

**CITY OF COSTA MESA  
PROFESSIONAL SERVICES AGREEMENT  
WITH  
KOA CORPORATION**

THIS AGREEMENT is made and entered into this 29th day of June, 2016 ("Effective Date"), by and between the CITY OF COSTA MESA, a municipal corporation ("City"), and KOA CORPORATION, a California corporation ("Consultant").

**WITNESSETH:**

A. WHEREAS, City proposes to utilize the services of Consultant as an independent contractor to provide engineering services for improvements at the intersection of Hyland Avenue and MacArthur Boulevard, as more fully described herein; and

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

C. WHEREAS, City and Consultant desire to contract for the specific services described in Exhibit "A" (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 Sections 1090-1092 of the California Government Code, in the subject matter of this Agreement.

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

**1.0. SERVICES PROVIDED BY CONSULTANT**

1.1. Scope of Services. Consultant shall provide the professional services described in the City's Request for Proposals ("RFP"), attached hereto as Exhibit "A," and Consultant's Response to City's RFP ("Consultant's Proposal"), attached hereto as Exhibit "B," both incorporated herein by this reference.

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

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

- (a) Meet with Consultant to review the quality of the work and resolve the

matters of concern;

- (b) Require Consultant to repeat the work at no additional fee until it is satisfactory; and/or
- (c) Terminate the Agreement as hereinafter set forth.

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

1.5. Non-discrimination. In performing this Agreement, Consultant shall not engage in, nor permit its agents to engage in, discrimination in employment of persons because of their race, 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. Consultant shall be paid in accordance with the fee schedule set forth in Exhibit "C," attached hereto and made a part of this Agreement by this reference (the "Fee Schedule"). Consultant's total compensation shall not exceed Forty-Nine Thousand Eight Hundred Thirty-Five Dollars (\$49,835.00).

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

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

### **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 set forth in Exhibit B. 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 five (5) years, ending on June 30, 2021, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

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

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

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

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

## 5.0. INSURANCE

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

- (a) Commercial general liability, including premises-operations, products/completed operations, broad form property damage, blanket contractual liability, independent contractors, personal injury or bodily injury with a policy limit of not less than One Million Dollars (\$1,000,000.00), combined single limits, per occurrence. If such insurance contains a general aggregate limit, it shall apply separately to this Agreement or shall be twice the required occurrence limit.
- (b) Business automobile liability for owned vehicles, hired, and non-owned vehicles, with a policy limit of not less than One Million Dollars (\$1,000,000.00), combined single limits, per occurrence for bodily injury and property damage.
- (c) Workers' compensation insurance as required by the State of California. Consultant agrees to waive, and to obtain endorsements from its workers' compensation insurer waiving subrogation rights under its workers' compensation insurance policy against the City, its officers, agents, employees, and volunteers arising from work performed by Consultant for the City and to require each of its subcontractors, if any, to do likewise under their workers' compensation insurance policies.
- (d) Professional errors and omissions ("E&O") liability insurance with policy limits of not less than One Million Dollars (\$1,000,000.00), combined single limits, per occurrence and aggregate. Architects' and engineers' coverage shall be endorsed to include contractual liability. If the policy is written as a "claims made" policy, the retro date shall be prior to the start of the contract work. Consultant shall obtain and maintain, said E&O liability insurance during the life of this Agreement and for three years after completion of the work hereunder.

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

- (a) Additional insureds: "The City of Costa Mesa and its elected and appointed boards, officers, officials, agents, employees, and volunteers are additional insureds with respect to: liability arising out of activities performed by or on behalf of the Consultant pursuant to its contract with the City; products and completed operations of the Consultant; premises owned, occupied or used by the Consultant; automobiles owned, leased, hired, or borrowed by the Consultant."
- (b) Notice: "Said policy shall not terminate, be suspended, or voided, nor shall it be cancelled, nor the coverage or limits reduced, until thirty (30) days after written notice is given to City."
- (c) Other insurance: "The Consultant's insurance coverage shall be primary insurance as respects the City of Costa Mesa, its officers, officials, agents, employees, and volunteers. Any other insurance maintained by the City of Costa Mesa shall be excess and not contributing with the insurance provided by this policy."
- (d) Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the City of Costa Mesa, its officers, officials, agents, employees, and volunteers.
- (e) The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

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

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

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

## **6.0. GENERAL PROVISIONS**

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

exhibits to this Agreement.

6.2. Representatives. The City CEO 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:

KOA Corporation  
3190 C Shelby Street  
Ontario, CA 91764  
Tel: (909) 890-9693  
Fax: (909) 890-9694  
Attn: Ming Guan

IF TO CITY:

City of Costa Mesa  
77 Fair Drive  
Costa Mesa, CA 92626  
Tel: (714) 754-5017  
Fax: (714) 754-5028  
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 "E" and incorporated herein by reference. Consultant's failure to conform to the requirements set forth in Council Policy 100-5 shall constitute a material breach of this Agreement and shall be cause for immediate termination of this Agreement by City.

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

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

Orange County, California.

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

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

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

6.11. PERS Eligibility Indemnification. In the event that Consultant or any employee, agent, or subcontractor of Consultant providing services under this Agreement claims or is determined by a court of competent jurisdiction or the California Public Employees Retirement

System (PERS) to be eligible for enrollment in PERS as an employee of the City, Consultant shall indemnify, defend, and hold harmless City for the payment of any employee and/or employer contributions for PERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of City.

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

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

6.13. Ownership of Documents. All findings, reports, documents, information and data including, but not limited to, computer tapes or discs, files and tapes furnished or prepared by Consultant or any of its subcontractors in the course of performance of this Agreement, shall be and remain the sole property of City. Consultant agrees that any such documents or information shall not be made available to any individual or organization without the prior consent of City. Any use of such documents for other projects not contemplated by this Agreement, and any use of incomplete documents, shall be at the sole risk of City and without liability or legal exposure to Consultant. City shall indemnify and hold harmless Consultant from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from City's use of such documents for other projects not contemplated by this Agreement or use of incomplete documents furnished by Consultant. Consultant shall deliver to City any findings, reports, documents, information, data, in any form, including but not limited to, computer tapes, discs, files audio tapes or any other 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 this Agreement and all reports, documents, information and data, including, but not limited to, computer tapes, discs or files furnished or prepared by Consultant, or any of its subcontractors, pursuant to this Agreement and provided to City may be subject to public disclosure as required by the California Public Records Act (California Government Code Section 6250 *et seq.*). Exceptions to public disclosure may be those documents or information that qualify as trade secrets, as that term is defined in the California Government Code Section 6254.7, and of which Consultant informs City of such trade secret. The City will endeavor to maintain as confidential all information obtained by it that is designated as a trade secret. The City shall not, in any way, be liable or responsible for the disclosure of any trade secret including, without limitation, those records so marked if disclosure is deemed to be required by law or by order of the Court.

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

performing work that would require Consultant or one of its officers, employees, associates or subconsultants to abstain from a decision under this Agreement pursuant to a conflict of interest statute.

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

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

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

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

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

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

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

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

6.24. Waiver. The delay or failure of either party at any time to require performance or compliance by the other of any of its obligations or agreements shall in no way be deemed a waiver of those rights to require such performance or compliance. No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the party against whom enforcement of a waiver is sought. The waiver of any

right or remedy in respect to any occurrence or event shall not be deemed a waiver of any right or remedy in respect to any other occurrence or event, nor shall any waiver constitute a continuing waiver.

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

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

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

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

CITY OF COSTA MESA,  
A municipal corporation

[Redacted Signature] \_\_\_\_\_  
Chief Executive Officer

Date: 6/29/16

CONSULTANT

[Redacted Signature] \_\_\_\_\_

Date: 6/23/16

Signature

Min Zhou Vice President  
Name and Title

[Redacted] \_\_\_\_\_  
Social Security or Taxpayer ID Number

ATTEST:

[Redacted Signature] \_\_\_\_\_  
City Clerk



APPROVED AS TO FORM:

[Redacted Signature]

City Attorney

Date: 06/22/16

APPROVED AS TO INSURANCE:

[Redacted Signature]

Risk Management

Date: 6/23/16

APPROVED AS TO CONTENT:

[Redacted Signature]

Project Manager

Date: 6-23-16

APPROVED AS TO PURCHASING:

[Redacted Signature]

Interim Finance Director

Date: 6-23-16

DEPARTMENTAL APPROVAL

[Redacted Signature]

Interim Public Services Director

Date: 6-23-16

**EXHIBIT A**  
**REQUEST FOR PROPOSALS**



# CITY OF COSTA MESA

CALIFORNIA 92628-1200

P.O. BOX 1200

FROM THE OFFICE OF THE DIRECTOR, DEPARTMENT OF PUBLIC SERVICES

March 4, 2016

**SUBJECT: REQUEST FOR PROPOSALS - ENGINEERING SERVICES FOR  
HYLAND AVENUE AT MACARTHUR BOULEVARD INTERSECTION  
IMPROVEMENTS**

Dear Consultant:

The City of Costa Mesa is requesting proposals for professional engineering services for improvements at the intersection of Hyland Avenue at MacArthur Boulevard. The scope of services generally consists of the following:

- Phase 1: Detailed topographic survey and Preliminary Design Plan
- Phase 2: Right-of-way engineering and legal descriptions
- Phase 3: Final civil design plans, specifications, and estimates (PS&E)

Final PS&E shall be developed as a turnkey project for advertisement and construction.

## **BACKGROUND**

The intersection of Hyland Avenue/MacArthur Boulevard is significantly congested during the evening peak periods. MacArthur Boulevard is classified as a Major Arterial in the Orange County Transportation Authority's (OCTA) Master Plan of Arterial Highways (MPAH). Hyland Avenue is classified as Primary Arterial on the MPAH. Both Hyland Avenue and MacArthur Boulevard carry significant amount of regional traffic. Hyland Avenue provides an important connection to the Harbor Gateway Business Park, a large employment area in the northwest portion of Costa Mesa. The intersection of Hyland Avenue/MacArthur Boulevard is at the border of Costa Mesa and Santa Ana and in close proximity to Fountain Valley. The traffic signal at this location is controlled by the City of Santa Ana.

There are significant numbers of northbound left-turning vehicles from Hyland Avenue to westbound MacArthur Boulevard during the evening peak periods. This results in long queues in the northbound direction. The intent of the subject improvement project is to mitigate current congestion and operational problems occurring daily at the Hyland Avenue/MacArthur Boulevard intersection, primarily during the evening peak hour periods. The scope of the project includes the construction of an additional northbound approach lane at the intersection and restriping Hyland Avenue to provide two northbound left turn lanes, one shared left/through lane and an exclusive right turn lane. Improvements will address the high eastbound right turn volume in the AM peak period by providing a right-turn overlap phase with the northbound left turn movement and enhance the overall intersection operation. To insure that buses do not conflict with right

turning traffic and negatively impact the intersection operation, improvements will also be made during construction to create a bus turnout within the existing right of way for the current bus stop along Hyland Avenue immediately south of the intersection. Existing bicycle lanes are to be maintained on Hyland Avenue. The attached aerial map shows the existing lane configuration and conceptual improvements.

### **SCOPE OF SERVICES**

The subject scope of services is intended as a "Turnkey" project to maintain a responsible and comprehensive base for all project development. Tasks shall be coordinated to effectively develop interrelated project elements; the project shall not be advanced until preliminary requirements are addressed and clear direction is established. The consultant shall have total responsibility for the accuracy and completeness of all work and services.

The following description of work defines the general project requirements. Associated tasks and provisions not specifically defined herein are requested to be addressed in the proposal and undertaken within the proposed "Not to Exceed" contract fee.

### **PHASE I - Topographic Survey & Preliminary Design Plan**

The project area is defined as Hyland Avenue, 600 feet south of MacArthur Boulevard to the MacArthur Boulevard intersection. This phase consists of defining physical conditions and utilities within the project area including the following:

1. Meet with City staff to define and clarify the work plan and project elements.
2. Review existing plans and materials, obtain a City permit, and secure right-of-entry for survey and geotechnical fieldwork.
3. Perform a topographic survey extending through the project area to establish horizontal and vertical controls at 10' intervals. The survey shall extend 50' outside of the City right-of-way within adjacent private parcels and 100' into cross streets. Establish existing and proposed controls including centerline, street geometrics, and right-of-way throughout project limits. Reference elevations to the closest and latest Orange County Benchmark (OCBM).
4. Establish City and private right-of-way boundaries with the same general care as would be applied to establish the exterior boundary on a final subdivision map. The consultant shall:
  - a. Recover or reestablish monumentation of points controlling in the deed description which created the City right-of-way boundary.
  - b. Recover all existing City right-of-way boundary line monumentation documented in County and City records.
  - c. By field survey, tie controlling monuments and boundary line monuments to each other and to the Orange County Horizontal Control Network.
  - d. Establish the existing City right-of-way boundary and document all work in a "Before Condition" Record of Survey.

