

AGREEMENT FOR PROFESSIONAL CONSULTANT SERVICES

THIS AGREEMENT FOR CONSULTING SERVICES (this "AGREEMENT") is made and entered into this ____ day of _____, 20____, by and between the CITY OF LANCASTER, a municipal corporation and charter city (the "OWNER"), and KIMLEY-HORN AND ASSOCIATES, INC. (the "CONSULTANT").

RECITALS

WHEREAS, OWNER desires to engage CONSULTANT to perform certain technical and professional services, as provided herein, identified as:

**PREPARATION OF PROJECT APPROVAL AND ENVIRONMENTAL DOCUMENT
FOR SR-138 (SR-14) AVENUE J INTERCHANGE**

WHEREAS, the principal members of CONSULTANT are qualified and duly registered/licensed under the laws of the State of California, and CONSULTANT desires to accept such engagement;

NOW, THEREFORE, the parties agree as follows:

1. **Parties to the AGREEMENT.**

The parties to this AGREEMENT are:

- A. OWNER: City of Lancaster
- B. CONSULTANT: Kimley-Horn and Associates, Inc.

2. **Notices.** All written notices required by or related to this AGREEMENT shall be sent by Certified Mail, Return Receipt Requested, postage prepaid and addressed as listed below. Neither party to this AGREEMENT shall refuse to accept such mail; parties to this AGREEMENT shall promptly inform the other party of any changes of address. All notices required by this AGREEMENT are effective on the day of receipt, unless otherwise indicated herein.

OWNER Development Services Director
 City of Lancaster
 44933 North Fern Avenue
 Lancaster, California 93534

CONSULTANT Enda Melvin, Senior Vice President
 Kimley-Horn and Associates, Inc.
 660 S. Figueroa Street, Suite 2050
 Los Angeles, California 90017

3. **Successors and Assigns.** The terms hereof shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto; provided, however, that no party hereto shall

assign any of the benefits and burdens hereunder, whether voluntarily or by operation of law, without prior written consent of the other party, and any such assignments without said consent shall be void.

4. **Incorporation by Reference.** The Request for Proposal – RFQ No. 632-16 – Preparation of Project Report, Environmental Document, Plans, Specifications and Estimate for SR-138 (SR-14) Avenue J Interchange and CONSULTANT’S Proposal is hereby incorporated in and made a part of this AGREEMENT. CONSULTANT agrees to comply with all of the requirements set forth therein.

5. **Precedence of AGREEMENT Documents.** If there is a conflict between AGREEMENT documents, the document highest in precedence shall control. The precedence shall be:

- First: This AGREEMENT consisting of 51 pages
- Second: RFQ No. 632-16 – Preparation of Project Report, Environmental Document, Plans, Specifications and Estimate for SR-138 (SR-14) Avenue J Interchange
- Third: The CONSULTANT’S Proposal

6. **Description of Work.** OWNER hereby engages CONSULTANT, and CONSULTANT accepts such engagement, to perform the technical and professional services set forth in the “Scope of Services” attached hereto as Exhibit “A”. CONSULTANT shall perform and complete, in a manner satisfactory to OWNER, all work and services set forth in Exhibit “A”. The Development Services Director or his designee shall have the right to review and inspect the work during the course of its performance at such times as may be specified by the Development Services Director, or his designee.

7. **Obligations of the OWNER.**

A. The total compensation to be paid by OWNER to CONSULTANT for all work and services described in Exhibit “A” is not to exceed \$1,099,513.00. CONSULTANT’S fees and charges for the work and services performed shall in no event exceed those set forth in Exhibit “B” attached hereto and made a part hereof.

B. No payment made hereunder by OWNER to CONSULTANT, other than the final payment, shall be construed as an acceptance by OWNER of any work or materials, nor as evidence of satisfactory performance by CONSULTANT of its obligations under this AGREEMENT.

8. **Obligations of the CONSULTANT.**

A. CONSULTANT shall perform as required by this AGREEMENT. CONSULTANT also warrants on behalf of itself and all subcontractors engaged for the performance of this AGREEMENT.

B. CONSULTANT shall be responsible for payment of all employees' and subcontractor's wages and benefits, and shall comply with all requirements pertaining to employer's liability, workers' compensation, unemployment insurance, and Social Security.

9. **Senate Bill 854.**

SB 854 bill signed into law on June 20, 2014, established a new public works contractor registration program to replace prior Compliance Monitoring Unit (CMU) and Labor Compliance Program (LCP) requirements for bond-funded and other specified public works projects. The Department of Industrial Relations (DIR) requires all contractors and subcontractors who bid or perform work on a public works project (as defined under the Labor Code) be subject to a registration and annual renewal fee. Contractors must apply online and meet minimum qualifications to be registered as eligible to bid and work on public works projects. The requirement to list only registered contractors and subcontractors on bids becomes effective on March 1, 2015. The requirement to only use registered contractors and subcontractors on public works projects applies to all projects awarded on or after April 1, 2015. **This project shall comply with the requirement of SB 854.**

Coverage is not limited only to work performed at the construction site by the traditional construction trades, but extends broadly to workers employed “in the execution of” the public works contract.

Survey and Geotechnical Services will only need to register if the scope of services provided would require the payment of prevailing wage and be considered to be covered under the *California Labor Code*. Even though survey and geotechnical services typically are viewed as consultants and generally do not necessarily fit the term “contractor,” compliance with section SB 854 will be required by the Department of Industrial Relations (“DIR”). Essentially, if the services provided by a survey or geotechnical services firm would be considered to be covered under the applicable *California Labor Code* sections, then they should register. It should be noted that only the firm needs to register and not individual licensed design professional(s).

Attention is directed to the revisions to Labor Code Section 4. 1725.5 and Section 5. 1771.1:

A. SECTION 4 1725.5

“A contractor (consultant) must be registered pursuant to this section in order to be qualified to bid on, be listed in a bid proposal pursuant to Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work that is subject to requirements of this chapter.

- (a) To qualify for registration under this section, a contractor must do all of the following:
 - (1) Beginning July 1, 2014, register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial non-refundable application fee of \$300 to qualify for registration under this section and an annual renewal fee on or before July 1st each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.
 - (2) Provide such evidence, disclosures, or releases as are necessary to establish all of the following:
 - (A) Worker’s Compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker who the contractor will employ to perform work that is subject to prevailing wage requirements other than a contractor who, is separately registered under this section. Coverage may be evidenced by a current and valid Certificate of Workers’ Compensation

Insurance or Certification of Self-Insurance required under Section 7125 of the Business and Professions Code.

