completing this project on time with no delays.

OCTA Orangethorpe Grade Separation Project 20 Appraisals
CPSI was awarded the Orangethorpe Grade Separation Project. As part of this assignment, Project Manager, Kent Jorgensen provided review appraisal services on all of the above parcels which also included coordination with an independent appraiser for a commercial property. Due to design modifications, some of the appraisals in varying stages of the process required revisions. CPSI maintained coordination and tracking of these appraisals, providing minimal disruption and maintained the appraisal schedule as set forth by OCTA.

City of Santa Ana, Phase I – Bristol St. Widening: Pine to McFadden 96 parcels
Mr. Jorgensen provided his expertise in management on this $225 million project, one of the largest road widening projects in Orange County. Responsibilities began by completing a detailed cost analysis, project schedule, preparation of a relocation plan and project presentations to community outreach groups. Additional responsibilities included title research, oversight of the appraisal process, complex property acquisitions and relocation of commercial businesses. Mr. Jorgensen was responsible for the management of

12 other consultants over a three-year period. As a result of Mr. Jorgensen's work, this project to date has come in $8 million under budget and one year ahead of schedule. As the Project Director, Mr. Jorgensen also acted as the Deputy City Engineer's primary aide and advisor on all project issues.

City of Hesperia – Rancho Road Railroad Undercrossing – 40 parcels
As Project Manager for CPSI, Mr. Jorgensen provided right of way oversight on this grade separation project. The City of Hesperia invested approximately $1.2 million in design plans and initial right of way acquisition where Ranchero Road meets the BNSF rail line. The new grade would eliminate the flooding potential of Ranchero Road where it crosses the Antelope Valley Wash. Mr. Jorgensen's management responsibilities included contract management, design assistance, title research, appraisal, acquisition, relocation, escrow, property management and right of way certification.

City of Santa Ana – Fairview and MacArthur Intersection Project
As Project Manager, Mr. Jorgensen's responsibilities include design review, title analysis, legal descriptions and plats, oversight of appraisal function and partial acquisitions. Ability to address sensitive severance damage issues was a critical component in meeting a very aggressive project schedule.

City of Irvine – Sand Canyon Grade Separation – 13 parcels
The City of Irvine's Sand Canyon Grade Separation Project consists of lowering Sand Canyon Avenue under the BNSF Railway to provide a grade separated crossing. The improvements also include the realignment and widening of the roadway from four to six lanes between the I-5 and Oak Canyon/Laguna Canyon Road. Funding for the $6.5 million right of way costs will come from State and Federal funds. Mr. Jorgensen provided project management, design review, appraisal, acquisition, and relocation services. Project assignments include providing cost analysis; project reports; and negotiation of road, slope, aerial, utility, railroad, and construction easements in the middle of a highly-developed area of Irvine.

Bristol Widening – Phase II – Bristol Widening Third to Tenth
40 full-acquisition and 20 part-acquisitions
As a result of the success with Phase I, Bristol, the City of Santa Ana awarded all project management activities to Mr. Jorgensen. Duties on this $54 million project included preparation of all project budgets, planning, oversight of environmental studies, appraisals, acquisitions, relocation, and property management activities. Special duties included evaluating and recommending right of way alignment alternatives as it relates to the cost benefit analysis. Using these techniques, the City adopted a modified alignment to reduce costs by nearly $10 million while concurrently negotiating with eight separate law firms for other parcels.

City of Victorville – Nisqualli Road Widening Project 175 Appraisals, 175 Acquisitions
As Project Manager and Broker for CPSI, Mr. Jorgensen managed the turn key right of way services for the Nisqualli Road Widening Project. Duties included oversight of public meetings, title and escrow preparation, engineering map review, appraisal preparation and purchase negotiations. This project is considered a Design/Build project and changes were necessary to accommodate a number of obstacles. Mr. Jorgensen utilized his experience and expertise to minimize impact on private property.

City of Irvine – Dyer / Barranca / Red Hill Widening
At the request of the City of Irvine and the City of Santa Ana, Mr. Jorgensen provided turn-key right of way services to this very high-profile project. His accomplishments included completing and mediating very complex acquisition cases, while avoiding costly litigation proceedings. Of special note were five extremely complex part-take acquisitions dealing with significant severance damage issues. Each case involved very unique right of way issues requiring the implementation of complex mitigation measures to meet strict budget demands. Mr. Jorgensen's expertise in evaluating the before and after condition on remainder parcels, as well as understanding legal nonconforming uses and planning issues was a critical component of the negotiation process.

TWINING

Company History and Background

For over 100 years, Twining has taken pride in its reputation for quality, reliability and expertise in providing geotechnical, materials testing and construction inspection services. As one of California's largest service provider, our firm has the in-house resources to meet the changing needs of complex construction projects from multi-building hospital campuses to interstate highways. We employ some of the industry's most well known construction materials experts who perform research and consult with regulatory agencies to shape the future of construction standard practices.