- e. Obtain a litigation guarantee/title report and define the exact limits of each private parcel, estimated for three (3) parcels.
5. Research and establish the precise location of all utilities and utility easements. Coordinate with all utility companies to determine underground, surface, and overhead facilities. Comply with the City adopted "Utility Coordination Procedures." Determine where interfaces with existing facilities will occur as a result of the future construction of this project. Consult with affected utility companies and resolve any conflicts, keeping City staff informed in writing. Maintain a Utility File on all utility documentation.
6. Plot the detailed survey notes and electronic mapping files at 40 scale via CAD on 24" X 36" sheets identifying all existing conditions. Physical features shall include BCR, ECR, flow-lines, centerlines, angle points, top of curb, driveways (width, X & Y), spandrels, pavement striping, utilities, structures, walls, trees and landscape, underground and surface utilities, poles, hydrants, catch basins, signs, valves, and manholes, etc. Within all adjacent, private properties, define driveways, walkways, curbs, stairs, parking lots and parking stall layouts, buildings, planters, patios, signs, and all other physical features.
8. Review the City prepared conceptual layout of the improvements at the Hyland Avenue/MacArthur Boulevard intersection. Refine the conceptual plan and prepare a detailed preliminary alignment plan for the proposed improvements, identify associated impacts and costs. The plan should include existing and proposed right-of-way, curbs, sidewalks, driveways, striping, bus stops, medians, centerlines, etc. A detailed cost estimate itemizing all construction and right-of-way elements should be prepared.

## **PHASE II – Right-of-Way Engineering**

The Consultant shall review the survey data, utility information and preliminary alignment plan to determine right-of-way requirements, impacts, and costs. Right-of-way engineering services shall include:

1. Obtain and review all existing right-of-way documentation of the project area, assessor maps, building site plans, and parcel maps for each affected property.
2. Facilitate the execution of all right-of-entry agreements as required for survey and geotechnical work. Procure and review current litigation guarantees/title reports, development tract maps, building plans, and associated property documentation for each affected property. Costs incurred to procure this documentation shall be included in the contract fee.
4. Determine all easement locations including utilities, existing easement facilities, and disposition of affected facilities and easements with alternative alignments.
5. Identify square footage to be acquired and itemize project impacts resulting from each affected property.
6. Interview owners and tenants, present the proposed project, and assess the extent of concerns conveyed at the meeting.

7. Prepare itemized cost estimates for acquisitions per parcel and per alignment plan, and estimate severance and/or cost-to-cure damages (excludes formal appraisal services).

Upon approval of the final alignment of the proposed improvements, perform calculations to establish precise right-of-way acquisition areas for each parcel to be acquired. Review and verify traverse closures and area calculations for each parcel. Prepare legal descriptions and acquisition maps for each parcel. The Consultant shall plot on 8-1/2" x 11" vellum acquisition maps per City standard layout. Maps shall be drawn in ink, by AutoCAD, or by another approved method. Process for City review and provide five (5) copies for each parcel of the final legal description, deed, exhibits, and right-of-way map for City execution.

### **PHASE III – Plans, Specifications & Estimates**

The preparation of final civil design plans, specifications and estimates, and utility coordination shall conform to MUTCD, Caltrans, and City standards. Intersection plans shall be designed to City of Santa Ana standards. Plan and profile will be required for the existing and proposed elevations. Plans shall be 1" = 20' scale horizontally and 1"=2' vertically on standard 24" x 36" sheets. AutoCAD latest version shall be utilized, completed on 4 mil. erasable mylar per the City standards. Plans are to be fully detailed to advertise and construct the project, including:

- < Surveying
- < Geotechnical analysis
- < Traffic signal modification plan
- < Signing and striping plan
- < Special provisions
- < Processing and approvals
- < Hydrology
- < Plan and profile drawings
- < Curb, gutter, & sidewalk
- < Contract documents
- < ADA improvement details
- < Utility adjustments/relocations
- < Private on-site reconfiguration including landscaping and irrigation adjustments; and lighting and sign relocations

1. Plot all physical features including BCR, ECR, flow-lines, centerlines, angle points, top of curb, handicap ramps, pavement striping, structures, trees, underground and surface utilities, poles, fire hydrants, catch basins, signs, water valves, manholes, etc. Within all adjacent private properties, define driveways, walkways, curbs, walls, AC and parking stall layouts, buildings, planters and irrigation, signs, lighting, utilities, and all other physical features. Based on the topographic survey, establish exact centerline controls, street geometrics, and right-of-way limits of project.
2. Prepare final intersection grid grades at 10' intervals for Hyland Avenue/MacArthur Boulevard and provide elevations at TC, FL, EG, EP, BCR, ECT, ¼ and ½ curb return, at 1"=10' scale. Prepare final cross sections at 25' intervals, indicating vertical and horizontal cross falls, elevations, analysis of super elevations/highway design speed calculations, and join elevations and details to private property, etc., conforming to City standards. Cross sections shall be submitted with the first plan check.
3. Utilities - Perform all necessary research to establish precise location of all utilities and utility easements. Coordinate with all utility companies to determine the nature and location of all possible relocations and associated costs. Comply with the City adopted "Utility

Coordination Procedures" attached. Determine where interfaces with existing facilities will occur as a result of the construction of this project. Consult with affected utility companies requiring relocations, and resolve any conflicts, keeping City staff informed in writing, including the possibility of undergrounding utilities presently on poles along the project area. Compile information in "Utility File" and submit to City.

4. The consultant shall include \$10,000 as a separate item in the fee schedule for the City's use for potholing for utilities as requested by the consultant and approved in writing by the City's Project Manager. The Consultant will not be compensated for any other work from this item. Identifying all underground conflicting utilities is critical and it is the consultant's responsibility to ensure all utilities are properly identified and located on the plans.
5. Geotechnical/Materials report - Obtain, analyze, and document geologic and engineering data averaging five feet in depth for the project area (estimated three locations), and develop R-value and pavement design recommendations. The Geotechnical report shall include:
  - Review of readily available background materials, including published geologic maps and literature, in-house information, and stereoscopic aerial photographs. Consultant shall also review preliminary project plans, as-built project plans and specifications, log of test boring sheets, and existing structure foundation reports, if available.
  - Performance of a geotechnical site reconnaissance to observe the geotechnical conditions along the proposed alignment.
  - Provide borings at three (3) locations determined by the Consultant and approved by the City. Borings shall be a minimum of 6" wide and average 5' deep, with cores backfilled and compacted at 95% with AC material immediately following work. Provide boring log and maps showing dimensions of cores and horizontal distances from identifiable roadway points.
  - Establishing existing structural section, R-value, moisture content, expansiveness, caving potential, water level, traffic indices, and sand equivalency. Determine estimated range and degree of soil contamination if encountered. The City will provide the average daily traffic volume data.
  - Preparation of a Geotechnical Report presenting the results of the data review and findings, conclusions, and recommendations relative to the geotechnical aspects of the project's design and construction. Identify recommendations for treatment and tabulate soil information in table format for existing and proposed conditions.
6. Prepare traffic signal modification plans for intersection of Hyland Avenue/MacArthur Boulevard, and coordinate with the City of Santa Ana. Coordinate with Edison on service requirements and any necessary street light and power pole relocations. These plans shall be prepared to City of Santa Ana standards.
7. Hydrologic/hydraulic Report – Analyze hydrologic/hydraulic conditions, develop details for standard longitudinal and cross fall drainage, and document findings and design calculations. Define removals and replacement of drainage pipe and design catch basin relocations, modifications, and repairs as needed.

8. Define and document Water Pollution Control requirements.
9. Define new monuments or re-setting of existing monuments and provide detailed drawings fully dimensioned for each.
10. Traffic control plans are not required. However, the specifications shall concisely define the lane and detour closure approach to minimize traffic and pedestrian impacts, and accommodate staged work requirements.
11. Complete project contract documents and special provisions in a format consistent with current City projects and guidelines. A sample of the construction proposal form and contract agreement will be furnished to the Consultant by the City.
12. The Consultant will be requested to review and approve addenda and provide clarification to plans and specifications. Consultant shall attend the pre-construction meeting, and shall be available for consultation and assistance during construction of the project to clarify or explain items relating to the design. A sub-line item fee for "Construction Technical Support" may be included under this phase, to be included within the scope of work at the discretion of the City, contingent on fee and services.
13. For construction budgeting purposes, submit to the City preliminary construction estimates with PS&E submittals at 70% and 90% completion, and any significant updates of the estimates as design work progresses. Prepare the final detailed construction quantity and cost estimate. Plans and specifications shall be signed and stamped by the Consultant before submitting.
14. Conduct a field walk-through with the City during the first and second PS&E submittal.
15. Prepare and submit a Resident Engineer's file containing, at a minimum, final construction quantities and cost estimates with background calculation work sheets; soil and hydrology reports; survey data; Utility File; Right-of-Way File, and all relative project information.
16. The selected Consultant shall include items not specified as necessary to achieve completion and approval of the final design plans, specifications and estimates.

**Quality Assurance/Quality Control** - Quality Control shall be consistently and thoroughly applied throughout project development. Assigned QA/QC staff shall be technically well qualified to conduct the appropriate level of oversight, and demonstrate a concerted and sustained commitment to provide a high quality product. Concise written records shall be maintained by the Consultant on all activities. Firms considering proposal submittals are requested to have an in-house technical level of expertise to professionally address all aspects of the project.

Project Design meetings shall be held once a month. The consultant shall be responsible for preparing meeting agendas, minutes, and presentation materials. A Critical Path Method (CPM) network, based on activities to support all project milestones and subtasks shall be prepared. The information will be in the form of a bar chart and show a deliverables schedule and other relevant data needed for the control of work, for City review of the work status and accomplishments occurring each month. A copy of the CPM software program and monthly

updates shall be furnished to the City Project Manager.

**Content of Proposal**

It is requested that the following be submitted with your proposal:

1. Project Understanding - provide a brief review of the project and any suggestions you might have to expedite the project or special concerns of which the City should be advised.
2. Work Plan – define the project approach, team assignments, and products.
3. Schedule – provide a detailed schedule indicating stages of work and time frames.
4. An organization chart and staffing plan identifying personnel on this project, with a brief resume on each individual (two pages max per person) and recent projects on which they have worked of a similar type. Identify the project manager with a detailed resume, and the individual authorized to negotiate the contract on behalf of the consulting firm.
5. A listing of similar street improvement projects that your firm has completed within the last five years. Information should include a description of work, year completed, cost, and agency/client name along with the agency’s contact person.
6. Comply with Professional Services Agreement requirements (see attached PSA).
7. Submittal of **four (4)** duplicate proposals.

**Fee Schedule**

The professional services contract will not be awarded based upon competitive bidding, and it is desired that fees be submitted separately. The fee schedule should show the hourly cost of personnel per task under each phase, with a total not-to-exceed amount for the project. The consultant’s cost proposal for the prime and subcontractors should contain a breakdown of all cost components including labor base rate, other direct costs, overhead, and fees. It is requested that the fee, including all meetings, reproduction, materials, mailings, and associated project expenses, be itemized under the following phases:

Phase I: Detailed topographic survey and Preliminary Design Plan	\$ _____
Phase II: Right-of-way engineering and legal descriptions	\$ _____
Phase III: Final PS&E	\$ _____

**NOTE:** All originals of plans, field notes, data and calculations, correspondence, reports, electronic files, etc., will be turned over to the City upon completion of design. Ten percent (10%) of the total contract fee will be withheld until the final PS&E, Resident Engineers File, and all project documents are submitted in acceptable form to the City.

**Contract Changes**

Any change in the scope of work resulting in a contract increase or decrease in fee shall be approved by the City **in writing prior** to commencement of actual change in work. No fee adjustment will be allowed unless said **prior** approval is authorized exclusively **in writing** by the City, without exception.

**Right to Reject all Proposals**

The City of Costa Mesa reserves the right to reject any or all proposals submitted, and no representation is made hereby that any contract will be awarded pursuant to this request for proposal, or otherwise. All costs incurred in the preparation of the proposal, in the submission of additional information, and/or in any other aspect of a proposal prior to the award of a written contract will be borne by respondent. The City will provide only the staff assistance and documentation specifically referred to herein and will not be responsible for any other cost or obligation of any kind that may be incurred by a respondent. All proposals submitted to the City of Costa Mesa in response to this request for proposals shall become the property of the City.

Enclosed is the City of Costa Mesa professional services standard agreement and sample certificate of insurance for reference in preparing the proposal. The minimum insurance and endorsement requirements are stated within the enclosed documents. Should your firm be interested in submitting a proposal for this project, please forward to the City of Costa Mesa, Transportation Services Division, 4<sup>th</sup> Floor, City Hall, **on or before 5:00 p.m., April 1, 2016**. If additional information is required, please contact Pritam Deshmukh, Associate Engineer, at (714) 754-5183, or email at: [pritam.deshmukh@costamesaca.gov](mailto:pritam.deshmukh@costamesaca.gov).