(B) Where applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages, or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months, or since the effective date of the requirements set forth in subdivision (f), whichever is shorter. For a contractor found to be in violation of the requirements of this paragraph only, the period of disqualification shall be waived if: (i) the contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months; and (ii) the contractor pays an additional non-refundable penalty registration fee of \$2,000.

- (b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established pursuant to Section 1771.3 and shall be used only for the purposes specified in subdivision (b) of Section 1771.3
- (c) The term “contractor,” as used in this section, shall include any subcontractor or “consultant”, as defined in Section 1722.1.
- (d) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. A contractor who inadvertently fails to pay the renewal fee may retroactively renew its registration by paying an additional non-refundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the date of the renewal fee.
- (e) The requirements of this section shall not apply with respect to any contract, which as a result of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or decision by a court that classifies, after the time at which the body awarding the contract accepts the contractor’s bid or awards the contractor a contract, the work covered by the bid or contract as a “public work,” as defined in this chapter, to which Section 1771 applies, provided that:

- (1) The body awarding the contract failed to identify as a public work, in the bid specification or in the contract documents that portion of the work that the determination or decision classifies as a “public work.”
 - (2) Within twenty (20) days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.
 - (3) The requirements of this section shall apply prospectively only to any bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2) of this subdivision.
- (f) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work, as defined in this chapter, entered into on or after April 1, 2015.”

B. SECTION 5 1771.1

- (a) No contractor or subcontractor shall be qualified to bid on, be listed in a bid proposal pursuant to Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered to perform public work pursuant to Section 1725.5. It shall not be a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Sections 10164 or 20103.5 of the public work pursuant to Section 1725.5 at the time the contract is awarded.
- (b) Notice of this requirement shall be included in all bid invitations and public works contracts, and no bid shall be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor’s current eligibility to perform public work pursuant to Section 1725.5.
- (c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following requirements are met: (1) the subcontractor is registered prior to the bid opening; (2) within 24 hours after the bid opening the subcontractor is registered and has paid the penalty registration fee specified in paragraph (E) of subdivision (2) of Section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.
- (d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) of this Section shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.
- (e) The DIR shall maintain on its website a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation. However, no contract for public work shall be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

A. This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. **This project shall comply with the requirements of SB 854.**

10. **Payment of Prevailing Wage.**

A. The State of California, Department of Industrial Relations, has ascertained the general prevailing rate of wages and employer payments for health and welfare, vacation, pension, and similar purposes applicable to the field work to be done, including mapping and surveying, geotechnical investigation, traffic control, and potholing services. These rates shall be the minimum wage rates for this project. These rates are on file with the City of Lancaster and copies will be made available to any interested party upon request.

Attention is directed to the provisions of Section 1777.5 (Chapter 1411, Statutes of 1968) and Section 1777.6 of the Labor Code concerning the employment of apprentices by the CONSULTANT or any subcontractor under him.

Section 1777.5, as amended, requires the CONSULTANT or subcontractor employing tradesmen in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of the public works project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen that will be used in the performance of the contract. The ratio of apprentices to journeymen in such cases shall not be less than one to five except:

- (A) When unemployment in the area of coverage by the joint apprenticeship committee has exceeded an average of 15% in the 90 days prior to the request for certificate; or
- (B) When the number of apprentices in training in the area exceeds a ratio of one to five; or
- (C) When the trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis statewide or locally; or
- (D) When the CONSULTANT provides evidence that he employs registered apprentices on all of his contracts on an annual average of not less than one apprentice to eight journeymen.

The CONSULTANT is required to make contributions to funds established for the administration of apprenticeship programs if he employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other Contractors on the public works site are making such contributions.

The CONSULTANT and any subcontractor under them shall comply with the requirements of Section 1777.5 and Section 1777.6 in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

B. The provisions of subsection A above shall be included in all solicitations or advertisements placed by or on behalf of CONSULTANT for personnel to perform any services under this AGREEMENT. OWNER shall have access to all documents, data and records of CONSULTANT and its subcontractors for purposes of determining compliance with the Prevailing Wage provisions of this Section.

11. **Audit.** OWNER shall have the option of inspecting and/or auditing all records and other written materials used by CONSULTANT in preparing its statements to OWNER as a condition precedent to any payment to CONSULTANT.

12. **Hold Harmless and Indemnification.** CONSULTANT agrees to indemnify and hold harmless the OWNER, its officers and employees, from and against any and all claims, losses, obligations, or liabilities whatsoever, including reasonable Attorney's fees, incurred in or in any manner arising out of or related to CONSULTANT'S negligent or willful wrongful acts, errors or omissions, or those of its employees or agents. CONSULTANT agrees to defend OWNER, its officers and employees, from and against any and all claims arising from any alleged negligent or wrongful acts, errors or omissions on the part of CONSULTANT or on the part of its employees.

13. **Amendments.** Any amendment, modification, or variation from the terms of this AGREEMENT shall be in writing and shall be effective only upon mutual written approval by the Development Services Director and CONSULTANT.

14. **Non-Discrimination and Equal Employment Opportunity.**

A. In the performance of this AGREEMENT, CONSULTANT shall not discriminate against any employee, subcontractor, or applicant for employment because of race, color, religion, ancestry, sex, national origin, physical or mental disability or age. CONSULTANT will take affirmative action to ensure that subcontractors and applicants are employed, and that employees are treated during employment without regard to their race, color, religion, ancestry, sex, national origin, physical or mental disability or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship.

B. The provisions of subsection A above shall be included in all solicitations or advertisements placed by or on behalf of CONSULTANT for personnel to perform any services under this AGREEMENT. OWNER shall have access to all documents, data and records of CONSULTANT and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section.

15. **Termination for Convenience.** The governing board of the OWNER may terminate this AGREEMENT at any time without cause by giving fifteen (15) days written notice to CONSULTANT of such termination and specifying the effective date thereof. In that event, all finished or unfinished documents and other materials shall, at the option of OWNER, become the OWNER's property. If this AGREEMENT is terminated by OWNER as provided herein, CONSULTANT will be paid a total amount equal to its costs as of the termination date, plus ten percent (10%) of that amount

for profit. In no event shall the amount payable upon termination exceed the total maximum compensation provided for in this AGREEMENT.