Twining, Inc. is a full-service engineering and quality control company with unmatched technical expertise, quality assurance/quality control capabilities, laboratory capabilities, and personnel resources. With laboratories throughout California and more than two hundred team members, we are unequaled in our core competencies:

- Geotechnical Engineering
- Materials Testing and Inspection
- Specialty Testing
- Mobile Laboratories
- Asphalt Pavement Quality Assurance Services
- Asphalt Pavement Design and Materials Evaluations
- Roofing and Waterproofing Consultation and Inspection
- Applied Engineering and Research
- Forensic Evaluation

Founded in 1898 and incorporated in 1959, Twining takes pride in its reputation for trustworthiness and excellence. Our office and laboratory are located in Long Beach which will be available for use on this project. In addition, we have a complete office and laboratory facilities in Ventura, San Bernardino, San Diego and Sacramento, California.

Experience with the County of Los Angeles

Twining has been working with various individuals within the County of Los Angeles to provide geotechnical engineering, pavement design and materials testing and inspection services for projects within the supervisorial and maintenance districts. We have collaborated with the County on pavement design solutions and innovations such as roller compacted concrete pavement, high stability X and Y mixes, recycling existing HMA into new pavements, and modified binders. Twining is very familiar with the Empirical mechanistic design guide, the AASHTO design guide, as well as the Caltrans design manual. Our resources related to pavements and our innovative technical materials knowledge will allow this partnership to provide design solutions that are expected by the County. We have successfully collaborated with the county to deliver solutions including green technologies, quality pavements, and low maintenance costs.

Our firm also has extensive experience on flood control projects throughout Southern California ranging from Flood Control Facilities rehabilitation investigations and maintenance construction activities.

The Twining team includes more than 250 multi-licensed, inspectors, whose specific certifications are available upon request.

Paul C. Soltis, PE, GE, *Senior Geotechnical Engineer*

Paul C. Soltis, PE, GE brings over 15 years of technical expertise to Twining Laboratories. His experience includes geotechnical investigations and analyses relative to the development of residential, commercial, and public-use facilities, including transportation, landfill, port and harbor, and water resource facilities. Paul has served as Geotechnical Engineer of record on numerous high profile projects throughout Southern California. As Senior Geotechnical Engineer, Mr. Soltis is responsible for the technical oversight of the firm's geotechnical-construction projects and management of the firm's geotechnical personnel.

Overview

In the Industry since 1993

Joined Twining in 2006

Current Licenses Held

- Registered Civil Engineer, California PE 56140
- Registered Geotechnical Engineer, California GE 2606
- 40-hour HAZWOPER Supervisor Certification

Education

Bachelor of Science, Civil Engineering, 1993
California Polytechnic State University, San Luis Obispo

Master of Science, 2000
University of Colorado, Boulder

Project Experience

- Port of Long Beach, Pier G Maintenance and Repair Complex Buildings
- Kaiser Ontario-Vineyard and Anaheim Medical Centers
- Norwegian Grade, City of Thousand Oaks, Thousand Oaks, California
- Caltrans 710 Improvements
- Caltrans Routes 154 and 101 Santa Barbara County, California
- Sunshine Canyon Landfill Sylmar, California

Project Experience Summaries

- **Port of Long Beach, Pier G Maintenance and Repair Complex Buildings:** Mr. Soltis is currently involved in the construction of container yard subgrade which consists of compacted cement-treated base (CTB) materials. Mr. Soltis is providing technical support during the testing and demonstration of compliance of the CTB materials. Mr. Soltis has been involved as a senior engineer in support of the engineer of record for the project, working to properly interpret and implement the project specifications. Working together with the Port, Parsons Brinkerhoff and the engineer of record, we were able to reduce the amount of testing needed for the CTB minimizing the testing and inspection costs for the Port, yet satisfying geotechnical engineering and civil engineering requirements.

- **Kaiser Ontario-Vineyard and Anaheim Medical Centers:** Mr. Soltis is serving as Geotechnical Engineer of Record during construction of New Patient Towers/D&T Center (split-level basement, mat foundation), Central Utility Plant (shallow foundations and drilled caisson foundations), and hospital support building (drilled caisson foundations) at the

Kaiser Ontario-Vineyard Medical Center. Mr. Soltis has provided design recommendations and engineering review of shoring design (30-foot-deep soldier pile and lagging with tie-backs), evaluated temporary stability of deep excavations, and provides responses to RFI's for design- and construction-related geotechnical issues. Mr. Soltis has prepared the necessary Verified Compliance Reports for approval by OSHPD. Mr. Soltis is also serving as Geotechnical Engineer of Record for the New Patient Towers/D&T Center. This work began in 2007 and is on-going with anticipated completion in 2011.

- **Norwegian Grade, City of Thousand Oaks, Thousand Oaks, California:** Mr. Soltis served as Senior Geotechnical Engineer on this landmark project. Twining performed an initial pavement evaluation. Based on this evaluation, our team completed a pavement design utilizing as much of the natural material as possible. We also provided the City with slope failure design and performed falling weight deflectometer testing. Services during construction included comprehensive Quality Assurance inspection and testing. We also provided on-site engineering solutions to support project needs that emerged during construction due to the special circumstances of this 100-year-old road.