Sincerely,



RAJA SETHURAMAN, Manager  
Transportation Services

- Attachments:   1.   Aerial Map Concept Plan  
                  2.   City Standard Agreement and Certificate of Insurance Forms

c           Ernesto Munoz, Public Services Director  
            Pritam Deshmukh, Associate Engineer



## HYLAND AVENUE & MACARTHUR BOULEVARD IMPROVEMENTS

**EXHIBIT B**  
**CONSULTANT'S PROPOSAL**



# ENGINEERING SERVICES for HYLAND AVENUE AT MACARTHUR BOULEVARD INTERSECTION IMPROVEMENTS

Prepared for:  
**City of Costa Mesa**  
**Transportation Services Division**  
77 Fair Drive  
4<sup>th</sup> Floor, City Hall  
Costa Mesa, CA 92626

Prepared by:



3190 C Shelby Street  
Ontario, California 91764  
**Contact: Ms. Ming Guan, P.E., T.E.**  
Project Manager  
Phone: (909) 890-9693  
Fax: (909) 890-9694

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April 1, 2016



## COVER LETTER

April 1, 2016

Raja Sethuraman, Manager  
**City of Costa Mesa**  
**Transportation Services Division**  
77 Fair Drive, 4<sup>th</sup> Floor, City Hall  
Costa Mesa, CA 92626

**Subject: Proposal for Engineering Services for Hyland Avenue at MacArthur Boulevard Intersection Improvements**

Dear Mr. Sethuraman,

We appreciate the opportunity to submit a proposal to provide Professional Engineering Design Services for this project. You will find that KOA is uniquely qualified for this project based on the following facts:

- KOA serves agencies such as yours and has performed numerous similar projects in the past 28 years since the company was established in Southern California. KOA specializes in all aspects of transportation engineering including roadway, drainage, traffic engineering, traffic control plans, and traffic signal design, etc.
- We have recently completed similar traffic signal design, roadway widening, sidewalk and ADA improvement projects for the many cities in the region.
- Contractor bids have been within  $\pm$  10% of engineers estimate for previous PS&E packages that we have completed for numerous agencies. Also, construction change orders resulting from conflicting and/or lack of design information in the plans is rare on most projects designed by KOA.

I will be the principal-in-charge and will provide QA/QC for the project. Ms. Ming Guan, P.E., will lead the project team as the Project Manager. Ms. Guan brings “hands-on” experience in assembling PS&E packages for signal design and street improvement projects. In addition, Mr. Ralph Dominguez, PLS, RMD Surveying, Ms. Karen Starr, Epic Land Solution, and Sean Lin, Twining, have been added to the KOA team to provide surveying, right of way engineering, and geotechnical services, respectfully. Ms. Guan will be the primary contact person for the duration of the contract and can be reached at our Ontario office at (909) 890-9693 or by e-mail at [mguan@koacorp.com](mailto:mguan@koacorp.com).

I am authorized to bind the firm to any contracts and agreements. KOA has reviewed and complies with the City's Professional Services Agreement. Our proposal is valid for a period of 90 days from the date of this submittal. KOA Corporation looks forward to working with the City of Costa Mesa on this project.

Sincerely,  
**KOA Corporation**



Chuck Stephan, P.E.  
Principal-In-Charge



## SECTION I – FIRM PROFILE

### CORPORATE OFFICE

KOA Corporation  
1100 Corporate Center Drive  
Suite 201  
Monterey Park, CA 91754  
Tel: (323) 260-4703  
Fax: (323) 260-4705  
[www.koacorporation.com](http://www.koacorporation.com)

### Five Offices in California:

Monterey Park  
Ontario  
Orange  
Culver City  
San Diego

### Key Individuals:

Ms. Ming Guan, P.E.  
Project Manager  
(909) 890-9693  
[mguan@koacorp.com](mailto:mguan@koacorp.com)

Chuck Stephan, P.E.  
Principal-in-Charge  
[cstephan@koacorp.com](mailto:cstephan@koacorp.com)

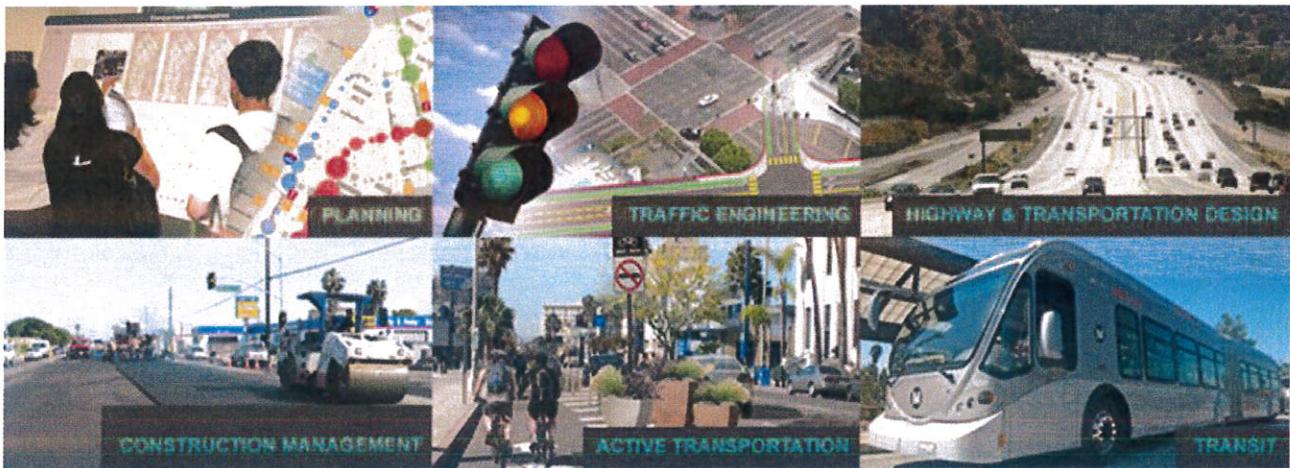
Founded in 1987, **KOA Corporation (KOA)** is one of the leading traffic engineering and transportation planning and design firms in California. KOA provides consulting services to both public and private sectors, and has five offices to serve our California clients. With nearly 100 employees, our staff includes certified planners and California registered civil and traffic engineers. Because KOA provides professional services in both planning and engineering, we are able to provide our clients with complete and innovative solutions.

We believe that providing professional planning and design services is all about improving the quality of life for communities. It begins with listening to our clients, and then finding practical solutions that can be implemented to satisfy their concerns.

KOA acquired CBM Consulting, a multi-disciplined engineering consulting firm, and now provides expanded services in civil engineering design, project management, construction management and observation, grant application processing and NPDES program implementation.

KOA is a California Corporation, a regional firm based and working primarily in California. The office assigned to this project will be our Ontario office located at 3190 C Shelby Street, Ontario, CA 91764, (909) 890-9693.

KOA has strong quality control procedures in place that all staff are required to follow. For each project, we develop a quality control implementation plan for which we obtain approval from the client. Once the QA/QC plan process is approved by the client we implement it and follow through the entire phase of the project.



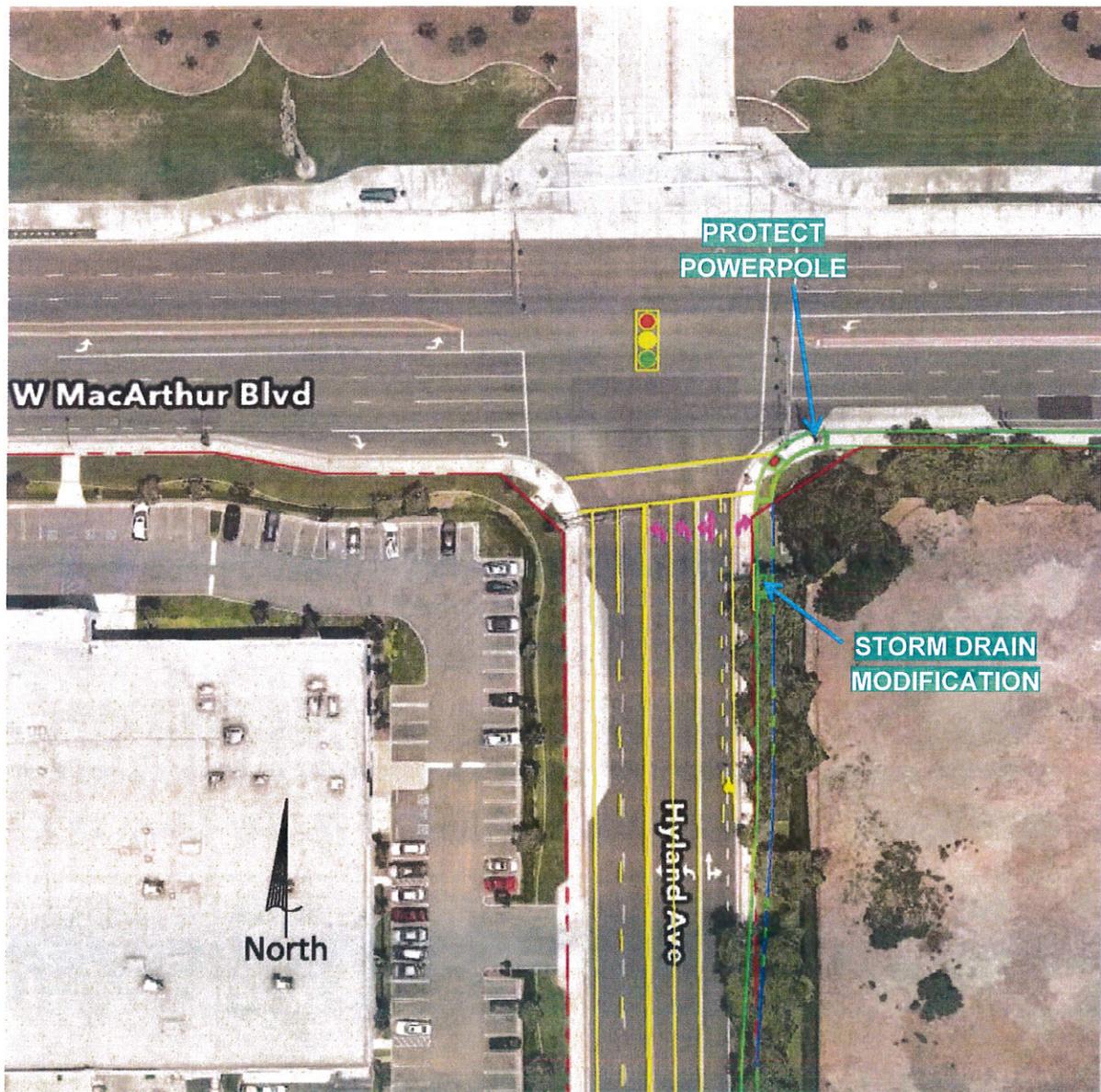


## SECTION 2 – PROJECT UNDERSTANDING

The City of Costa Mesa is proposing to make improvements to northbound Hyland Avenue at the intersection with MacArthur by constructing a new northbound dedicated right-turn lane on Hyland Avenue. This dedicated right-turn lane will alleviate the long queue of northbound traffic waiting to make left turn movement at the intersection. The existing right/through lane will become a left/through lane.

In addition, the dedicated right-turn lane improvement will require modification to the existing traffic signal, signing and striping.

The following aerial shows the project limits and proposed street improvements.





The city boundary of Costa Mesa ends at the centerline of MacArthur Boulevard; north of the centerline belongs to City of Santa Ana. Since the traffic signal is controlled by the City of Santa Ana, coordination with City of Santa Ana for traffic modification design shall be conducted at the early stage of the project.

Field observations indicate that there are some key issues that will have to be considered in the design process. Some of these issues are captioned with site photos below:

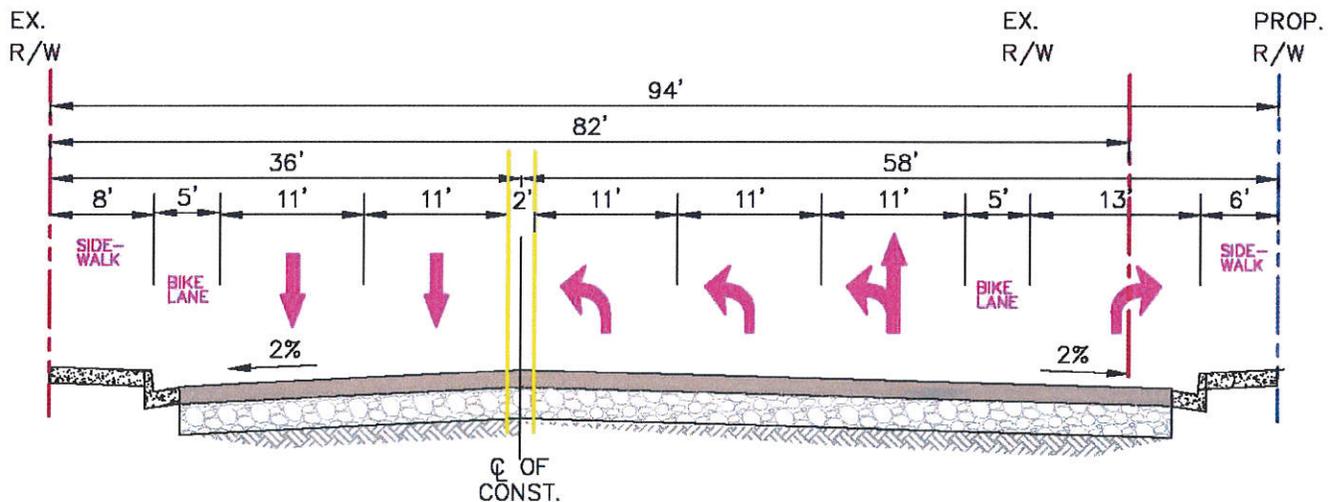


R/W is not available at the southeast corner of the intersection. In order to construct ADA ramps and install signal equipment, R/W acquisition is needed.