16. **Termination for Cause.**

A. The governing board of the OWNER may, by written notice to CONSULTANT, terminate the whole or any part of this AGREEMENT in any of the following circumstances:

(1) If CONSULTANT fails to perform the services required by this AGREEMENT within the time specified herein or any authorized extension thereof; or

(2) If CONSULTANT fails to perform the services called for by this AGREEMENT or so fails to make progress as to endanger performance of this AGREEMENT in accordance with its terms, and in either of these circumstances does not correct such failure within a period of ten (10) days (or such longer period that OWNER may authorize in writing) after receipt of notice from OWNER specifying such failure.

B. In the event OWNER terminates this AGREEMENT in whole or in part as provided above in paragraph A of this Section, OWNER may procure, upon such terms and in such manner as it may deem appropriate, services similar to those terminated.

C. If this AGREEMENT is terminated as provided above in paragraph A, OWNER may require CONSULTANT to provide all finished or unfinished documents, data, studies, drawings, maps, photographs, reports, etc., prepared by CONSULTANT. Upon such termination, CONSULTANT shall be paid an amount equal to the contract amount, less the cost of hiring another CONSULTANT to complete CONSULTANT's services. In the event no new CONSULTANT is employed, CONSULTANT shall be paid an amount equal to the value of the work performed. In ascertaining the value of the work performed up to the date of termination, consideration shall be given to completed work and work in progress, complete and incomplete drawings, and other documents whether delivered to OWNER or in possession of CONSULTANT, and authorized reimbursement expenses.

D. If, after notice of termination of the AGREEMENT under the provisions of this Section, it is determined, for any reason, that CONSULTANT was not in default, or that the default was excusable, then the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 15.

17. **Independent Contractor.** CONSULTANT is an independent contractor and shall have no power or authority to incur any debt, obligation or liability on behalf of the OWNER. It is expressly understood between the parties to this AGREEMENT that no employee/employer relationship is intended; CONSULTANT is an independent contractor.

18. **Insurance.**

A. (1) The CONSULTANT, at its expense, shall maintain in effect at all times during the performance of work under this AGREEMENT not less than the following coverage and limits of insurance, which shall be maintained with insurers listed "A-, VIII" or better in the Best's Key Rating Guide:

Commercial General Liability	
Each Occurrence	\$5,000,000
Per Project General Aggregate	\$10,000,000
Including Products/Completed Operations	
Including Contractual Liability/Independent Contractors	
Including Broad Form Property Damage	
Must Not Exclude XCU Coverage	
Commercial Automobile Liability	
Combined Single Limit per Accident for	
Bodily Injury and Property Damage	\$10,000,000
Workers Compensation	
As Required by the State of California	Statutory Limits
Employer's Liability	
Each Accident	\$1,000,000
Bodily Injury by Disease	\$1,000,000
Each Employee	\$1,000,000
Professional Liability	
Each Occurrence	\$10,000,000
General Aggregate	\$10,000,000

B. For General Liability insurance shall be at least as broad as ISO form CG2010 11/85, CG2010 07/04 and CG2037 07/04 combined, or an equivalent providing ongoing and completed operations. Commercial Auto coverage shall be at least as broad as ISO form CA00 01.

C. 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 insured's liability.

D. A Waiver of Subrogation must be provided on behalf of the Certificate Holder for the Workers Compensation/Employers Liability policies and a copy of the endorsement must accompany the certificate.

E. Any deductibles or self-insurance retentions must be declared and approved by the OWNER. At the option of the OWNER, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the OWNER insured entities or the insurer shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

F. All insurance shall be primary and non-contributory as respects the OWNER insured entities. Any insurance or self-insurance maintained by the OWNER insured entities shall be in excess of the CONSULTANT'S insurance and shall not contribute with it.

G. The coverage provided under this contract shall not contain any special limitations on the scope of protection afforded to the OWNER insured entities.

H. Insurance provided and maintained by CONSULTANT must be placed with insurers with a rating of A-, VIII or better by Best's Key Rating Guide, latest edition.

I. Insurance written on a “claims made” basis must be renewed for a period of five (5) years after this contract expires or is terminated. Such insurance must have the same coverage and limits as the policy that was in effect during the term of this contract and will cover CONSULTANT for all claims made by the OWNER insured entities arising out of any acts or omissions of CONSULTANT or its officers, employees, or agents during the time this AGREEMENT was in effect.

J. CONSULTANT shall furnish the OWNER with Certificates of Insurance and with original endorsements effecting coverage required by this contract. The certificates for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. All certificates and endorsements are to be received and approved by the OWNER before work commences. The OWNER reserves the right to require complete, certified copies of all required insurance policies at any time.

K. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the OWNER insured entities.

L. Certificates of Insurance must be deposited with the OWNER for all coverage required by this contract. Certificates shall meet the following requirements:

(1) Show that the insurance policy has been endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits except after 30 days prior written notice (10 days written notice for non-payment) by Certified Mail, return receipt requested to the OWNER.

(2) List in the “Descriptions of Operations/Locations/Vehicles/Special Items” section:

PREPARATION OF PROJECT APPROVAL AND ENVIRONMENTAL DOCUMENT FOR SR-138 (SR-14) AVENUE J INTERCHANGE

The City of Lancaster, its elected officials, officers, employees and volunteers are included as additional covered parties, but only insofar as the operations under this contract are concerned.

(3) List in the “Certificate Holder” section:

The City of Lancaster
44933 Fern Avenue
Lancaster, California 93534

M. CONSULTANT shall include all subcontractors as an insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. Subcontractors are subject to the same insurance requirements as the CONSULTANT.

N. The coverage shall contain no special limitations on the scope of protection afforded to the insured entities. The CONSULTANT’S insurance coverage shall be primary insurance as respects the OWNER’S insured entities.

19. **Commencement and Completion of Work.** The execution of this AGREEMENT by the parties does not constitute an authorization to proceed. The services of CONSULTANT shall commence when the OWNER, acting by and through its Development Services Director or his designee, has issued the Notice to Proceed.

CONSULTANT shall have no claim for compensation for any services or work which has not been authorized by the OWNER's Notice to Proceed.

20. **Extension of Time for Completion of Work.**

A. If, at any time, the work is delayed due to suspension order by OWNER, or due to any other cause which, in the reasonable opinion of the OWNER, is unforeseeable and beyond the control and not attributable to the fault or negligence of CONSULTANT, then CONSULTANT shall be entitled to an extension of time equal to said delay, subject to the OWNER's right to terminate this AGREEMENT pursuant to Section 15.