- **Caltrans 710 Improvements:** This project was extremely time-sensitive as Caltrans had only a 53-hour weekend window to perform the work and re-open the freeway. On this basis, Caltrans requested that Twining provide in-the-field geotechnical engineering oversight during the operations to provide on-the-spot recommendations for remediating the poor subgrade conditions, achieving compaction of the subgrade and base materials, and raising productivity. Twining provided a registered geotechnical engineer, Paul Soltis, to oversee the subgrade preparation and compaction of subgrade soil and aggregate base. Mr. Soltis worked closely with Caltrans and the contractor to quickly identify and delineate poor subgrade areas that would require remediation. Twining's input lead to more consistent, reliable compaction test results, hence increased productivity by eliminating time-consuming retesting and/or repairs of subgrade soil and base materials. With Twining's support, Caltrans and the contractor were able to achieve a stable, compacted platform as required within the highly demanding timeframe.

References

Leonard Madson,
Bottega Management Group
(213) 590-7436

James Ho
St. Joseph Health Systems
(714) 397-3017

Rick Darling
Arcadis
(310) 221-8310

Andrew Holm
Kaiser Foundation Health Plan
(909)772-9343

Mark Zakhour
California State University, Long Beach
(562) 577-2289

Chris Gerber, *Infrastructure Division Manager*

Chris Gerber brings over 13 years of technical expertise managing quality assurance and quality control services for high profile infrastructure projects throughout the State of California. He has specialized experience encompassing all aspects of hot mix asphalt pavement construction. He has in-depth knowledge and understanding of engineering, inspection, and testing consulting on various infrastructure facilities including pavements, bridges, airfields, waste water facilities, light rail, and port projects. Mr. Gerber served as a partnering member with Caltrans on the Rubberized Asphalt Concrete Pilot Warranty project. He also participated as co-chair of the Caltrans expert task group and was warranted sole responsibility for the quality of over two and a half million tons of hot mix asphalt over several years.

Overview

In the Industry since 1998
Joined Twining in 2006

Current Licenses Held

- Troxler Radiation Safety
- Radiation Safety Officer
- Asphalt Institute's Professional Development Certification
- FAA & Asphalt Institute Airport Pavement Workshop 2003
- Course CS-921 Use of Recycled Materials for Pavement Construction by Dr. Jon A. Epps, P.E.
- Performance Graded Asphalt Binder by Dr. Jon A. Epps, P.E.
- Asphalt Pavement Technologists

Education

Ventura College, Construction Technology

Project Experience

- POLB, Ocean Boulevard Improvement Project
- LAWA, LAX Crossfield Taxiway
- LAWA, LAX Taxilane S Improvements
- LAWA, LAX Runway 25L Reconstruction and Center Taxiway Relocation
- Route 710 Rehabilitation, Long Beach, California
- City of Thousand Oaks Annual Rubberized Asphalt Rehabilitation Program, Thousand Oaks, California
- Kiewit I-405 Sepulveda Pass Widening
- Caltrans District 8 On-Call
- Caltrans 08-0N7004 Hwy 18, Apple Valley
- RCTC I-215 Widening, Murrieta
- City of Santa Clarita 2010-2011 Overlay and Slurry Seal Program
- Caltrans Contract 08-4697V4 Route 138 and Route 2 Phelan, California

Project Experience Summaries

- **POLB, Ocean Boulevard Improvement Project:** The Ocean Boulevard/Terminal Island Freeway interchange program was completed in early 2007. As a result of this project included easing congestion and improving air quality by eliminating two Terminal Island traffic signals – at Ocean and the TI Freeway, and Ocean and Pier S Avenue. Ocean Boulevard will be raised nearly 20 feet so that east-west traffic can travel non-stop between the Gerald Desmond Bridge and Navy Way. Twining performed pavement profiling services and quality control for smoothness. Mr. Gerber provided Quality Assurance Management services for the successful delivery of this project.

- **LAWA, LAX Crossfield Taxiway:** Mr. Gerber is serving as Asphalt Pavement Technical Advisor on this project. His responsibilities have included providing oversight of quality control services including paving laboratory testing, field sampling, batch plant sampling, materials density testing, and inspection. This project includes constructing portland cement concrete (PCC) and asphalt concrete pavement, removing existing deteriorated concrete and asphalt pavement and improving storm drains. The project will also realign the existing World Way West road and construct two bridges over it.

- **LAWA, LAX Taxilane S Improvements:** This taxilane improvement includes demolishing several existing tenant buildings and asphalt and concrete apron and taxiway pavement. Twining is providing quality control testing and inspection services for the construction of a new portland cement concrete (PCC) taxiway and apron pavement as well as other miscellaneous site work. Mr. Gerber is serving as Project Technical Advisor for quality control services.

- **LAWA, LAX Runway 25L Reconstruction and Center Taxiway Relocation:** Mr. Gerber served as Project Manager for quality control/quality assurance services and as the assistant Quality Program Administrator for this project. His responsibilities included oversight of all aspects of quality control/quality assurance services including paving laboratory testing, field sampling, batch plant sampling, materials density testing, and inspection.