There are power transmission lines and cable lines running along the south side of MacArthur Blvd. Coordination with SCE shall be conducted at the early stage of the project.

Hyland Avenue – Proposed Cross-Section:



As shown above, at the intersection with MacArthur Boulevard, the proposed Hyland Avenue north bound will consist of two westbound left-turn lanes, one shared through/left lane, one bike lane and a designated right turn lane; southbound will consist of Bike Lane and two through lanes. With minimum lane width at 11' and curb adjacent lane at 13', additional 12' Right of Way is required.

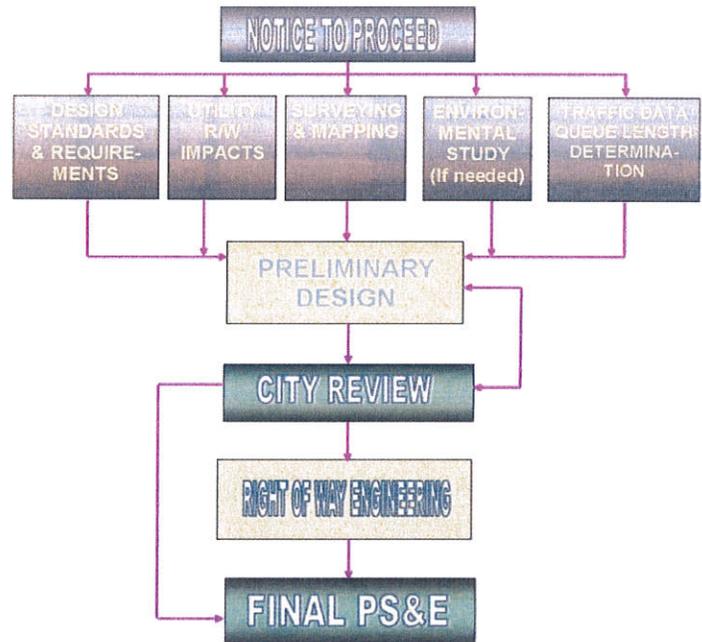


## SECTION 3–WORK PLAN

### PROJECT APPROACH

Our approach to this project is a very well thought out, strategic effort which takes into account the project goals and objectives with time and budget constraints in mind.

The first effort on this project is development of the base map which will outline existing right-of-way limits. This effort includes review of as built plans and design plans for improvements within the project limits. The base mapping effort will include aerial mapping for which we will establish horizontal and vertical controls so that composite base maps can be prepared that show centerline and right of way limits on the aerial. The base mapping will document the side slopes and edge conditions where the curb, gutter and sidewalks will be constructed and or modified. Collecting above and below ground utility information is highly critical for all urban locations, and we will coordinate this effort with all local utility companies including, but not limited to, water, sewer, natural gas, electrical, cable TV, and telephone, etc. We will also obtain information related to meter boxes, survey monuments, power poles, manholes, trees, and valve covers, etc.



Once the base mapping is completed, work towards conceptual design will begin. A meeting will be held with the City regarding the proposed project to develop project design standards and design concepts. On this particular project, one important aspect is to perform realignment study and determine the ultimate locations of the proposed traffic signal appurtenances that meet SCE minimum clearance standard and the needed ADA improvements. Once the preliminary design is approved by the City, KOA will complete the final plans, specifications and estimate for the City to advertise the project for construction.

### SCOPE OF WORK

The following scope of work has been prepared for the Hyland Avenue at MacArthur Boulevard Intersection Improvements project. We have taken into account the details included in the RFP.

#### PHASE I - TOPOGRAPHIC SURVEY & PRELIMINARY DESIGN PLAN

##### Task 1 - Project Management and Administration

The KOA team will meet with the City to establish the design parameters for this project. Under the project management task, KOA will be responsible for maintaining contact with the City’s Project Manager to keep him/her informed of the developments on the project. It is anticipated that a maximum of three in-person meetings will be needed for this project. The following specific subtasks will be performed:

- 1) Management of project team including sub-consultant
- 2) Development and Agreement on Design Standards
- 3) Quality Control of Submittals



## Task 2 - Data Review, Field Surveying and Base Mapping

Under this main task, the following subtasks will be performed.

- 1) *Obtain and Review Existing Documents and Reports*  
Research of City records including records of survey, corner records, parcel maps, tract maps, right-of-way maps, field notes, etc. These records will show locations of existing centerline and right-of-way monuments necessary to show existing street centerline and right-of-way alignments.
- 2) *Contact and Obtain Utility Information*  
Utility research will be conducted and letters will be sent to the appropriate utility personnel in order to obtain confirmation regarding the conflicts that will affect the project, and how and when the conflicts will be resolved in the field by the utility company. A summary memorandum of the research findings, anticipated conflicts, and relocations or adjustments shall be included in the project design memorandum.
- 3) *Conduct Field Surveys for Control and Mapping*  
Project Controls will be established for aerial mapping. Field surveys will be conducted for mapping elevations against National Mapping Accuracy Standards. This will entail sending field crews to the project area and surveying topographic information to develop one-foot contour base maps of the project area. AutoCAD plans will be prepared for the purpose of engineering design. Our estimate for the base map is based on surveying an area encompassing the existing right of way corridor along all of the streets included in the project.
- 4) *Preparation of Base Map*  
The survey topography will be submitted in ASCII format on CD-RW and a hard copy plot provided, using AutoCAD software. All drawings will be prepared at 1"= 40' scale.

## Task 3 - Utility Coordination

KOA shall provide preliminary notification/request letter and relocation/removal notices to all utility companies that have facilities within the limits of the project. The City shall provide KOA with the required format for the utility notice in Microsoft Word format. Said notices will inform the utility company of their need to relocate their facilities prior to construction or to adjust their facilities to grade after completion of the pavement construction.

If requested by the City, potholing services will be performed under a supplement agreement. As an optional task, the KOA team will provide a composite utility plan exhibiting all existing utilities within the proposed right-of-way and pot-hole all utilities affected by the proposed street improvements and required relocation. The plan shall exhibit above and below ground utilities, wet and dry utilities and laterals, overhead lines and power poles (with pole numbers), guy anchors, manholes, valve caps, and potentially affected private utility lateral connections, etc. The plan shall have a legend listing each utility symbol shown on the plan with a description of the conduit or pipe material, and the name and address of the utility company contact person. All pre-construction utility research and construction field meetings with the various utility companies will be done in coordination with the Project Manager and the City's Utility Coordinator. The complete Composite Utility Plan will be delivered to the City of Costa Mesa within 60 calendar days of receiving the notice to proceed. Specific subtasks will include:

- 1) *Coordinate with utility agencies*
- 2) *Prepare notices and follow up requests with plans to utility companies*
- 3) *Pot-hole utilities to confirm location and prepare summary memorandum and composite utility plan (optional)*

## Task 4 - Geotechnical Design Report

KOA, with **Twining**, will perform a thorough field inspection of the entire project area to verify topographic information, and verify record drawing data. KOA will utilize our standard pavement and curb/gutter/sidewalk field investigation procedures to develop locations and requirements for improvements. KOA will photograph the entire



project area for our use during design, review, and as a pre-construction record. A copy of labeled site photographs will be provided to the City on CD. We will utilize our aerial camera ("drone") to obtain aerial imagery where beneficial.

1) *Site Reconnaissance*

The KOA team will conduct a field reconnaissance to evaluate the existing pavement conditions and mark the boring locations for our pavement and subgrade study. The pavement conditions will be evaluated in accordance with "Pavement Condition Index Distress Identification Manual for Asphalt and Surface Treatment Pavements" published by the Metropolitan Transportation Commission in 1986. We propose to perform coring/boring to evaluate the existing pavement structural profile and subgrade soil conditions along the street alignment. The preliminary coring/boring locations will be marked using white paint as required by the Underground Service Alert. We assume that access to the site will be granted by the City and that you will provide site-specific, as built utility plans, if available.

2) *Coordinate and Perform Field Exploration*

Upon marking our exploration locations in the field, a plot plan showing the planned boring locations will be submitted to the City for review to avoid conflicts with existing underground utility lines. As required by law, we will notify Underground Service Alert (USA) of the proposed subsurface exploration locations at least 48 hours prior to drilling. **We will pull an encroachment permit from the City of Costa Mesa prior to commencement of our field work. We assume no fee will be charged for the permit since this work is done for the City.** We will prepare a traffic control plan in accordance with the Work Area Traffic Control Handbook (WATCH) manual and submit along with the encroachment permit to the City.

We propose to explore the project alignment by advancing a total of two soil borings to approximately maximum 3 feet below pavement surface, or to refusal, whichever is shallower. The borings will be advanced using an eight-inch-diameter, hollow-stem-auger, truck-mounted drill rig or a concrete coring machine and hand auger. We will coordinate with the City upon marking our proposed borings and determine best access to the site.

3) *Perform Geotechnical Field and Laboratory Testing*

Samples obtained from the exploratory borings will be transported to Twining, Inc. for observation and testing. Laboratory tests will be performed on selected samples obtained from the borings to aid in the classification and to evaluate the engineering properties of the subsurface soils. The laboratory tests may include the following:

- Moisture and Density
- Expansion Index
- R-value

The exact quantities and types of tests will depend on the material types encountered during our subsurface exploration. For the purpose of this proposal, we have estimated a laboratory testing budget based upon our experience with similar projects.

4) *Perform Analysis and Prepare Structural Pavement Recommendation Report*

After the laboratory testing is complete, a report will be prepared to summarize the data collected and present our findings, conclusions, and structural pavement recommendations for design and construction of the proposed project. Based upon our experience with similar projects, at a minimum, the following engineering analyses will be performed for the proposed project:

- Evaluation of general pavement conditions and rating in accordance with "Pavement Condition Index Distress Identification Manual for Asphalt and Surface Treatment Pavements" published by the Metropolitan Transportation Commission in 1986
- Evaluation of subgrade conditions and description of types, distribution, and engineering characteristics of subsurface materials along project alignment



- Engineering analysis for pavement structural section based on the design Traffic Index provided by the City or design team
- Development of general recommendations for earthwork, including site preparation and excavation, requirements for placement of compacted fill, and site drainage

#### **Task 5 - First Review: Preliminary Design Plans**

Preliminary design plans will focus on issues that require general agreement on some of the items noted above. These will be resolved during the preliminary phase of the project. KOA will review and refine the conceptual plan; prepare a detailed preliminary alignment plan for the proposed improvements; and identify associated impacts and costs. The plan will include existing and proposed right-of-way, curbs, sidewalks, driveways, striping, bus stops, medians, centerlines, etc. Specific subtasks for this task will include:

- 1) Coordinate and obtain project data from the City
- 2) Prepare Detail Alignment Plan
- 3) Prepare Preliminary Cost Estimates

### **PHASE II- RIGHT-OF-WAY ENGINEERING**

#### **Task 6 - Right-of-Way**

The proposed street improvements will impact one parcel located at the southeast corner of the intersection. It is important that exact property lines on the parcel are indicated on the base map. Once the design footprint has been finalized, KOA will identify the needs for new rights-of-way, permanent easements, temporary construction easements, and rights-of-entry. The KOA team will prepare right-of-way maps showing existing rights-of-way and easements; areas requiring acquisition; assessor's parcel number; zoning; owner's name, addresses, and type of business; street centerlines; property lines; building footprints; setback distances from right-of-way to building; existing and proposed improvements within the taking areas, including potential acquisition and easements required for maintenance access; utilities; and construction work area, as necessary.

We added **Epic Land Solutions** (Epic) to our team to perform right-of-way services. Epic will coordinate and/or negotiate to obtain rights-of-way or easements. Based on our preliminary research it appears one parcel will require partial right-of-way acquisition. Temporary Construction Easements (TCEs) may be required on these and additional parcels; this has not yet been determined.

**Title Services:** Epic will obtain Preliminary Title Reports for the impacted parcel. Epic's agents will review each report which will include property characteristics; identify any easements or encumbrances; and include copies of all underlying deeds, documents and maps.

#### **Right of Entry:**

Epic will obtain a right of entry permit from private landowner as needed for entering the property to perform surveys for ecological and geotechnical purposes. The right of entry agreement will inform the property owner of the purpose and impact of such entry, along with the approximate time range of the entry, and provide them with a contact person should they have any concerns that arise from the entry.