B. CONSULTANT shall submit to OWNER a written request for an extension of time within ten (10) days after commencement of such delay, and failure to do so shall constitute a waiver thereof. OWNER shall, in its sole discretion, determine whether and to what extent any extensions of time shall be permitted.

C. No extension of time requested or granted hereunder shall entitle CONSULTANT to additional compensation unless, as a consequence of such extension, additional work must be performed. In such event, OWNER shall in good faith consider any request for additional compensation submitted by CONSULTANT.

21. **Ownership of Documents.** All plans, specifications, reports, studies, tracings, maps and other documents prepared or obtained by CONSULTANT in the course of performing the work required by this AGREEMENT shall be the property of the OWNER. Basic survey notes, sketches, charts, computations and similar data prepared or obtained by CONSULTANT under this AGREEMENT shall, upon request, be made available to OWNER without restriction or limitation on their use.

22. **Data Provided to CONSULTANT.** OWNER shall provide to CONSULTANT, without charge, all data, including reports, records, maps and other information, now in the OWNER's possession which may facilitate the timely performance of the work described in Exhibit "A".

23. **CONSULTANT's Warranties and Representations.**

CONSULTANT warrants and represents to OWNER as follows:

A. CONSULTANT has not employed or retained any person or entity, other than a bona fide employee working exclusively for CONSULTANT, to solicit or obtain this AGREEMENT.

B. CONSULTANT has not paid or agreed to pay any person or entity, other than a bona fide employee working exclusively for CONSULTANT, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the execution of this AGREEMENT. Upon any breach or violation of this warranty, OWNER shall have the right, in its sole discretion, to terminate

this AGREEMENT without further liability, or, in the alternative, to deduct from any sums payable hereunder the full amount or value of any such fee, commission, percentage or gift.

C. CONSULTANT has no knowledge that any officer or employee of the OWNER has any interest, whether contractual, noncontractual, financial, proprietary, or otherwise, in this transaction or in the business of the CONSULTANT, and that if any such interest comes to the knowledge of CONSULTANT at any time, a complete written disclosure of such interest will be made to OWNER, even if such interest would not be deemed a prohibited "conflict of interest" under applicable laws.

D. Upon the execution of this AGREEMENT, CONSULTANT has no interest, direct or indirect, in any transaction or business entity which would conflict with or in any manner hinder the performance of services and work required by this AGREEMENT, nor shall any such interest be acquired during the term of this AGREEMENT.

24. **Resolution of Disputes.**

A. Disputes regarding the interpretation or application of any provisions of this AGREEMENT shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

B. If the parties cannot resolve the dispute through good faith negotiations, either party may give Notice of Dispute to the other party. The Notice of Dispute shall state the nature of the dispute and the corrective action necessary to remedy the dispute.

After Notice of Dispute, the parties shall first attempt to resolve any disputes by mediation. The parties shall agree on a single mediator. Mediation shall be conducted in Lancaster, California. Each party shall pay its own attorneys' fees and the costs of mediation shall be split equally between the parties.

If the dispute has not been resolved by mediation within 45 days after Notice of Dispute, or the parties are unable to agree to a mediator, within 15 days after Notice of Dispute, then, the dispute may, upon agreement of the parties be resolved by binding arbitration.

25. **Exhibits.**

The following exhibits to which reference is made in this AGREEMENT are deemed incorporated herein in their entirety:

Exhibit "A" Scope of Services

Exhibit "B" Term, Payment and Time for Commencement and Completion Clause

26. **Governing Law.**

This AGREEMENT shall be governed by the laws of the State of California.

27. **Effective Date.**

This AGREEMENT shall become effective as of the date set forth below on which the last of the parties, whether OWNER or CONSULTANT, executes said AGREEMENT.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed and attested by their respective officers thereunto duly authorized.

“OWNER”
CITY OF LANCASTER
LANCASTER, CALIFORNIA

Approved By Department Head:

By: _____
Jeff Hogan, Development Services Director

Dated: _____

By: _____
Mark V. Bozigian, City Manager

Dated: _____

"CONSULTANT"
KIMLEY-HORN AND ASSOCIATES, INC.

By: _____
Enda Melvin
Senior Vice President

ATTEST:

Dated: _____

Britt Avrit, CMC
City Clerk

APPROVED AS TO FORM:

Allison E. Burns, Esq.
City Attorney

EXHIBIT "A"

SCOPE OF SERVICES

The Consultant shall maintain separate costs for each project and shall identify the costs specific to each project.

The work to be performed under this contract shall include:

SEE ATTACHED

EXHIBIT "A"
SCOPE OF SERVICES



City of Lancaster
Avenue J/SR-14(SR-138) Improvements - PA&ED

Project Understanding

The City of Lancaster, in cooperation with Caltrans and the Los Angeles County Metropolitan Transportation Authority (LACMTA), will modify the geometry and capacity of the SR-138 (SR-14) Avenue J Interchange. The proposed modifications include new ramp connections at Avenue J and improvements to Avenue J and Avenue J-8 between 25th Street West to 20th Street West. The project will potentially include a new southbound on-ramp from Avenue J, a new northbound off-ramp to Avenue J or a new northbound collector-distributor road between 20th Street West and Avenue J, channelization improvements to Avenues J and J-8, traffic signals or other traffic control improvements on Avenue J, Avenue J-8 and 20th Street West, landscaping, pedestrian and bicycle improvements and other context sensitive solutions. With the proposed modifications to include a full interchange at Avenue J, the options need to consider closing the one or both of the ramps at J-8 and 20th Street West.

The SR-138 (SR-14) Avenue J Interchange Project is one of the five interchange projects approved by LA Metro that would use Measure R Highway “Equity” funds for planning, design and construction. The City of Lancaster (the City) has long realized the need to enhance the operational capacity of the Avenue J interchange, due to the Avenue J commercial/retail corridor, the historic downtown Lancaster (“The Blvd”), and the medical corridor (future Medical District).

In close partnership with the City’s Capital Program and Planning Department staff during the Project Initiation Document (PID) phase, Kimley-Horn has developed a good understanding of the goals for this priority project in the core central area of the City.