- **Route 710 Rehabilitation, Long Beach, California:** The project consists of over 500,000 tons of HMA of varying types to accommodate the heavy loading. All of the hot mix asphalt mix designs for this project were developed by Mr. Gerber. Mr. Gerber acted as the Quality Control Manager and coordinated the inspection and testing of over 42,000 tons produced by two separate hot plants and delivered to three separate paving crews over a single 55 hour weekend closure. Mr. Gerber also managed the AC Pay program which consisted of 16 lots due to the different hot mix material types used on the project and the three separately approved hot plants.

- **City of Thousand Oaks Annual Rubberized Asphalt Rehabilitation Program, Thousand Oaks, California:** The City of Thousand Oaks has been a pioneer in the use of asphalt rubber pavements and was among the first local agencies to utilize the material. Over 75% of the city's streets have been overlaid with asphalt rubber since the early 1980's. There was a period of time in the late 1980's when the City experienced premature reflective cracking and pavement raveling. Along with the support of the Rubber Pavement Association and Applied Research Associates, Mr. Gerber performed a pavement investigation comparing previous successful projects versus the poor performing projects. Based on the research information derived from the study, Mr. Gerber assisted the City in rewriting their project specifications, implemented a mix design verification program, and implemented a proactive quality assurance program.

- **Caltrans Contract 08-4697V4 Route 138 and Route 2 Phelan, California** This project consists of the complete reconstruction and widening of approximately 10 miles of Route 138 in San Bernardino County. The project calls for 133,000 metric tons of QC/QA Type C PBA-6A asphalt concrete totaling nearly $160 million in construction cost. The project was the first in the state to utilize the newly rewritten Type C specification on a QC/QA project. Mr. Gerber has acted as the Quality Control Manager. He has worked with the laboratory to design a Type C PBA-6A mix with 0.5% antistrip utilizing various aggregates exceeding the specification requirements and has provided an economically feasible mix for the contractor to produce. Mr. Gerber has also coordinated all field QC activities including proper sampling and quartering of samples, placement inspection, compaction testing, plant inspection, and pavement profilograph testing. Mr. Gerber has worked diligently with Caltrans to identify future testing improvements to ensure repeatability in results between two laboratories.

HARTZOG & CRABILL, Inc.

HCI is a consulting engineering firm specializing in serving local government agencies with a full array of traffic engineering services. Specific to traffic engineering and transportation planning, HCI performs various traffic studies including, but not limited to, the following: Preparation and review of traffic impact analyses; warrant analyses for traffic control devices (*traffic signals, flashing beacons, Stop signs, crosswalks*); engineering and traffic surveys for establishing speed limits; traffic signal and striping plans, specifications, and estimates (*PS&E*); development and design of traffic signal coordination systems; on-going remote and local (*off-site/on-site*) management of traffic signal systems; traffic control plans; and assist cities with coordination of services completed by their traffic signal maintenance contractor. Since its inception in 1993, HCI has proven itself as a leader in traffic engineering. This is evident in the continued and long-standing relationships they have maintained with Onward Engineering and their numerous clients. The successes are attributed to the "hands on" approach that is demonstrated by Gerald "Jerry" Stock, as well as their other staff members. Their firm harnesses 40 years of experience, specializing in traffic signal design, signal operations, and signal system coordination. Mr. Stock is a registered Civil and Traffic Engineer, whose experience covers over 21 years, and has been serving the City of Bellflower as both contract City and Traffic Engineer for over ten years.

GERALD J. STOCK, PE, TE
EXECUTIVE VICE-PRESIDENT

Years of Experience: 20

EDUCATION:
1989 BSCE, Civil Engineering,
University of Colorado, Denver

Chi Epsilon – 1989
1978 BS, Geology,
California State University, Long Beach

PROFESSIONAL REGISTRATIONS:
Registered Civil Engineer-California
No. 52822
Registered Traffic Engineer-California
No. 2049

PROFESSIONAL AFFILIATIONS:
American Public Works Association
American Society of Civil Engineers

Mr. Stock is an Executive Vice President with the consulting firm of Hartzog & Crabill, Inc., in charge of city and traffic engineering services. He provides consulting to public agencies from both a technical and organizational perspective. Mr. Stock's background includes a broad array of municipal projects from project conception through completion. He has directed city staff in both long-term capital project planning as well as the day-to-day activities associated with managing a municipal engineering department.

Mr. Stock's experience includes over seventeen years of project management, capital improvement planning, design, and contract administration. He is well-versed in both the technical and the political challenges of municipal engineering activities.

Transportation:
Mr. Stock is currently assisting the City of La Palma with traffic safety enhancements to the Walker Street bridge crossing Coyote Creek.

Mr. Stock has prepared intersection widening plans in the City of Laguna Hills, as well as completed the Engineering and Traffic Surveys for Speed Limits in the Cities of Laguna Hills, Laguna Niguel, San Juan Capistrano, and Yorba Linda.

The City of Bellflower selected Mr. Stock to represent the City on the technical advisory committee (TAC) of the SR-91/I-605 Needs Assessment Major Corridor Study. As vice-chair of the TAC, Mr. Stock's role is to ensure that the City's interests are protected during the planning and development of major improvements along the SR-91 and I-605 Freeways in Bellflower.

Mr. Stock has developed and fostered positive working relationships with Caltrans, Los Angeles County Department of Public Works, Los Angeles Metropolitan Transportation Authority, South Coast Air Quality Management District, and also local law enforcement.