#### **Legal Descriptions:**

The KOA team will prepare legal descriptions, plats, and maps for each parcel acceptable to City for conveyance of marketable title interests, and for accurate representation of right-of-way necessary for construction of the project. This function must be completed at least thirty (30) days prior to finalizing plans and specifications for bidding processes. The City will record the easement deeds. The City will be responsible for the R/W appraisal, negotiations and acquisitions. Specific subtasks will include:



- 1) *Identify Right-of-Way Requirements*
- 2) *Obtain Right of Entry*
- 3) *Prepare Legal Document*

### PHASE III -PLANS, SPECIFICATIONS & ESTIMATES

#### Task 7 - Prepare Interim and Final Plans, Specifications and Estimate

KOA will prepare and assemble a set of drawings for this project in a bid package format for City review. These plans will be prepared in 75%, 100% and Final Stages. Street Plans will include plan & profile views, and existing street cross sections. Street plans will exhibit street right-of-way, proposed pavement sections, utility appurtenances, details for areas requiring re-grading, storm drain design, and general details for all private utility re-connections, etc. The design plans will be prepared per the requirements listed on the RFP:

**a) Street Improvement Plans:** Improvement plans will be prepared to encompass all improvements at the intersection of Hyland Avenue at MacArthur Boulevard as well as for the transition on the realigned Hyland Avenue south of MacArthur Boulevard. Street plans will include plan & profile views, and existing street cross sections. Street plans will exhibit street right of way, proposed pavement sections, proposed and existing curb, gutter, street lights, signing and striping, driveways, utilities (including septic systems), utility appurtenances, etc. Street plans will also exhibit elevation points for curb ramps, and sidewalk and driveways to meet the requirements of Caltrans Design Information Bulletin (DIB) 82-05 and Form CEM3673 (A through D) where applicable.

Cross sections will be plotted at 25' intervals (or thru BCR, C/L & ECR at intersections) on a grid at 8' Horizontal and 0.8' Vertical Scales for the full length of the design. The cross sections will exhibit proposed & existing elevations (all elevations will be labeled) up to 25 feet beyond the right-of-way, at right-of-way, top of curb, joint points, grade breaks, and at centerline points. Cross sections will include extended areas where slope grading beyond the right of way may be required. Cross sections will indicate cross falls and all grades of existing and proposed grading and improvements, cut/fill quantities should be labeled next to each cross section.

**b) Storm Drain Improvement Plans:** Drainage plans will be prepared to convey the nuisance water on the east side of Hyland Avenue by the connection to the existing storm drain system. This will require the design of new catch basin on the east side of Hyland Avenue. The proposed catch basins will connect to the existing storm drain in Hyland Avenue through a lateral storm drain. Storm drain plans will include plan & profile views, exhibit street right of way, proposed and existing pavement sections, curb, gutter, street lights, signing and striping, driveways, utilities (including septic systems), and utility appurtenances, etc.

**c) Traffic Signal Plans:** Signal Plans will be prepared for the proposed traffic signal at the intersection of Hyland Avenue at MacArthur Boulevard. Traffic Signal Plans will show existing right-of-way, curb, gutter and sidewalk, and existing utilities, etc. Traffic Signal Plans will be submitted in 1" = 20' scale.

**d) Signing & Striping Plans:** Plans will be prepared to encompass all improvements at the intersection of Hyland Avenue at MacArthur Boulevard, as well as for the transition on the realigned Hyland Avenue south of MacArthur Boulevard. Striping Plans will show all existing signing and striping in addition to the proposed signing and striping for desired alignment including the reconfiguration of the current striping north of MacArthur Boulevard to accommodate the newly configured intersection. Signing and Striping plans will be submitted in 1" = 40' scale. Specific sub-tasks include:

- 1) *Specifications and Special Provisions and Engineers Estimate*
- 2) *2<sup>nd</sup> Review 75% Submittal*
- 3) *3<sup>rd</sup> Review 100% Submittal*
- 4) *Final Review and Submittal*



All approved plans will be provided to the City on compact disk in AutoCAD 2007 or higher format, as well as on "D" size Mylar. Specifications documents, including technical specifications, will be provided on digital medium disks in Microsoft Word for Windows format. The Engineers Estimate will be provided in Excel for Windows format.

### **Task 8 - Engineering Support during Bidding, Award & Construction Phase**

It is assumed that the City will be responsible for preparation of the bid package, advertising and awarding the contract, and for distributing the contract documents to interested contractors and construction observation and management. Unless otherwise requested, KOA will only have a marginal role in assisting the City during the bid and construction phase. This includes answering questions from prospective bidders. Specific sub-tasks include:

- 1) *Bidding Services*
- 2) *Preconstruction meeting*
- 3) *Review Inquiries, submittals and change orders during construction*
- 4) *Prepare As Built Drawings*

This project will be a collaborative effort between the City of Costa Mesa and KOA staff. We have described the task responsibilities between the two as follows:

#### **KOA Team Responsibilities:**

- 1) Surveying and Mapping
- 2) Geotechnical Report
- 3) Construction Plans include:
  - a. Street Improvement Plans
  - b. Storm Drain Improvement Plans
  - c. Traffic Signal Plan
  - d. Signing & Striping Plans
- 4) Coordination with SCE and other Utility Companies
- 5) Right of Way Data Sheets and Legal Descriptions
- 6) Specifications and Estimate
- 7) Support during Ad and Award and Construction

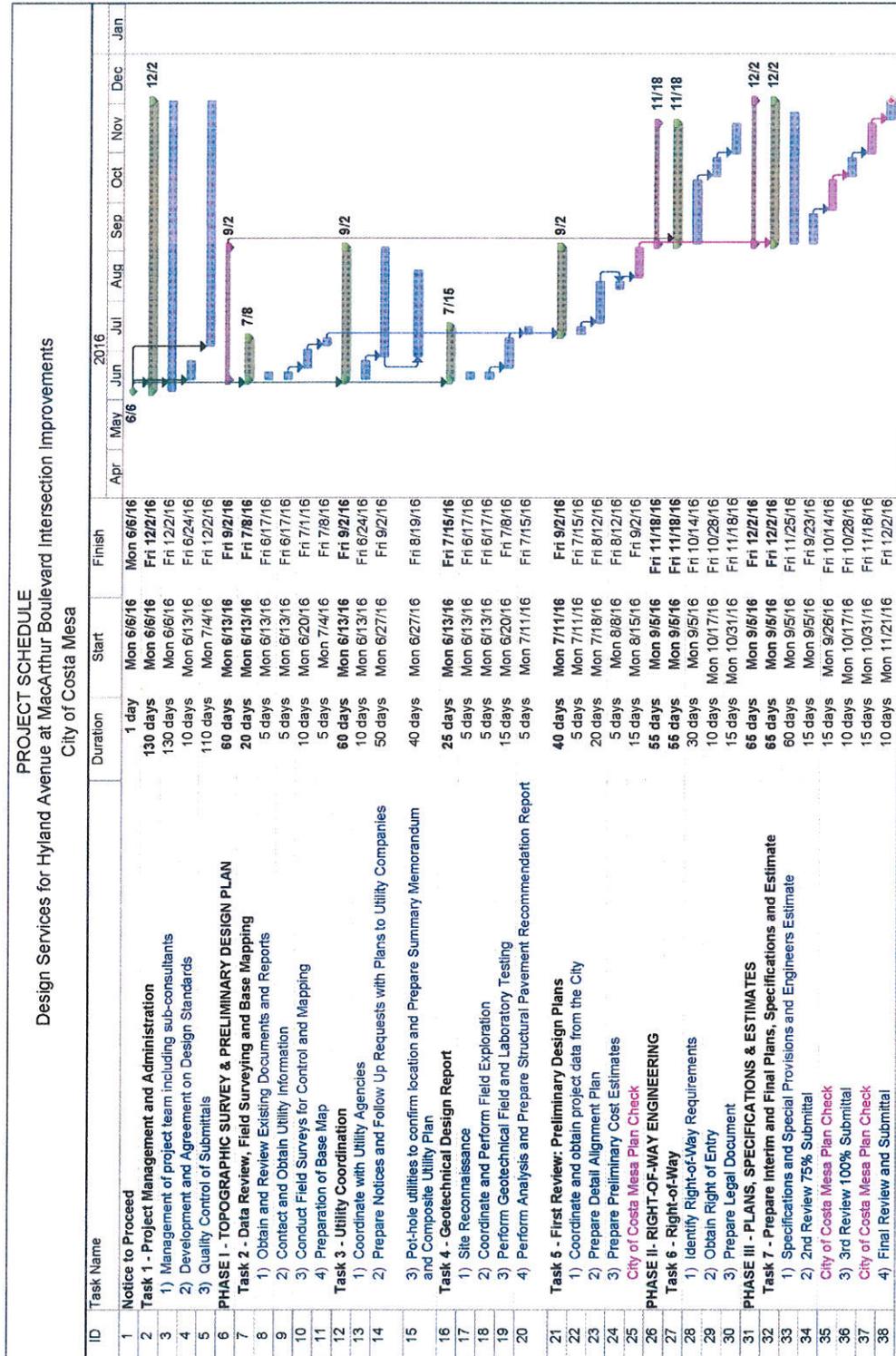
#### **City Responsibilities:**

- 1) Public Outreach
- 2) Environmental Clearance
- 3) As-Built Plans and CAD files from previous studies
- 4) Plan Review and Approval
- 5) Preparation of Bid Package, Ad and Award



## SECTION 4-SCHEDULE

A preliminary Project Schedule is included. The design schedule is very conservative and includes all of the necessary tasks to complete the project. While this schedule reflects our ideas regarding the most efficient and expeditious manner for taking on this project, we are open to suggestions from the City's staff and will modify our schedule accordingly.



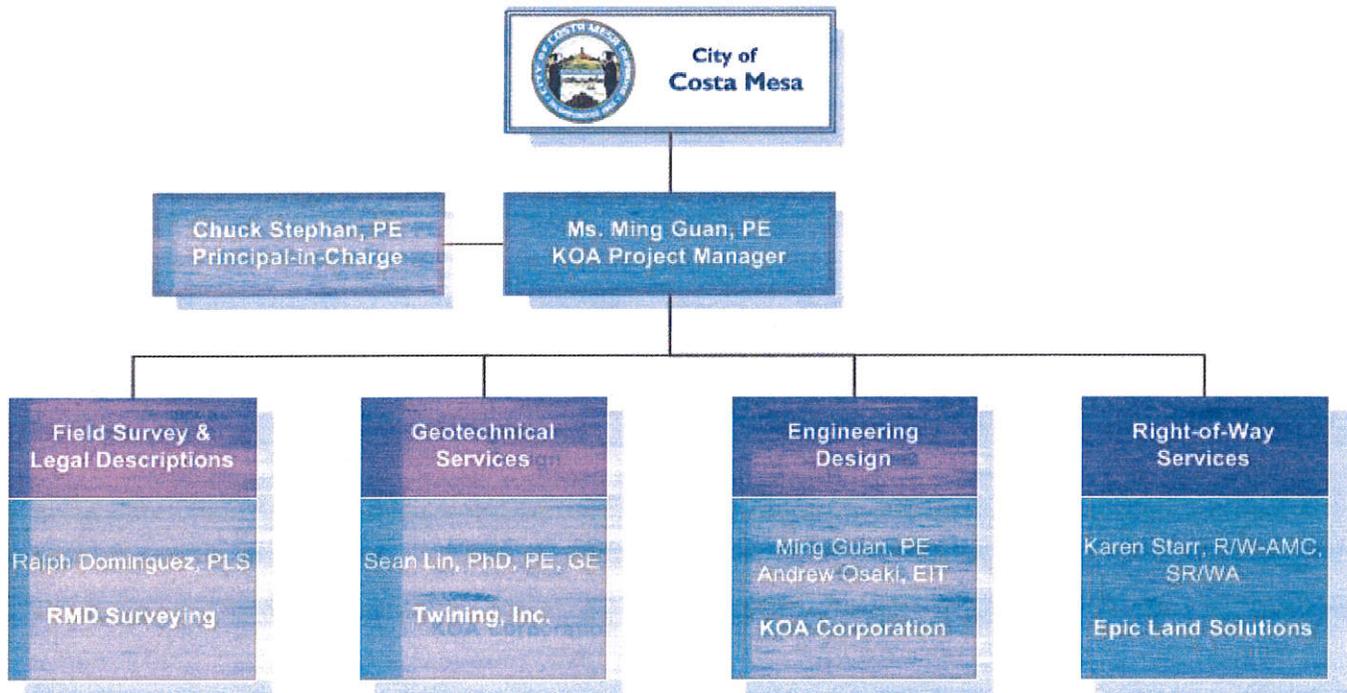


## SECTION 5 – ORGANIZATION CHART/STAFFING PLAN

Our organizational approach will be based upon our knowledge of the City’s objective, project requirements, and our subsequent translation of those into a project plan. It will provide structure for directing, controlling, and reporting project activities. KOA’s management plan for the engineering services will provide a mechanism to ensure high-quality end products, in a timely and cost effective manner. The management plan elements include technical, schedule and cost control, progress reporting, coordination, and organization. Internal cost control procedures include budget control, which is facilitated by computerized management information reports that provide tabulations of actual cost and manpower expenditures incurred against those budgeted. The project manager will be responsible for exercising cost control, manpower scheduling, resource allocation, and estimates of cost-to-complete, performed on a period-by-period basis.