Enhance Operational Capacity at the Avenue J Interchange

The existing Avenue J Interchange is a partial compact diamond interchange (L-1) with ramps only on the northern half of the interchange. The missing NB off-ramp and the SB on-ramp are provided by another partial interchange at Avenue J-8/20th Street West less than 0.5 mile to the south. As a result of the two partial interchanges, vehicle trips between the freeway and various destinations in this part of the City use other north-south City streets.

Completing the Avenue J Interchange would draw traffic away from Avenue J-8 and 20th Street West and other surrounding local streets to Avenue J. This would increase utilization of Avenue J, which currently has significant commercial activities and is poised to become the gateway to the future Medical District and the historic downtown Lancaster.

Reduce Local Congestion by Shift in Traffic Patterns

Due to the partial interchanges, freeway bound traffic is distributed to the local street network, particularly on north-south streets including 15th Street West, 20th Street West, and 25th Street West and east-west streets including Avenue J-8 and Avenue K. These trips have created incremental congestion on the local street network adjacent to the freeway and certain intersections, such as Avenue J and 20th Street West.

Through the SR-14 interchange improvement and other studies, the City is identifying and prioritizing improvements that encourage drivers to use high capacity corridors while preserving selected roadways as lower volume and lower speed facilities consistent with the City's Complete Streets vision.

As the City has conducted traffic sensitivity testing as part of the early program efforts, Kimley-Horn (KHA) will utilize this data in the PA&ED phase to determine the opportunities and potential constraints from various access options at Avenues J and J-8 to ensure that the selected alternatives accommodate anticipated growth and meet the City's transportation goals.

Better Way-Finding

The incomplete interchanges at Avenue J and 20th Street West/Avenue J-8 present challenges to way-finding. For example, drivers traveling westbound on Avenue J with a destination of Palmdale/Los Angeles via southbound SR-14, often assume that they can enter the freeway on Avenue J; however, they end up making a left turn on 25th Street West and then on Avenue J-8, and use the loop on-ramp on Avenue J-8. A similar situation occurs for drivers traveling eastbound. Confusion to drivers creates unnecessary trips on local streets, sometimes involving large trucks.

The Avenue K Interchange to the south, in particular the northbound off-ramp, has seen significant congestion since the completion of the Antelope Valley Hospital and other medical facilities on 15th Street West. Operational improvements to the Avenue J Interchange as well as destination guide signs on the freeway advising motorists to use Avenue J for hospital are expected to relieve pressure on of the Avenue K Interchange.

Context Sensitive Solutions

The City of Lancaster has created a vision of a network of complete streets and bikeways throughout the City, often involving road diets on streets with lower volumes and high traveling speeds. This project will need to be consistent with that vision as it aims to address the challenges identified. In addition a program of aesthetic guidelines is being developed and will be implemented within the corridor where appropriate to establish an identity for the community and enhance the experience of visitors.

Environmental

Because the project is not receiving federal funding, only compliance with the California Environmental Quality Act (CEQA) will be required. According to the Section 15063 of CEQA, a Lead Agency is required to prepare an Initial Study (IS) to determine whether a project could have a significant impact on the environment. Caltrans is the lead agency for CEQA on this project. Once the IS has been completed, it is anticipated that a Mitigated Negative Declaration (MND) will be prepared if potentially significant impacts are identified, but revisions are made to the project that would avoid or mitigate these impacts to a less than significant level (CEQA Section 15070).

A Draft Mini-Preliminary Environmental Assessment Report (Mini-PEAR) was prepared for the PSR (PDS). The preliminary technical studies completed to support the Mini-PEAR identified there may be potentially significant impacts associated with implementation of the project that could require mitigation measures to avoid or reduce these impacts. With the implementation of available

mitigation measures, no significant impacts are expected; therefore, an IS/MND is anticipated to be the appropriate level of CEQA documentation.

The City, in an effort to expedite and provide efficiencies, completed corridor studies for the Community and Neighborhood Existing Conditions, Biological Resources Existing Conditions and the Cultural Resources Existing Conditions to be used in completing the technical studies for the individual interchanges. The team will utilize the results of these studies to prepare technical studies and the environmental document for the Avenue J Interchange project. This approach will help provide consistency in the technical reports, allow access to information earlier, and reduce project costs.

Approach

Our overall approach is to utilize the information available from the PID phase as well as the corridor studies developed for the Program, including traffic forecasting, hydrology, environmental setting, corridor aesthetics and public outreach, to develop all documents needed for Project Approval and Environmental Documentation. The build alternatives developed from the PID phase will need to be advanced to demonstrate how highway standards are met (horizontal, vertical and superelevation), and provide a project footprint for environmental clearance. Project impacts can then be evaluated in the various technical studies to better understand the mitigation required to complete the project. The Kimley-Horn team that is completing the PSR-PDS will be enhanced with additional specialists to complete the PA&ED phase.

Scope of Work

Task 1 Project Management

Effective project management and communication is critical to the project's success. The KHA team's approach to manage this project includes the following tasks:

Task 1.1 Coordination and Meetings

Coordination with the City – Provide continuous dialog and updates to City's Project Manager. This will be done through emails, phone conversations, in person meetings at the City in an efficient manner. Our goal is to keep the City informed at all times and in-prompt to, and not let time sensitive issues sit unattended. The City's Project Manager will be our single point of contact for the project. Kimley-Horn will consult with the City's Project Manager on prior to engaging external communications related to the project.

Coordination with External Stakeholders – We will report status to the Project Development Team (PDT), which includes Caltrans District 7 staff, on a regular basis. In addition to the PDT coordination, we will hold focus meetings with specific stakeholders or functional units within Caltrans to resolve any specific issues that do not require the entire PDT. Full PDT meetings will be held at key milestones to ensure Caltrans functional units are kept informed and aware of project status and decisions. Each PDT meeting has a specific set of goals for the meeting, and Kimley-Horn will prepare and distribute meeting agenda and materials prior to the meeting, and prepare and distribute meeting notes subsequent to the meetings. Up to four PDT meetings are anticipated to complete the PA&ED for the project.

Meeting Agendas will be prepared and distributed prior to focused and PDT meetings. Meeting notes will be prepared and action items will be identified. The notes will be distributed within a reasonable amount of time of each meeting.

Task 1.2 Administration

Progress reports and invoices will be prepared and submitted monthly to provide a summary of activities completed by the team, the corresponding effort expended to complete those services, and anticipated activities for the next period. Potential issues will be summarized that could impact the schedule with action items to resolve them.