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A WBE Firm

SAF-r-DIG™ Utility Surveys, Inc.

P.O. Box 1478, Palm Desert, CA 92261
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(800) 326-0446 760-776-8274 Fax 760-776-8278 www.safrdig.com

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"Your **Safe** and **Accurate** Window to the Underground"

Professional Profile: Richard Hernandez

Project Assignment: Branch Manager/Project Manager – Signal Hill

Years of Experience: With this Firm 10 yrs. With Other Firms 10

Summary of Experience:

Direct, on-the-scene, proactive Project Management and supervision of field forces; performing Subsurface Utility Engineering services; such as, the minimally intrusive, non-destructive, damage-prevention "Spotholing" services to designate, locate and expose existing subsurface utilities. Richard acts as the multi-tasked principal contact and aggressive negotiator within the role of Project Utility Coordinator.

Project Experience:

Richard Hernandez functioned as Saf-r-Dig's Project Manager to the Prime Consultant, on the **World's largest Groundwater Replenishment System Project**. The project envisioned an estimated budget of $350 million. Richard Hernandez, as the "competent" supervisor, acquired the accurate data collection and visual verification of existing wet and dry subsurface utilities. The 3-phase complex project, along the 13-mile Santa Ana River pipeline alignment and at the Orange County Water District plant site, involved 360 Spotholes with a realized under-budget cost of $250,000. Richard Hernandez functioned as Saf-r-Dig's Project Manager for the **$2.4 billion, 20-mile Alameda Corridor Project.** This project of national significance, involved many political jurisdictions with conflicting interests including rival ports and railroad companies. The project center piece was a 33-foot-deep. 50-foot wide trench that required the relocation of 1700 lines of sewers, gas, electricity, and fiber-optic services. Additionally, the Pacific Coast Highway Over-crossing phase required night time activity, utility visual verification, coordination of non-destructive, damage prevention efforts and sensitive exposure of refinery pipeline crossings and surface railroad crossings. This on-site activity with Caltrans inspection over-sight, specifically requested that project coordination be performed by Richard Hernandez.

Caltrans I-405 & Euclid Sound Wall Project: Saf-r-Dig's Project Manager, Richard Hernandez, encountered many "Orphan Utilities" (existence denied by any utility owner) that complicated the positive identification of existing utility conflicts. Richard was frustrated by several unproductive utility owner representative Field-meets. Furthermore, consulting design engineers provided misleading information. Also, Utility Contract Locators mismarked many of their respective utility locations. However, notwithstanding many unsuccessful, gratuitous test holes, Richard Hernandez's persistence paid; the project was successfully completed and on time.

On a joint Caltrans District 7-Los Angeles County Bureau of Public Works Hwy-30 extension, Richard Hernandez, sensed the need for sensitive public relations. These relations were associated with utility and Right of Way encroachments that involved residential sanitary sewer lateral connections. Richard's excellent public relations were rewarded with favorable public complements from the affected community.

Kinder Morgan acquired **Santa Fe high-pressure "high-risk" gas pipeline properties.** The poor records prompt backhoe operators to reject pothole request. Richard's crews, with proper safety Spothole precautions taken, are safety certified for this work.

EDUCATION / ACTIVE REGISTRATIONS:

University of Maryland National Technical Schools / Safety Certified with Union Pacific and Burlington Northern Santa Fe Railroads. / 40-hr Hazmat certification / ATSSA, Traffic Control Supervisor Certification. Project Management Certification. / Certified DOT Supervisory training / Registered with Union Pacific and Burlington Northern Santa Fe Railroad. / Registered with RSO. (Los Angeles Refinery Safety Overview).

EXHIBIT B

FEE SCHEDULE

CITY OF COSTA MESA
FEE PROPOSAL TO PROVIDE ENGINEERING DESIGN SERVICES FOR THE
HARBOR BOULEVARD AND GISLER AVENUE INTERSECTION IMPROVEMENTS PROJECT