KOA has assembled a very qualified team that has worked on similar projects that require coordination. Our proposed project manager, Ms. Ming Guan, P.E., will lead the project team, and will be responsible for the day-to-day work and contact with the City for this project. She can be reached in our Ontario office at (909) 890-9693 or by e-mail at mguan@koacorp.com. Ms. Guan will be supported by a team of qualified KOA staff and sub-consultants. None of the project team members will be removed and/or replaced without the prior written consent of the City of Costa Mesa project manager.

### ORGANIZATION CHART





## QUALIFICATIONS OF PROPOSED STAFF

### **MING GUAN, P.E., T.E.** **KOA Project Manager**

#### **PROFESSIONAL EXPERIENCE**

Ms. Guan has 10 years of experience with work in street, highway, freeway, and interchange design including extensive experience in urban street intersection design, traffic signal designs, ramp metering, signing and striping, and traffic control plans. Most of all, Ming brings “hands on” experience in the application of AutoCAD, MicroStation, and other roadway and interchange software design programs. Ming is the co-author of a technical textbook entitled “*Highway Geometric Design using InRoads*” along with Professor Xudong Jia of Cal Poly Pomona. She has completed a number of roadway and traffic signal design projects for a number of agencies.

#### **Education:**

M.S., Civil Engineering  
B.S., Civil Engineering, Cal Poly  
Pomona, 2006

#### **Registrations:**

Professional Civil Engineer, CA,  
#75793

**Traffic Signal and Intersection Improvement Project, Fontana, CA.** *Project Manager.* The City of Fontana desires to signalize the existing intersection which is currently operating as a four way stop. The project will require survey and mapping the intersection; designing a new traffic signal; and updating and constructing ADA ramps at all four curb returns of the intersection. The project will impact two properties in the northeast corner; therefore, right-of-way plans and legal descriptions will be required.

**Safe Routes to School Project - Sidewalk Improvements and IRWLS Installation for Merle Casey Elementary School, Rialto, CA.** *Project Engineer.* Federally funded by Safe-Routes-to-School (SRTS) Cycle 2, the City of Rialto desires to improve the sidewalk, curb & gutter, and ADA access ramp located south-west of Merle Casey Elementary School. The City also proposed to install an In-Roadway-Warning-Light (IRWL) system to provide safer pedestrian street crossing in the vicinity of the school. The scope of work included completion of base maps with right of way and utility information, and completion of design plans for sidewalks and IRWL installation.

**Three Intersections and ‘C’ Street Improvement, Colton, CA.** *Project Engineer.* KOA provided design services to the City of Colton for three intersections. The design includes improving the intersections to comply with ADA standards and signalization. Additionally, ‘C’ Street was widened to connect the previously widened sections on both sides. This was needed for the south side of the street serving the eastbound traffic. The project required constructing new sidewalks and improving the driveway access to local properties. Right of way was required on this project including coordination with property owners.

**SR-60/Perris Blvd. Lane Widening and Traffic Signal Modifications, Moreno Valley, CA.** *Lead Design Engineer.* KOA completed the design and obtained permits from Caltrans for modifications at the interchange. The modifications included adding a southbound right-turn drop lane to the westbound on-ramp at the interchange. This project required traffic signal modifications; relocation of the Wendy’s sign; and impact to Wendy’s landscaping and drainage improvements. KOA completed a fact sheet for the project and obtained approval of the design variance from Caltrans.

**Multiple Traffic Signals and One Bus Stop Platform Project, Colton, CA.** *Lead Design Engineer.* KOA was recently selected by the City of Colton to provide engineering services for street safety improvements. Ms. Guan was responsible for preparing design plans, specifications and estimates for the following sites:

Traffic Signal Design at:

- Site # 1 La Cadena Drive / Rancho Avenue
- Site # 2 Agua Mansa Road / Rancho Avenue
- Site # 3 Colton Cement Plant Road / Rancho Avenue
- Site # 4 Laurel Ave School Bus Drop Platform (in front of Rogers Elementary School)



**CHUCK STEPHAN, P.E.**  
**KOA Principal-in-Charge/QA/QC**

**PROFESSIONAL EXPERIENCE**

Chuck Stephan has 33 years of extensive experience in engineering design and project management on projects for many municipalities and private firms. He has diverse project experience in planning, design, management, and construction of transportation, educational, institutional, industrial, aerospace, municipal, residential and commercial projects. Mr. Stephan works in multiple capacities as Principal-In-Charge, project manager, project engineer, lead engineer, design engineer, and construction engineer in both the civil and construction management disciplines. His experience includes:

**Education:**

BS, Agricultural Engineering, California Polytechnic State University, San Luis Obispo (1982)

**Registrations:**

Prof. Engineer, Civil, CA #C50481, 1993

Prof. Engineer, Civil, OR #1872, 1995

Prof. Engineer, Civil, HI #843, 1996

LEED Accredited Professional, 2007

**Off-Site Pedestrian and Traffic Improvements, Culver City Redevelopment Agency, Culver City, CA.** *Design Engineer.* This improvement project included new sidewalks, ADA compliant ramps, landscape median islands, new traffic signals, relocating utilities, repaving sidewalk enhancements, curb extensions, new crosswalks, traffic calming measures, and NTMP work in the neighborhood.

**Lambert Road and Beach Boulevard Intersection Improvement Project, La Habra, CA.** *Project Engineer.* Mr. Stephan provided project and construction management services for the Lambert Road Gap Closure project which filled missing gaps and completed the sidewalk system along both sides of Lambert Road across the entire City. The project also reconstructed the Lambert Road and Beach Boulevard intersection with new signals right turn lanes, and pavement rehabilitation within the Caltrans ROW. This project also included 15' retaining walls, right of way acquisition, curb & gutter, sidewalk, ADA improvements, utility pole relocation, railroad coordination, and landscape restoration in various locations. The project was partially funded with Safe Route to School and STPL funds administered through Caltrans.

**Department of Public Works, Shafter, CA.** *Assistant City Engineer.* Mr. Stephan assisted the City Engineer overseeing various public works projects, including the design and construction of sewer, water storm drain, street, curbs, sidewalks, lighting, traffic signals, parks, industrial park, street rehabilitation and surveying. Performed computer traffic modeling, GIS system development and water modeling analysis.

**City of Malibu Street and Intersection Improvements, Malibu, CA.** *Project Manager.* Mr. Stephan completed plans, specifications, and estimate to realign Zumirez Drive and construct a new traffic signal at the intersection with Pacific Coast Highway (Caltrans). Zumirez Drive consisted of new asphalt rubber hot mix pavement with decomposed granite walkways, striping, and relocated utilities. The project included a tight timeline with stringent Right of Way and funding deadlines. KOA also provided construction management during the construction phase of this project.

**City of Signal Hill Cherry Avenue Improvement Project, Signal Hill, CA.** *Design Engineer.* Mr. Stephan was responsible for the project management associated with the new design for the widening of Cherry Avenue between 20<sup>th</sup> Street and 250-feet south of Pacific Coast Highway (PCH). The project included a new storm drain, traffic signal upgrade at the PCH/Cherry Avenue intersection, reconstruction of the street, PCC improvements and striping.

**Brea Standard Drawings, Brea, CA.** *Design Engineer.* Mr. Stephan assisted the City of Brea with completely updating existing and developing new Standard Plans for public works construction. Standard plans included street, sewer, water, street lighting, traffic signals, landscaping, irrigation, and storm drain improvement details.



**ANDREW OSAKI, EIT**  
**KOA Design Engineer**

**PROFESSIONAL EXPERIENCE**

Mr. Osaki is very well skilled in the application of AutoCAD and Civilsoft and has been instrumental in preparing roadway plans and profiles. Most recently, he has been involved in the following projects:

**Education**

B.S., Civil Engineering, Cal Poly Pomona, 2012

**Certification**

Engineer-in-Training, Civil, CA #80532

**Traffic Signal and Intersection Improvement Project, Fontana, CA.** *Design Engineer.* This project impacts one corner property and will require preparation of a right of way plan and legal description. ADA ramps also have to be modified to comply with standards. The project is in the final stages of completion.

**Vista Chino at Farrell Drive Street Improvements for the City of Palm Springs, CA.** *Design Engineer.* This street improvement project will improve the intersection at Vista Chino at Farrell Drive by adding a dedicated northbound right-turn lane. The professional engineering services for this project will include curb, gutter, sidewalk, ADA access ramps, a city bus turn-out design, traffic signal modification plan, and new signing and striping. The project will provide close coordination with the Department of Transportation and SunLine Transit Agency. Mr. Osaki is responsible for preparation of plans, specifications, and estimate. The project is currently going through the Caltrans District 8 Encroachment Permit Process.

**Riverside Avenue Improvement at Linden Street for the City of Rialto, CA.** *Design Engineer.* The City of Rialto desired to install a new traffic signal system and construct ADA ramps at the intersection of Riverside Avenue and Linden Avenue. The existing intersection is not currently constructed to the ultimate width, but the City plans to negotiate with the property owner to obtain additional right of way for proposed widening and to allow installation of the traffic signal equipment at their ultimate locations. Lanes will be added to provide turning lanes as needed. Mr. Osaki provided hands-on design for the project using AutoCAD and Civilsoft.

**Cesar Chavez Road Improvement Project, Calexico, CA.** *Design Engineer.* This is a federally-funded street widening project that requires NEPA Clearance from Caltrans District 11. This project is required to meet the new Port of Entry that is planned to be constructed in the city in 2016. The project requires roadway improvements including three intersection modifications including traffic signal design. One of the intersections needs coordination with Caltrans District 11, while the intersection at Cesar Chavez and Grant Street has a UPRR at-grade crossing so extensive coordination and approval is necessary with UPRR.

**Niagara Avenue & Athol Street Sidewalks, Access Ramps, and Driveway Approach Improvements, Fontana, CA.** *Design Engineer.* Funded by Community Development Block Grant (CDBG), the City of Fontana desired to improve existing sidewalk, access ramps and driveway approaches along Niagara Avenue and Athol Street. KOA was retained by the City to provide professional engineering services for the project. This roadway improvement project included completion of 2,500 feet of sidewalk improvements, ADA ramp upgrades, and driveway approach improvements. This project will impact over 50 households, and Public Outreach is important for sidewalk project. KOA assisted the City with Public Outreach in the early stage of the project. Another challenge of the project was to tie-in to existing resident driveway approach with minimum impact to its landscape, automatic gate, and wrought iron fences.

**Martin Avenue, Sidewalks, Access Ramps, and Driveway Approach Improvements, Fontana, CA** *Design Engineer.* Funded by Community Development Block Grant (CDBG), KOA was retained by the City of Fontana to provide professional engineering services for the project. This roadway improvement project included completion of 600 feet of sidewalk improvements, ADA ramps upgrades, and driveway approach improvements. KOA prepared detail resident frontage impact exhibit to help the City get censuses from residents.



**SEAN LIN, PhD, PE, GE**

Twining Lead Geotechnical & Materials Engineer

**PROFESSIONAL EXPERIENCE**

Dr. Sean Lin has over 17 years of professional experience. He specializes in seismic site response analysis as it applies to hospitals, schools and high-rise buildings. His professional experience includes soil mechanics and foundations, soil reinforcement, geosynthetics, pile design and driving analysis, slope stability, and liquefaction analysis. Sean has experience in engineering projects for commercial, residential, water/wastewater, military, educational and industrial facilities. Dr. Lin also has experience in geotechnical and construction projects for municipal, commercial, residential, military, educational and industrial facilities including technical and laboratory oversight and supervision of staff and personnel.

**Education**

Ph.D. Civil Engineering emphasis  
Earthquake Engineering, 2002.  
University of Southern California  
MS. Civil Engineering emphasis  
Geotechnical Engineering, 1997.  
University of Southern California  
BS, Civil Engineering, 1993.  
Chung Yuan Christian University

**Registration**

Professional Civil Engineer, CA 67109  
Professional Geotechnical Engineer, CA  
2921

**Warner Ave Gravity Sewer Project, Huntington Beach, CA:** Project required the construction of 4,000 feet of new gravity sewer main along Warner Avenue and Pacific Coast Highway. The gravity line was installed using the “open trench” method to minimize traffic impacts. The new gravity line allows for the abandonment of 4 existing, problematic pump stations. The new underground pump station ‘C’ was constructed in the Huntington Beach Yacht Club parking lot. Sean provided soils testing and inspection, performed compaction testing of trenches and supplied a nuclear gauge for testing purposes. Additionally, Sean conducted subgrade and base compaction testing for asphalt paving.

**City of Anaheim, Community Services Department, On-Call Geotechnical and Materials Testing Services, Anaheim, CA:** Sean oversees all on-call geotechnical and materials testing support services for the City of Anaheim, including geotechnical investigation, geotechnical design review, hazardous materials testing in soils and building materials, construction materials testing, and provides analysis and recommendations to the City.