Task 1.3 Project Management

Kimley-Horn will manage the project and the contract with the City. The Kimley-Horn project manager will be the single point of contact for the City and will be responsible for all activities on the contract.

The project team will be managed by Kimley-Horn staff. Regular communication will occur with the team to coordinate, inform and apprise the team on status, information needs and coordination required with Caltrans and the City.

The Kimley-Horn team consists of the following team members:

Kimley-Horn – Project Management, Civil Design, Project Report Preparation
GPA Consulting – Environmental Lead, Technical Studies and Environmental Documentation
Fehr and Peers – Traffic Forecasting and Operational Analysis
Baker – Structures and Environmental Technical Studies (Air, Noise & ISA)
AESI – Surveys and Mapping and R/W Engineering
Earth Mechanics – Materials and Geotechnical Studies
OPC – R/W Support Services
Sargent Town Planning – Aesthetics Support

Schedule - A project schedule will be prepared for the project within the first two months after the notice to proceed is provided. A detailed schedule will be prepared that will identify the major activities of the project and identify the controlling timeline and the relationships between project task to establish a critical path for completing the project. The schedule will be updated as needed to maintain the project schedule based upon actual completion of activities.

Task 1 Deliverables:

- Meeting Agenda, Notes with Action Items
- Monthly Progress Reports and Invoices
- Schedule updates as applicable

Task 2 Data Collection

Task 2.1 Research and Data Collection

Kimley-Horn collected a substantial amount of data during the PID phase relevant to the project including record maps from private and public utilities (responses on Utility “A” letters), as-built

plans from the City of Lancaster and Caltrans, right of way maps from Caltrans, County Assessor Parcel Maps, USGS aerial photos and available contour maps. In the PA&ED phase Kimley-Horn will continue to build the database of existing data including:

- Transit lines and stops from Antelope Valley Transit Agency
- Future planned projects on the State Highway System from Caltrans
- Future planned roadways within the City limits (CIP) from the City
- Utility verification information including potholing or other means of utility detection
- Follow-up with private utilities on facilities that would be in conflict with the project improvements
- Planning documents being prepared by the City for the Complete Streets Master Plan, the Citywide Signal Coordination effort, and other development and CIP projects as they are identified

Task 3 Surveying and Mapping (AESI & KHA)

Task 3.1 Photogrammetric Mapping and Boundary (AESI)

AESI will establish aerial control targets and their aerial mapping sub-consultant will provide the data collection and mapping through photogrammetric methods. The photogrammetric survey and mapping will be performed in accordance with Caltrans Survey Manual Chapter 13. Horizontal and vertical control established for the aerial targets will meet or exceed Caltrans Second Class Accuracy Standards for Basic Corridor Control.

Horizontal locations will be based upon the CALVRS system, utilizing the Lancaster station to establish two (2) horizontal locations, one to be used as a base location for our Trimble R-10 base station and the other as a horizontal and vertical check. Each aerial target will be located with two (2) 180 epoch (3 minute) observations at different times of the day to verify accuracy.

Vertical datum will be NAVD88, with observations made on a minimum of two (2) Los Angeles County benchmarks. In the event the benchmarks don't measure within 0.10' an additional benchmark will be observed to verify any discrepancy.

All observations will be processed through the Trimble Business Center Software and provided in the Caltrans acceptable format.

Centerline and Right-of-Way Mapping

AESI will locate existing centerline and right-of-way monuments along the project corridors, which will be used to establish the centerlines and rights-of-way of public streets and the State Route. Preliminary rights-of-way will be approximated from the Los Angeles County Assessor's parcel data, with precise rights-of-way determined from record maps, roadway documents and Preliminary Title Reports if necessary.

Photogrammetric & Topography Survey ("A-B-C" process)

AESI's sub-consultant will provide the flight, photography, analytical bridging, stereo compilation and editing, and will include the digital terrain model (DTM). The Photogrammetric Survey will be

performed to full Caltrans ABC standards, with the mapping flight plan, control placement files and camera calibration file provided to Caltrans and the City of Lancaster for the “A” submittal.

Aerial photo control points will be positioned to insure complete coverage at the minimum number required to meet Caltrans standards for the project. Upon approval from Caltrans and the City of Lancaster for the flight plan and control placement, the color stereo aerial photography will be completed along with Aero-triangulation. The aerial target locations will be processed and a report prepared. This report along with the strip layout, exterior orientation file, and two (2) sets of negatives will be provided to Caltrans and the City of Lancaster for the “B” submittal. Once we receive approval of submittal “B”, DTM data will be extracted at 1” = 50’ and 1’ C.I. which will be usable for both the PA&ED and PS& E phases of the project. The DTM data will consist of Digital 3D breaklines and points to be used for simplifying the creation of Triangular Irregular Networks (TINs) and Surface Models. All data will be delivered in an AutoCAD Civil3D (dwg) format, unless requested otherwise. The “C” submittal will consist of the original film, mapping data on a DVD and a photo index for the project.

Visible surface utility structures will be shown in the aerial mapping for coordination with the collected utility as-built and design plans.

Task 3.2 Supplemental Field Surveys (AESI)

AESI will survey the improvements for tie-in locations on SR-138 (SR-14) and portions of Avenues J & J-8. Cross sections will be taken at 50-foot intervals and at changes in direction of curb alignments. A two-man crew will survey the improvements for tie-in locations on SR-138 and portions of Avenues J & J-8. Cross sections will be taken at 50-foot intervals and at changes in direction of curb alignments. The roadway improvements on Avenue J from Valley Central Way to 300 feet past the north bound on-ramp and from 300 feet west of the on-ramp to the east side of 20th Street West on Avenue J-8 will be surveyed. The improvements on the existing ramps from the edge of concrete on SR-138 to the returns at Avenue J will be located. We will also survey the proposed tie-in locations on SR-138, with an additional 300 feet each side of each ramp’s edge of pavement. The surveys will include measurements on the edge of pavement and edge of concrete and will not require us to enter or cross SR-138 during the surveys. We assume the City of Lancaster will provide an encroachment permit at no cost for the work on Avenues J & J-8 and a Caltrans encroachment permit will be a no cost permit. During the surveys traffic control and/or the appropriate signs will be in place to insure the work is done in a safe manner.

All collected data will be added to the topographic base map drawing.