	TASK	PROJECT MANAGER		QA/QC MANAGER		PROJECT ENGINEER		DESIGN ENGINEERS		SUBS./ REIMB	TOTAL BY TASK	
		$110		$110		$90		$80				
		HOURS	$	HOURS	$	HOURS	$	HOURS	$	$	HOURS	$
	PHASE I-Topographic Survey & Preliminary Design Plan											
1	Project Meetings, Management & Scheduling	40	$4,400	0	$0	30	$2,700	20	$1,600	$219	90	$8,919
2	Project Research & Permitting	1	$110	0	$0	10	$900	20	$1,600	$0	31	$2,610
3	Topographic Survey	0	$0	0	$0	2	$180	2	$160	$4,347	4	$4,687
4	Aerial Topographic Survey	0	$0	0	$0	2	$180	2	$160	$4,002	4	$4,342
5	Establish Right of Way Boundary	2	$220	1	$110	2	$180	4	$320	$8,073	9	$8,903
6	Utility Coordination	8	$880	0	$0	20	$1,800	40	$3,200	$0	68	$5,880
7	Project Basemap	2	$220	2	$220	8	$720	20	$1,600	$1,277	32	$4,037
8	Preliminary Widening Alignment Analysis	20	$2,200	4	$440	40	$3,600	60	$4,800	$0	124	$11,040
	Phase I Reimbursables	Reproduction Costs								$750		$750
	Phase I Grand Total	73	$8,030	7	$770	114	$10,260	168	$13,440	$18,668	362	$51,168
	PHASE II-Right-of-Way Engineering											
9	Research Existing Records	0	$0	0	$0	2	$180	2	$160	$391	4	$731
10	Obtain Right of Entry Agreements	1	$110	0	$0	2	$180	2	$160	$1,150	5	$1,600
11	Obtain Title Reports (1 Parcel)	0	$0	0	$0	2	$180	2	$160	$633	4	$973
12	Easement Documentation Analysis	1	$110	0	$0	2	$180	4	$320	$2,266	7	$2,876
13	Property Impact Analysis (1 Parcel)	2	$220	1	$110	4	$360	8	$640	$460	15	$1,790
14	Property Owner Interview & Coordination (1 Parcel)	2	$220	1	$110	4	$360	8	$640	$575	15	$1,905
15	Property Acquisition Estimates (1 Parcel)	2	$220	1	$110	2	$180	4	$320	$460	9	$1,290
16	Provide Legal Description & Right of Way Maps (1 Parcel)	2	$220	2	$220	5	$450	9	$720	$1,990	18	$3,600
	Phase II Reimbursables	Reproduction Costs								$500		$500
	Phase II Grand Total	10	$1,100	5	$550	23	$2,070	39	$3,120	$8,425	77	$15,265
	PHASE III-Plans, Specifications & Estimates											
17	Final Project Basemap	4	$440	2	$220	5	$450	16	$1,280	$0	27	$2,390
18	Geotechnical/Materials Report	2	$220	1	$110	2	$180	4	$320	$7,935	9	$8,765
19	Hydrologic/Hydraulic Report	2	$220	1	$110	8	$720	12	$960	$0	23	$2,010
20	Title Sheet, Details & Roadway Plan & Profile	10	$1,100	8	$880	40	$3,600	80	$6,400	$0	138	$11,980
21	Cross Section Sheets (25' O.C.)	2	$220	2	$220	12	$1,080	20	$1,600	$0	36	$3,120
22	Intersection Grid Grade Plans	2	$220	1	$110	4	$360	16	$1,280	$0	23	$1,970
23	Signing & Striping Plans	3	$330	2	$220	4	$360	16	$1,280	$0	25	$2,190
24	Traffic Signal Modification Plans	2	$220	2	$220	2	$180	4	$320	$12,647	10	$13,587
25	Drainage Plans	4	$440	2	$220	12	$1,080	20	$1,600	$0	38	$3,340
26	Offsite Improvement Plans	8	$880	4	$440	20	$1,800	40	$3,200	$0	72	$6,320
27	On Site/Off Site Electrical Design Plans	2	$220	2	$220	2	$180	4	$320	$6,914	10	$7,854
28	Field Walk-Through	2	$220	0	$0	4	$360	4	$320	$0	10	$900
29	Utility Relocation Coordination	4	$440	0	$0	8	$720	12	$960	$0	24	$2,120
30	Utility Potholing (10 @ $1,470 Per Pothole)	1	$110	0	$0	1	$90	2	$160	$14,700	4	$15,060
31	Technical Specifications	10	$1,100	6	$660	30	$2,700	12	$960	$1,806	58	$7,226
32	Water Pollution Control Documentation	2	$220	1	$110	6	$540	8	$640	$0	17	$1,510
33	Engineers Estimate	4	$440	2	$220	20	$1,800	20	$1,600	$983	46	$5,043
34	Monumentation	1	$110	0	$0	2	$180	2	$160	$1,150	5	$1,600
35	Resident Engineers File	8	$880	2	$220	20	$1,800	8	$640	$0	38	$3,540
36	Construction Technical Support	2	$220	2	$220	16	$1,440	20	$1,600	$0	40	$3,480
	Phase III Reimbursables	Reproduction Costs								$1,500		$1,500
	Phase III Grand Total	75	$8,250	40	$4,400	218	$19,620	320	$25,600	$47,635	653	$105,505
	GRAND TOTAL	158	$17,380	52	$5,720	355	$31,950	527	$42,160	$74,728	1092	$171,938