**Orange County Sanitation District, Plant No.1, PI-101 Project, Fountain Valley, CA:** This project will upgrade the sludge pumping system for the Primary Clarifiers at Plant No. 1 and will resolve various operation, maintenance, corrosion, and safety issues throughout the facility. It will allow the primary clarifiers to handle an increase in solids loading and future flows through the plant to support the expansion of the Groundwater Replenishment System. Sean oversees all geotechnical and material testing support services, including geotechnical investigation, geotechnical design review, hazardous materials testing in soils and building materials, construction materials testing, and providing analysis and recommendations.

**Orange County Sanitation District, Plant No. 1 & 2, J-III Project, Huntington Beach, CA:** This project will renovate, replace, or demolish facilities surrounding the final effluent sampler trailer. These facilities need significant renovations due to age and exposure to ocean air. This includes replacement of the final effluent sampler pumping and sampling systems and sampling trailer with a new building, the removal of the adjacent unused buildings, removal and replacement of gas lines, rehabilitation of the short ocean outfall system, and landscaping and drainage improvements near the new building. Sean performed geotechnical investigation and provided geotechnical recommendations for ground settlement mitigation and foundation design

**Edwards Lifesciences, Material Testing and Inspections for Building E2, Irvine, CA:** The building will replace the existing 30,000 square foot building with a new 4-story building that will be on the order of 123,000 square feet. The new E2 building will consist largely of offices with a cafeteria at the ground level. Twining is conducting materials testing and special inspections for the project. Sean serves as Project Manager and supervises field exploration, reviews site-specific geotechnical data, performs engineering analyses, attends design meetings, and prepares geotechnical investigation reports.



**KAREN STARR, CPM®, R/W-AMC, SR/WA**  
Epic Land Project Manager/Regional Manager

**PROFESSIONAL EXPERIENCE**

With more than 25 years of industry experience, Karen Starr is Epic’s regional manager for the Inland Empire office. She is a seasoned project manager and has oversight of all client projects within the region. Karen’s comprehensive acquisition background includes single-family residential, multi-family, mobile home parks, and commercial and industrial properties, and she provides ancillary services ranging from community outreach to managing building demolition and environmental remediation. Karen has worked extensively with local, state and federal governments, including numerous cities and counties, Caltrans District 8, Caltrans Local Program, the Federal Highway Administration, and federal and state regulatory agencies, as well as utility companies. Her experience includes:

**Education**  
B.S., Business and Management, University of Redlands, 1992

**Registration**  
Certified Property Manager Designation #15165  
Real Estate Broker, California, License #01043389  
General B Contractor, California, License #682631  
Designated SR/WA, International Right of Way Association, #6453  
Designated R/W-AMC, International Right of Way Association

**Orange County Transportation Authority (OCTA), 17th Street Grade Separation Project, Orange County, CA.** *Project Manager.* The Orange County Transportation Authority (OCTA) and the City of Santa Ana (City), in cooperation with the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), propose to grade separate the current at grade crossing of 17th Street with the Metrolink (SCRRA) double tracks. The proposed project would construct a railroad undercrossing structure to carry SCRRA over 17th Street, depressing the current grade of the roadway and maintaining the railroad profile. Epic is on the team providing right of way services. This work is being completed through the Orange County Transportation Association and Epic working with them to help the City analyze up to four alternatives to complete the work in the most efficient and cost effective manner possible.

**Riverside County Transportation Commission (RCTC), SR-79 Realignment, Riverside County, CA.** *Project Manager.* Karen managed Epic’s team which provided right of way costs estimates, prepared Caltrans right of way data sheets and drafted a Draft Relocation Impact Report. Epic’s team analyzed over 200 parcels for cost estimating work, including residential, businesses, dairy farm, outdoor advertising signs, chicken and cattle ranches, and industrial full and part takes. Epic prepared Right of Way Data Sheets and a Draft Relocation Impact Report for the SR-79 Realignment project. The project proposed to realign SR-79 in the cities of San Jacinto, Hemet, and Winchester from two to four lanes between the areas north of Ramona Expressway to just south of Domenigoni Parkway. Once a preferred alternative was selected Epic prepared updated and Final Right of Way Data Sheets and a Final Relocation Impact Report. Epic performed a thorough review of over 200 parcels and analyzed the property impacts anticipated.

**Orange County Transportation Authority (OCTA), Orangethorpe Avenue Grade Separation Project, Orange County, CA.** *Project Manager.* Karen provided assistance on all efforts to provide acquisition services, including full and partial fee takes, permits to enter, along with a variety of easements: public utility, wall, footing, combined slope/maintenance, aerial & temporary construction easements. This was a federally funded project identified as an off-system local public agency (LPA) project conforming to Caltrans oversight.

**San Bernardino Associated Governments (SANBAG), Downtown San Bernardino Passenger Rail Project, San Bernardino County, CA.** *Project Manager.* Epic provided right of way services for this SANBAG project. Karen managed Epic’s team as it provided acquisition services for over 35 parcels including fee, partial acquisition, and temporary construction easements. Services included obtaining rights of entry, title reports, appraisals, appraisal reviews, fixture, furniture and equipment appraisals, preparing offers and negotiating with business and residential owners for purchase of required right of way, relocation assistance and providing support for the eminent domain process.



**RALPH M. DOMINGUEZ, P.L.S.**  
**RMD Surveying, Manager Surveying and Mapping**

**PROFESSIONAL EXPERIENCE**

Mr. Dominguez has nearly 40 years of experience in surveying and mapping of public and private projects. He supervised the scheduling and productivity of numerous survey crews and office support teams on residential, commercial, industrial, and public works projects; maintained a solid safety program for field staff to minimize injuries, accidents and equipment loss; developed and maintained an effective training program for current and new field and office staff as new technologies were implemented; ensured adherence to accepted standards of care while maximizing project success and profitability; and directed staff in boundary and right-of-way establishment and retracement, aerial control, deformation studies, design topography, ALTA surveys, and construction staking while utilizing both conventional, robotic and GPS surveying equipment as required by the task. His experience includes:

**Education**

1966-1968 Rio Hondo Community College, Whittier, CA  
Engineering Major  
1972-1976 California Surveyors Joint Apprenticeship Program  
Spring 1982-CLSA L.S. Exam problem solving workshop  
Summer 1983-San Bernardino County Surveyor L.S. Exam Review

**Certifications**

California-Professional-Land Surveyor, 1984 – PLS 5425  
California-Land-Surveyor-in-Training, 1982 - LSIT 2323

**Residential Project LOMR, Rancho Cucamonga, CA.** As Land Surveying Consultant, Ralph provided land surveying services to facilitate the topographic mapping in support of an application for a Letter of Map Revision (LOMR) to an effective Flood Insurance Map from FEMA. The project encompasses approximately 400 acres in the city of Rancho Cucamonga bounded by SR 210 and the Etiwanda Channel. RMD Surveying established the ground control for the aerial mapping of the site. The survey was oriented to current San Bernardino County Flood Control horizontal and vertical control monuments with GPS equipment using Real Time Kinematic (RTK) corrections from a network of established local reference stations.

**Vista Chino Widening Project, Palm Springs, CA.** As Land Surveying Consultant, Ralph provided research and coordination with California Department of Transportation (Caltrans) and design topographic services in support for the widening of Vista Chino and Farrell Drive in the city of Palm Springs. He prepared a topographic map of the site showing existing improvements and utilities, contours, and a digital terrain model for use in the design of the new improvements. The survey was based upon record centerline monuments and published City of Palm Springs bench marks. He obtained an Encroachment Permit from Caltrans and coordinated with the local law enforcement agency staff for work within Vista Chino (State Highway 111) right-of-way.

**Tequesquite Arroyo Trunk Sewer Improvement Project, Riverside, CA:** Land Surveying Consultant: Provided Land Surveying services, as a consultant, for the Tequesquite Arroyo Trunk Sewer Improvement Project for the City of Riverside. Surveying work was based upon the extensive City of Riverside GIS Database network. The work was performed using both conventional and GPS instruments, as was appropriate for the conditions. Services included finding, locating and detailing approximately fifty existing sewer manholes situated within numerous public, private and institutional properties within the project limits. RMD Surveying provided mapping services in order to prepare both permanent easement and temporary construction easement legal descriptions and plats for the two of the three segments of the project which total approximately 20,000 feet in length. Easement documents were prepared for numerous parcels including private lands, railroads, State Highways, Flood Control Facilities and a private golf course. Extensive research was performed at City, County and State Highways offices in order to compile land record information and to bring some older information into the City GIS. The project area is in a historic area of the City of Riverside.



## SECTION 6– SIMILAR PROJECT EXPERIENCE

### KOA

**Vista Chino and Farrell Drive Designated Right Turn Lane and Traffic Signal Improvement Project, Palm Springs, CA (12/10-2/16).** The City hired KOA to provide engineering and design services to add a northbound right turn lane on Farrell Drive and Bus Bay at Vista Chino Drive. The proposed modification will impact Vista Chino (SR-111) so the project has to be coordinated with Caltrans District 8. Also, since the project is CMAQ funded, KOA had to comply with NEPA requirements and completed PEAR document and an Air Quality Study. Additionally, since there is prevailing Agua Caliente tribal land jurisdiction in the project area, all routine tribal coordination and approval processes have to be met for the project. Caltrans District 8 is representing the FHWA for NEPA clearance. KOA’s scope includes obtaining NEPA/CEQA clearance and completion of a PS&E package for the project. The project is currently under construction. Cost: \$98,600. **Reference:** *Savat Khampou, Assistant Director of Public Works, City of Palm Springs, 3200 Tahquitz Canyon Way, Palm Springs, CA 92262, (760) 323-8253.*



**Traffic Signal & Street Improvements to Linden Avenue & Riverside Avenue, Rialto, CA (12/12-Present).** The City of Rialto desires to install a new traffic signal system at the intersection of Riverside Avenue and Linden Avenue. The existing intersection is not currently constructed to the ultimate width, but the City plans to negotiate with the property owner to obtain additional right of way for proposed widening and to allow installation of the traffic signal equipment at their ultimate locations. Lanes will be added to Linden and Riverside Avenues to provide turning lanes as needed. KOA is responsible for preparing the PS&E package for the intersection improvement and legal description for one parcel. Cost: \$204,940. **Reference:** *City of Rialto, Public Works Department, Hector Gonzalez, Associate Civil Engineer, 335 W. Rialto Avenue, Rialto, CA 92376, (909) 820-2651, hgonzalez@rialtoca.gov.*



**Traffic Signal/Sidewalk and ADA Improvements at Slover and Beech Street Intersection, Fontana, CA (7/13-10/14).** The City of Fontana desires to signalize the existing intersection which is currently operating as a four way stop. The project will require survey and mapping the intersection; designing a new traffic signal; and updating and constructing ADA ramps at all four curb returns of the intersection. The project will impact two properties in the northeast corner; therefore, right-of-way plans and legal descriptions will be required. The City plans to appraise and negotiate the take on this project. Cost: \$25,443. **Reference:** *Noel Castillo, Engineering Manager, City of Fontana, 8353 Sierra Ave, Fontana, CA 92335, (909)-350-7632, ncastillo@fontana.org.*

**Three Intersections and ‘C’ Street Improvement, Colton, CA (8/07-1/09).** KOA is under contract to provide design services to the City of Colton for three intersections. The design includes improving the intersections to comply with ADA standards and signalization at the following three intersections:

- 1) La Cadena Drive / Rancho Avenue
- 2) Agua Mansa Road / Rancho Avenue
- 3) Colton Cement Plant Road / Rancho Avenue

Additionally, ‘C’ Street will be widened to connect the previously widened sections on both sides. This will be needed for the south side of the street serving the eastbound traffic. The project requires constructing new sidewalks and improving the driveway access to local properties. Right of way will be required on this project including coordination with property owners. Cost: \$115,809. **Reference:** *Victor Ortiz, Project Manager, City of Colton, Corporate Yard, 160 S. 10<sup>th</sup> St., Colton, CA 92324, (909) 370-5065.*



**Traffic Signal and Interconnect Design for City of Rancho Cucamonga, CA (3/08-8/09).** KOA was selected by the City of Rancho Cucamonga to provide design services and complete PS&E package for the following intersections:

Design new traffic signals at:

- 1) Hermosa Avenue/Church Street
- 2) Banyan Street/Banyan Fire Station
- 3) Foothill Boulevard/Malachite Avenue
- 4) Terra Vista Parkway West/Church Street
- 5) 19<sup>th</sup> Street and Jasper Avenue

Modify Signal Design at:

- 1) Carnelian Street/Highland Avenue
- 2) Haven Avenue/Lemon Avenue

Traffic Signal Interconnect at:

- 1) Haven Avenue: From Banyan Avenue to Baseline Road

The project design services included intersection modifications at a couple of locations, construction of ADA Ramps, and signing and striping. At one of the intersections, coordination with the business owner was required for their access needs. Cost: \$118,460. Reference: Mr. Mark Steuer, P.E., City Engineer, City of Rancho Cucamonga, 10500 Civic Center Dr., Rancho Cucamonga, CA 91730, (909) 470-2740 Ext. 4051.