Task 3.3 Utility Coordination and Base Mapping (KHA)

During the PID phase, Kimley-Horn has collected records maps from responses to the “A” letters from all utility owners within the study limits. Upon the start of the PA&ED phase, Kimley-Horn will plot all known utility facilities using the record maps received and data from supplemental field survey. Visible surface utility structures will be shown in the aerial mapping, and utility base mapping will be developed from the collected utility as-built and design plans. The utility facilities and structures shown in the aerial mapping will be field verified and any visible utility facilities or structures, not shown in the aerial photography, will be located.

The completed base map file will be in an AutoCAD Civil 3D format and provided to the design team.

Task 3 Deliverables:

- Caltrans photogrammetry surveys A, B & C submittals
- Digital Aerial Base Mapping at a 1"=50' scale in AutoCAD Civil 3D format
- Digital Terrain Model (DTM)
- Preliminary Existing R/W for the Project Study Area
- Base Mapping with existing utilities

Task 4 Traffic Forecasting and Operational Analysis (F&P and KHA)

Fehr & Peers will lead the preparation of the Traffic Operations Analysis Report (TOAR) for the proposed project with support from Kimley-Horn. The following tasks will be conducted as part of this effort:

Task 4.1 Traffic Forecasts (F&P)

The City of Lancaster Travel Demand Forecasting Model will be used to develop future traffic growth projections within the study area. Preliminary traffic forecasts for Avenues J and J-8 are available from the Measure R Program. However, it is anticipated that additional forecasting may be needed to update growth projections in the study area, such as within the Hospital District, and explore various interchange improvement options.

We are anticipating up to four additional model runs as part of the PA/ED effort. The model inputs, such as land use growth and roadway network parameters, will be documented for review and approval by the project team. Traffic forecasts will be prepared for both Opening Year and Design Year conditions during the AM and PM peak hours. Traffic Forecasting Methodology and Forecasting memos will be prepared for review by Caltrans.

Task 4.1 Deliverables:

- Draft and Final Forecasting Methodology Memo
- Digital Draft and Final Traffic Forecasting Memo

Task 4.2 Existing Conditions (F&P)

We will prepare a Draft Traffic Analysis Assumptions and Methodologies Memorandum and submit to the project team at the beginning of the PA&ED phase. The memorandum will contain a list of assumptions and recommended methodologies for use for the operations analysis.

We will report the existing conditions within the study area. The following data will be collected for use in the existing conditions analysis:

- Field observations of the project location and surrounding roadway network to verify existing intersection control, lane configurations, and other roadway characteristics.
- Observations of peak hour traffic operations and vehicle queue lengths.
- Existing traffic signal timings and ramp metering rates (if any) for study intersections and on-ramps.
- Multi-modal facilities, such as bicycle lanes and sidewalks, will be documented.

The study facilities are proposed based on the locations of the planned improvements as well as parallel facilities that may be affected by the access changes due to potential modifications in travel patterns. The following facilities will be analyzed:

Study Intersections:

1. 30th Street W/Avenue J
2. 25th Street W/Avenue J
3. Valley Central Way/Avenue J
4. SR 14 Southbound Ramps/Avenue J
5. SR 14 Northbound Ramps/Avenue J
6. 20th Street W/Avenue J
7. 15th Street W/Avenue J
8. 10th Street W/Avenue J
9. 20th Street W/SR 14 NB
10. 25th Street W/Avenue J-8
11. SR 14 Southbound Ramps/Avenue J-8
12. 20th Street W/Avenue J-8
13. 15th Street W/Avenue J-8
14. 20th Street W/Home Depot Driveway

SR-138 (SR-14) Study Freeway Facilities:

1. Avenue J Ramps Merge/Diverge Analysis
2. Avenue J-8 Ramps Merge/Diverge Analysis
3. Mainline Analysis North of Avenue J (Between J and I)
4. Mainline Analysis between Avenues J & J-8
5. Mainline Analysis South of Avenue J-8

The study intersections will be analyzed under existing conditions during the AM and PM peak hours based on traffic counts collected in June 2014 by the City of Lancaster. Traffic operations and LOS will be based on the methodology in the 2010 Highway Capacity Manual. Traffic Methodology and Existing Conditions.

Task 4.2 Deliverables:

- Draft and Final Existing Conditions Memo

Task 4.3 Traffic Operations Analysis Report (F&P & KHA)

The traffic operations analysis will utilize the projected traffic forecasts to determine the resulting traffic operations for the study intersections and freeway facilities under the following scenarios:

- Opening Year No Build
- Opening Year Plus Project
- Design Year No Build
- Design Year Plus Project for up to three alternatives

AM and PM peak hour traffic operations will be reported under each study scenario. The operations analysis will determine the overall benefits resulting from the proposed transportation improvements. If additional improvements are found to be necessary to achieve the City's operational goals, additional roadway improvements will be identified.

The Traffic Operations Analysis Report (TOAR) will document the findings of the operational analysis. In addition, the report will compile the previously submitted deliverables to provide a compressive and complete report for use in the PA&ED.

Task 4.3 Deliverables:

- Draft and Final TOAR

Task 4.4 Safety Template

Caltrans will perform a Safety Analysis for the study area. We will provide Caltrans with the completed Safety Template for their use in the safety study.

Task 4.4 Deliverables:

- Completed Safety Template

Task 4.5 Intersection Control Evaluation

If required, based on the outcome of the PID, we will prepare an Intersection Control Evaluation (ICE) study to identify the effectiveness of alternate treatment options, such as roundabouts, as part of the proposed project. The ICE study will report operations under various intersection control options (maximum of three control options per location). The ICE analysis will account for both Opening Year and Design Year conditions. The ICE memo can be attached as an appendix to the TOAR.

Task 4.5 Deliverables:

- Draft and Final ICE Memo

Task 5 Environmental Document (GPA)

Task 5.1 Project Management and Meetings (GPA)

Throughout the environmental process, GPA will maintain a clear line of communication with the City and Caltrans, and will conduct regular status checks to ensure all tasks are on schedule and within budget. The GPA Project Manager will prepare a monthly progress report that includes the progress of each task, new and ongoing issues, proposed resolutions, and estimated impact on the schedule. The Project Manager will attend up to 16 project team meetings throughout the environmental process either in person or by teleconference. GPA will also maintain electronic copies of the complete environmental record of the project, and will provide a copy of all documentation.

Task 5.1 Deliverables:

- One electronic copy of monthly progress reports

Project Initiation

At project initiation for PA&ED, GPA will attend one kick-off meeting with the project team to discuss project design, project description, purpose and need and project schedule. GPA will review

any existing environmental documentation relevant to the project, and conduct any additional research necessary.