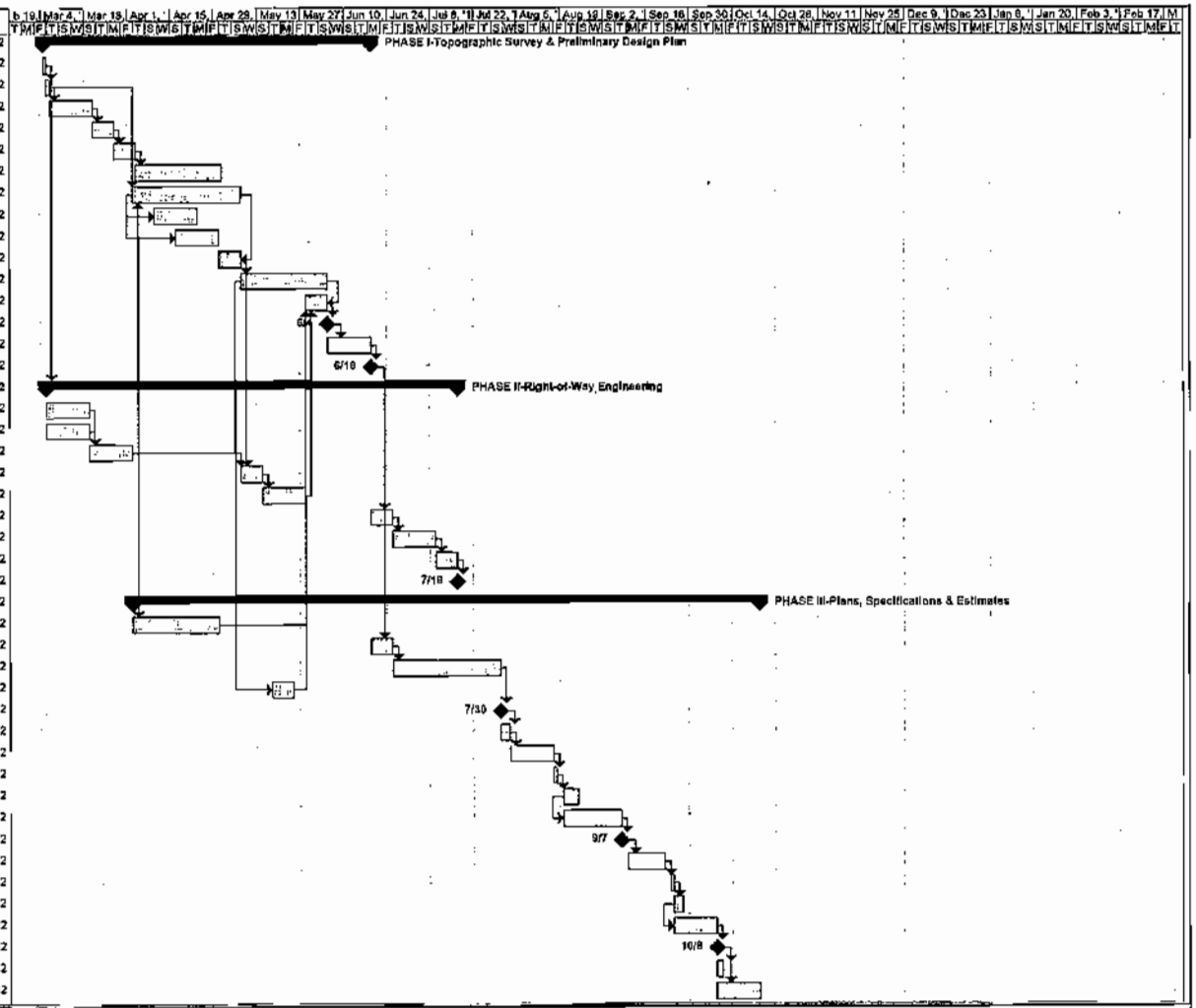
EXHIBIT C

PROJECT SCHEDULE

3: SCHEDULE

The following schedule has been prepared in accordance with the requirements in the RFP. Upon selection as the consultant of choice, Onward Engineering will meet with the City to modify and adjust the schedule to meet any necessary internal or external deadlines to ensure that the project is completed within the schedule requested by the City.