**SR60/Perris Blvd Lane Widening and Traffic Signal Modifications, Moreno Valley, CA (6/08-8/12).** The

City of Moreno Valley selected KOA in June 2008 to complete the design and obtain permit from Caltrans District 8 for modifications at this interchange. The modifications basically included adding a southbound right-turn drop lane on Perris Blvd leading to the westbound on-ramp at this interchange. Besides the road widening, the project required traffic signal modifications, ADA ramp design at the intersection and ADA access to Wendy's restaurant. The project cost was below \$3M so Caltrans Streamlined Oversight Process was followed. Design exceptions were granted for this project. The project has been recently advertised for construction by the City and it is in the final stages of completion. KOA also assisted the City in making some design modifications relating to ADA access during the bidding stages of the project. Cost: \$105,555. Reference: Mr. Henry Ngo, PE, Associate Engineer, City of Moreno Valley, 14177 Frederick Street, Moreno Valley, CA 92552, (951) 413-3106.

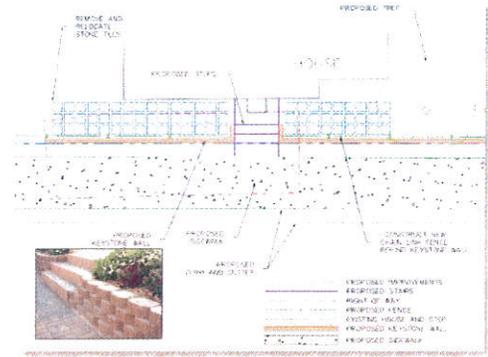


**9<sup>th</sup> Street and Arrowhead Avenue and 9<sup>th</sup> Street and Sierra Way Traffic Engineering Design Services, San Bernardino, CA (10/10-7/14).** KOA worked with the City of San Bernardino to prepare the required design and final PS&E for the intersections of 9<sup>th</sup> Street and Arrowhead Avenue and 9<sup>th</sup> Street and Sierra Way. KOA addressed right of way issues associated with the proposed intersection modifications and prepared traffic signal, signing and striping plans for the two locations. The project was coordinated with the City staff and conforms to the requirements of the City of San Bernardino. Cost: \$25,020. Reference: Hernando R. Cotangco, PE, Project Manager, Public Works Department, City of San Bernardino, 300 N. D Street, San Bernardino, CA 92418, (909) 384-5179.

**Niagara Avenue & Athol Street Sidewalks, Access Ramps, and Driveway Approach Improvements, Fontana, CA (6/14-11/14).** Funded by Community Development Block Grant (CDBG), the City of Fontana desired to improve existing sidewalk, access ramps and driveway approaches along Niagara Avenue and Athol Street. KOA was retained by the City to provide professional engineering services for the project. This roadway improvement project included completion of 2,500 feet of sidewalk improvements, ADA ramp upgrades, and driveway approach improvements. This project will impact over 50 households, and Public Outreach is important for sidewalk project. KOA assisted the City with Public Outreach in the early stage of the project. Another challenge of the project was to tie-in to existing resident driveway approach with minimum impact to its landscape, automatic gate, and wrought iron fences. The KOA team was able to complete the project on a fast-track basis, which helped the City meet the CDBG funding deadline. Cost: \$31,040. Reference: Noel Castillo, Engineering Manager, City of Fontana, 8353 Sierra Ave, Fontana, CA 92335, (909)-350-7632, [ncastillo@fontana.org](mailto:ncastillo@fontana.org).

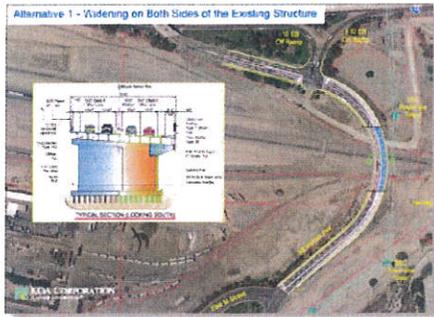


**Martin Avenue, Sidewalks, Access Ramps, and Driveway Approach Improvements, Fontana, CA (11/14-12/15).** Funded by Community Development Block Grant (CDBG), KOA was retained by the City of Fontana to provide professional engineering services for the project. This roadway improvement project included completion of 600 feet of sidewalk improvements, ADA ramps upgrades, and driveway approach improvements. KOA prepared detail resident frontage impact exhibit to help the City get censuses from residents. KOA is responsible for PS&E preparation and the project is currently under construction. Cost: \$23,500. **Reference:** Richard J. Oaxaca, Assistant Engineer, City of Fontana, 8353 Sierra Avenue, Fontana, CA 92335, (909) 350-7661, roaxaca@fontana.org.



**Mt. Vernon Avenue over UPRR Bridge and Roadway Widening Project, Colton, CA (5/13-Present).** KOA Corporation was recently selected by the City of Colton for this major Federally Funded Bridge widening project.

This project requires the existing bridge to be widened from existing 2 lanes to 4 lanes with bike lanes on each side including curb gutter and sidewalk. The roadway also intersects with EB Ramps of I-10 interchange which will also require modification and approval from Caltrans District 8. This is a federally funded project so NEPA and CEQA Clearance will be required through Caltrans District 8 which has been delegated the NEPA clearance responsibility by FHWA. Main challenges of the project include maintaining the required clearance over the UPRR tracks, obtaining approval of the design from UPRR, and project approval from Caltrans District 8. Other design features include geometric design of the bridge alignment including EB ramp modifications at the interchange, hydraulic studies, drainage design, bridge structure design and geotechnical studies



including Initial Site Assessment study (ISA). The project will also have some right of way impacts requiring appraisal and negotiations (to be done by others). Cost: \$2.1M. **Reference:** Victor Ortiz, Project Manager, City Engineer, City of Colton, Corporate Yard, 160 S. 10th St., Colton, CA 92324, (909) 370-5065.

**EPIC LAND**

**Project Cost Estimates and ROW Sheet for 17th Street Grade Separation, OCTA, Orange County, CA, Colton, CA (10/14 - Present).** The Orange County Transportation Authority (OCTA) in cooperation with the City of Santa Ana and SCRRA proposes to construct a grade separation at the 17th Street grade crossing along the Los Angeles-San Diego-San Luis Obispo (LOSSAN) corridor, at Lincoln Avenue which entails lowering 17th Street and Lincoln Avenue to pass under the Metrolink track. The purpose of the project is to alleviate traffic congestion and delay, and to improve operation and safety along 17th Street. The tasks to be performed are preparation of the draft and final Project Report, and draft and final Environmental Document in compliance with CEQA and the NEPA procedures. There are three alternatives under consideration for this project. As a part of determining which alternative is best Epic is preparing a Utility Information Sheet, Cost Estimate of acquisition and utility relocations/impacts, and ROW Data Sheets to document costs related to right of way needs for each build alternative for approximately 30 parcels per alternative. Cost: \$71,984. **Client Reference:** Darren Adrian, Project Manager, Kimley-Horn and Associates, Inc., 765 The City Drive, Suite 200, Orange, CA 92868, (714) 939-1030.



**EXHIBIT C**  
**FEE SCHEDULE**

**FEE PROPOSAL**  
**Design Services for Hyland Avenue at MacArthur Boulevard Intersection Improvements**  
**City of Costa Mesa**

TASKS	Project Principal	Project Manager	Design Engineer	Admin.	Epic Lands Right of Way Services	RMD Surveying Mapping	Twining Geotech	TOTAL COST	OPTIONAL TASK COST
	\$202	\$129	\$88	85					
<b>PHASE I - TOPOGRAPHIC SURVEY &amp; PRELIMINARY DESIGN PLAN</b>									
<b>Task 1 - Project Management and Administration</b>									
1) Management of project team including sub-consultants	2	4	4					\$1,272.00	
3) Quality Control of Submittals		4	4	2				\$1,038.00	
3) Prepare Necessary Documents and Exhibits for Meetings		4	8	2				\$1,390.00	
<b>Subtotal</b>	<b>2</b>	<b>12</b>	<b>16</b>	<b>4</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,700.00</b>	
<b>Task 2 - Data Review, Field Surveying and Base Mapping</b>									
1) Obtain and Review Existing Documents and Reports						\$1,500		\$1,500.00	
2) Contact and Obtain Utility Information						\$1,500		\$1,500.00	
3) Conduct Field Surveys for Control and Mapping						\$2,500		\$2,500.00	
4) Preparation of Base Map		2	4			\$2,500		\$3,110.00	
<b>Subtotal</b>		<b>2</b>	<b>4</b>	<b>0</b>	<b>\$0.00</b>	<b>\$8,000</b>	<b>\$0</b>	<b>\$8,610.00</b>	
<b>Task 3 - Utility Coordination</b>									
1) Coordinate with Utility Agencies		2	8		\$2,962.00			\$3,924.00	
2) Prepare Notices and Follow Up Requests with Plans to Utility Companies		2	8		\$1,000.00			\$1,962.00	
3) Pot-hole utilities to confirm location and Prepare Summary Memorandum and Composite Utility Plan (3 holes)					\$6,000.00			\$6,000.00	
<b>Subtotal</b>		<b>4</b>	<b>16</b>	<b>0</b>	<b>\$9,962.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,886.00</b>	<b>\$0.00</b>
<b>Task 4 - Geotechnical Design Report</b>									
1) Site Reconnaissance							\$250	\$250.00	
2) Coordinate and Perform Field Exploration							\$2,600	\$2,600.00	
3) Perform Geotechnical Field and Laboratory Testing							\$650	\$650.00	
4) Perform Analysis and Prepare Structural Pavement Recommendation Report		2	2				\$1,500	\$1,934.00	
<b>Subtotal</b>		<b>2</b>	<b>2</b>	<b>0</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$5,000</b>	<b>\$5,434.00</b>	
<b>Task 5 - First Review: Preliminary Design Plans</b>									
1) Coordinate and obtain project data from the City		4	8	2				\$1,390.00	
2) Prepare Detail Alignment Plan	1	4	32					\$3,534.00	
3) Prepare Preliminary Cost Estimates		2	8					\$962.00	
<b>Subtotal</b>	<b>1</b>	<b>10</b>	<b>48</b>	<b>2</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,886.00</b>	
<b>PHASE I SUBTOTAL</b>	<b>3</b>	<b>30</b>	<b>86</b>	<b>6</b>	<b>\$9,962.00</b>	<b>\$8,000.00</b>	<b>\$5,000.00</b>	<b>\$35,516.00</b>	<b>\$0.00</b>
<b>PHASE II - RIGHT-OF-WAY ENGINEERING</b>									
<b>Task 6 - Right-of-Way</b>									
1) Identify Right-of-Way Requirements	1	4	8		\$341.00			\$1,763.00	
2) Obtain Right of Entry		2			\$682.00			\$940.00	
3) Prepare Legal Document						\$2,000		\$2,000.00	
<b>Subtotal</b>	<b>1</b>	<b>6</b>	<b>8</b>	<b>0</b>	<b>\$1,023.00</b>	<b>\$2,000</b>	<b>\$0</b>	<b>\$4,703.00</b>	
<b>PHASE II SUBTOTAL</b>	<b>1</b>	<b>6</b>	<b>8</b>	<b>0</b>	<b>\$1,023.00</b>	<b>\$2,000.00</b>	<b>\$0.00</b>	<b>\$4,703.00</b>	
<b>PHASE III - PLANS, SPECIFICATIONS &amp; ESTIMATES</b>									
<b>Task 7 - Specifications</b>									
1) Specifications and Special Provisions and Engineers Estimate	2	6	12					\$2,234.00	
2) 2nd Review 75% Submittal		8	24					\$3,144.00	
3) 3rd Review 100% Submittal		4	16					\$1,924.00	
3) 100% Submittal		2	12					\$1,314.00	
<b>Subtotal</b>	<b>2</b>	<b>20</b>	<b>64</b>	<b>0</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$8,616.00</b>	
<b>Task 8 - Engineering Support during Bidding, Award &amp; Construction Phase (Upon Authorization)</b>									
1) Bidding Services		2	4					\$610.00	
2) Preconstruction meeting	2	2	2					\$838.00	
3) Review Inquiries, submittals and change orders during construction.		4	4					\$868.00	
4) Prepare As Built Drawings		2	8					\$962.00	
<b>Subtotal</b>	<b>2</b>	<b>10</b>	<b>18</b>	<b>0</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,278.00</b>	
<b>PHASE III SUBTOTAL</b>	<b>4</b>	<b>30</b>	<b>82</b>	<b>0</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$8,616.00</b>	<b>\$3,278.00</b>
<b>Reimbursable</b>									
1) Reports and printing including Mylars								\$500.00	
2) Mileage								\$500.00	
<b>TOTAL HOURS</b>	<b>6</b>	<b>56</b>	<b>158</b>	<b>6</b>					
<b>TOTAL COST</b>	<b>\$1,212</b>	<b>\$7,224</b>	<b>\$13,904</b>	<b>510</b>	<b>\$10,985.00</b>	<b>\$10,000</b>	<b>\$5,000</b>	<b>\$49,835.00</b>	<b>\$3,278.00</b>