ID	Task Name	Duration	Start	Finish
1	PHASE I-Topographic Survey & Preliminary Design Plan	76 days	Mon 3/5/12	Mon 6/18/12
2	Notice to proceed	1 day	Mon 3/5/12	Mon 3/5/12
3	Design Kickoff Meeting	1 day	Tue 3/6/12	Tue 3/6/12
4	Research & Review Records	10 days	Wed 3/7/12	Tue 3/20/12
5	Utility Research & Coordination	5 days	Wed 3/21/12	Tue 3/27/12
6	Send 1st Utility Notice	5 days	Wed 3/28/12	Tue 4/3/12
7	Respond to 1st Utility Notice	20 days	Wed 4/4/12	Tue 5/1/12
8	Topographic Survey	25 days	Tue 4/3/12	Mon 5/7/12
9	Aerial Photographic and Photogrammetric mapping	10 days	Tue 4/10/12	Mon 4/23/12
10	Establish City and private right of way boundaries	10 days	Tue 4/17/12	Mon 4/30/12
11	Provide Detail Survey Plan	5 days	Tue 5/1/12	Mon 5/7/12
12	Prepare Preliminary Alignment and Concept Designs	20 days	Tue 5/8/12	Mon 6/4/12
13	Prepare Concept Design Estimates	5 days	Tue 5/29/12	Mon 6/4/12
14	Submit Concept Designs to City	0 days	Mon 6/4/12	Mon 6/4/12
15	City Review Concept Designs	10 days	Tue 6/5/12	Mon 6/18/12
16	City Select Alternative of Choice	0 days	Mon 6/18/12	Mon 6/18/12
17	PHASE II-Right-of-Way Engineering	95 days	Tue 3/6/12	Mon 7/16/12
18	Obtain Title Reports	10 days	Tue 3/6/12	Mon 3/19/12
19	Research and study all existing right-of-way documentation	10 days	Tue 3/6/12	Mon 3/19/12
20	Prepare & Send Right of Entry Agreements	10 days	Tue 3/20/12	Mon 4/2/12
21	Identify areas that are affected	5 days	Tue 5/8/12	Mon 5/14/12
22	Prepare Cost Estimate for Land acquisition	10 days	Tue 5/15/12	Mon 5/28/12
23	Interview with owners and tenants	5 days	Tue 6/19/12	Mon 6/25/12
24	Prepare Legal Descriptions & Plats for Final Alternative	2 wks	Tue 6/26/12	Mon 7/9/12
25	Compile Right of Way Documentation File	1 wk	Tue 7/10/12	Mon 7/16/12
26	Submit Final Right-of-Way documents to City (5 Copies)	0 days	Mon 7/16/12	Mon 7/16/12
27	PHASE III-Plans, Specifications & Estimates	145 days	Tue 4/3/12	Mon 10/22/12
28	Geotechnical Analysis & Report	20 days	Tue 4/3/12	Mon 4/30/12
29	Prepare Final Base Map	5 days	Tue 6/19/12	Mon 6/25/12
30	Prepare 70% PS&E	25 days	Tue 6/26/12	Mon 7/30/12
31	Potholing of existing utility facilities	5 days	Fri 5/18/12	Thu 5/24/12
32	Submit 70% PS&E	0 days	Mon 7/30/12	Mon 7/30/12
33	Send 2nd utility Notice	3 days	Tue 7/31/12	Thu 8/2/12
34	City Review 70% PS&E	10 days	Fri 8/3/12	Thu 8/16/12
35	Field review with City	1 day	Fri 8/17/12	Fri 8/17/12
36	Incorporate Comments	5 days	Mon 8/20/12	Fri 8/24/12
37	Prepare 90% PS&E	15 days	Mon 8/20/12	Fri 9/7/12
38	Submit 90% PS&E	0 days	Fri 9/7/12	Fri 9/7/12
39	City Review 90% PS&E	10 days	Mon 9/10/12	Fri 9/21/12
40	Field Review with City	1 day	Mon 9/24/12	Mon 9/24/12
41	Incorporate Comments	3 days	Tue 9/25/12	Thu 9/27/12
42	Prepare Final PS&E	10 days	Tue 9/25/12	Mon 10/8/12
43	Submit Final PS&E	0 days	Mon 10/8/12	Mon 10/8/12
44	Send 3rd Utility Notice	2 days	Tue 10/9/12	Wed 10/10/12
45	Finalize & Submit Resident Engineers File	10 days	Tue 10/9/12	Mon 10/22/12



Onward Task | City Task | Sub Task | Milestone | General Summary Item

EXHIBIT D

CITY COUNCIL POLICY 100-5

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

BACKGROUND

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

PURPOSE

It is the purpose of this Policy to:

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

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

POLICY

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

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

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

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

1. The dangers of drug abuse in the workplace;

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

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

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

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

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

1. Abide by the terms of the statement; and

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

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

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

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

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

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

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

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

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

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

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

BUDGET ADJUSTMENT AUTHORIZATION

Unit	Department	Division	Serial Number
CITY	Public Services	Transportation	12-010

Type of Transaction

- ☒ Revenue Estimate
  - ☒ Estimate Increase
  - ☐ Estimate Decrease
- ☒ Source
  - ☐ From Existing Budget Appropriations
  - ☒ From Donations, Fees, or Grants
  - ☒ From Unappropriated Fund Balance

- ☒ Expenditure Appropriation
  - ☐ Intra-Departmental Transfer
  - ☐ Inter-Departmental Transfer
  - ☐ Project-To-Project Transfer
  - ☒ Appropriation Increase
  - ☐ Appropriation Decrease

Reason for Request:

To increase revenue and appropriations for Measure M2 grant and Traffic Impact Fee funds for intersection improvements at Harbor Blvd and Gisler Ave, as recommended to City Council on March 6, 2012.

Unit	Account	Name	Fund	Organization	Program	Project/Grant	Increase	Decrease
CITY	500000	Harbor/Gisler Intersection Improvements	415	19300	30112	300057	$112,500	-
CITY	430312	Measure M2 Regional Grant	415	19300	30112	-	112,500	-
CITY	500000	Harbor/Gisler Intersection Improvements	214	19300	30112	300057	60,000	-
CITY	340295	Unreserved undesignated fund balance	214	90000	50240	-	-	60,000
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-

Department Authorization:

Department Director

Date 2-27-12

Budget Verification:

The above information has been reviewed, is complete and accurate, and the appropriations and/or unappropriated funds are sufficient to support the request.

☒ Yes ☐ No

Budget and Research Officer

Date

Recommendation: ☒ Approval ☐ Disapproval

Reasons For Disapproval:

Director of Finance

Date

City Manager Action:

☐ Approved ☐ Disapproved ☐ Not Required

City Manager

Date

City Council Action:

☐ Approved ☐ Disapproved ☐ Not Required

Date

ATTACHMENT 2