Task 5.1 Deliverable:

- One electronic copy of the project description

Assumptions

This scope of work has been completed based on the following assumptions:

- This scope of work does not include protocol level surveys or consultation under the State or Federal Endangered Species Act, if required for the project.
- Documentation pursuant to the National Environmental Policy Act will not be required.
- Filing fees and newspaper postings associated with the CEQA document and permit applications will be paid by the City.
- No Extended Phase I study will be required.
- Archaeological Evaluation will be reported using the Cultural Resources Letter Report format.

Environmental Technical Studies (GPA, BAKER & SRI)

Task 5.2 Jurisdictional Delineation (GPA)

The City performed a Jurisdictional Delineation of the Avenue J project area in 2015. The presence of jurisdictional wetlands, other waters of the United States and State, and jurisdictional boundaries for the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) were identified in the JD report. Amargosa Creek, and several surface drainages, are within the project area. Based on the results of the research, it appears that the creek is not under jurisdiction of the USACE; however, this will need to be confirmed by the USACE.

GPA will utilize the results of these surveys to prepare the JD for the project in order to streamline efforts. GPA will summarize the results of the 2015 research, field delineation, mapping specific to the Avenue J project area in a JD report to support the CEQA documentation for the project. The JD will include a discussion of applicable regulations, delineation methodology, and existing jurisdictional resources in the project area, including wetlands, other jurisdictional waters, and regulatory boundaries. GPA will coordinate as needed with the City for review and approval of the JD.

Task 5.2 Deliverables:

- One electronic copy and up to five hard copies of the draft and final Jurisdictional Delineation.

Task 5.3 Natural Environment Study (GPA)

The City completed database research, biological field surveys, and existing conditions mapping for the Avenue J project area in 2015. GPA will utilize the results of these surveys to prepare the Natural Environmental Study (NES) for the project. GPA will review and update research results. GPA will confirm that the Biological Study Area (BSA) used for the 2015 surveys is still sufficient to cover the direct and indirect impact area for the project, including temporary construction areas, and will create a BSA map to be used for the biological analysis.

During 2015 surveys, existing vegetation communities and habitat for wildlife species in the Avenue J project area were inventoried and mapped. In addition, a rare plant survey was conducted. Results of the vegetation surveys, specifically the rare plant surveys, are typically valid for two years. If the NES is prepared within two years of the 2015 field surveys, and the BSA remains the same, additional field surveys will not be required. 2015 surveys did not identify any rare plants, but identified the potential for special-status wildlife species to be in the project area.

GPA will summarize the results of the 2015 research, field surveys, and updated research in the NES to support the CEQA documentation for the project. The NES will include a discussion of applicable regulations, survey methodology, existing biological resources in the project area, potential project impacts, and proposed avoidance, minimization, and mitigation measures to minimize and/or mitigate these impacts. The NES will also discuss any consultation required with other agencies to obtain project approvals and environmental permits, if necessary. GPA will coordinate as needed with the City and Caltrans for review and approval of the NES.

Task 5.3 Deliverables:

- One electronic copy and up to five hard copies of the of draft and final the NES(MI)

Task 5.4 Cultural Resources (GPA)

GPA's historic preservation staff prepared the technical memo for built environment historical resources as part of the mini-PEAR for this project. They conducted background research, summarized an existing records search, identified known historical resources in the vicinity of the project, corresponded with potentially interested parties, and analyzed parcels located within the project study area. They concluded that there were no built resources requiring evaluation within the project study area. Assuming the project study area for this phase of the project remains the same as for the mini-PEAR, the project will not require preparation of a Historical Resource Evaluation Report (HRER) to identify built historic properties for CEQA; however, the project will require an Archaeological Survey Report (ASR) and a Historical Resources Compliance Report (HRCR). The ASR will be completed by sub-consultant SRI. GPA will prepare the HRCR, which is Caltrans' umbrella document for CEQA-only cultural resources compliance. The HRCR will summarize all cultural resource identification efforts and identify findings. The ASR will be attached to the HRCR as an appendix.

Task 5.4 Deliverables:

- Deliverables: One electronic copy and up to five hard copies of the draft and final HRCR

Tsk 5.5 Archaeology and Paleontology (SRI)

The City prepared the existing conditions report for archaeological resources as part of the corridor wide approach for the project. They conducted background research including a records search at the

South Central Coastal Information Center (SCCIC), requested a Native American Heritage Commission Sacred Lands Files search, and conducted Phase I field surveys and site recording. Four archaeological sites, two dating to the historical-period and two dating to the prehistoric period, have been recorded in the proposed Avenue J Interchange study area. SRI relocated the two historical-period sites, but was unable to locate the two prehistoric sites.

SRI will prepare the Archaeological Study Report using the information from the existing conditions report augmented with additional historic research related to past land-use as it relates to the two historical-period sites. SRI will streamline the archaeological studies for the proposed project by leveraging the information already collected as part of the existing conditions report. SRI will also prepare a buried sites sensitivity model to identify where buried archaeological sites might be present in the proposed project area that are not visible at the current ground-surface. This will be particularly important at the locations of the two previously recorded prehistoric archaeological sites that could not be relocated during the Phase I field survey. SRI will conduct an Extended Phase I study, if needed, to locate buried archaeological sites in areas identified in the buried sites sensitivity model as highly sensitive for buried archaeological sites. Where feasible, we will recommend findings of no adverse effect with Standard Conditions with Environmentally Sensitive Areas (ESA). Resources that cannot be avoided using ESAs will be evaluated for eligibility for listing in the California Register of Historical Resources (CRHR) and the results will be documented in a Phase II archaeological evaluation report as an appendix to the HRCR.

The paleontological resource assessment will examine geological maps of the project area to determine the underlying stratigraphic units and reviewing geological and paleontological literature to determine the types of fossil remains each unit has produced locally and the locations of previously recorded fossil sites in the vicinity. An archival search will be conducted at the Natural History Museum of Los Angeles County, Vertebrate Paleontology Department, for additional information regarding fossil remains and previously recorded fossil sites from these units. Because the project area is developed, PEAI will not conduct a field survey of the area. The results of the data searches will be summarized in a Paleontological Identification Report (PIR).

Task 5.5 Deliverables:

- One electronic copy and up to five hard copies of the draft and final ASR and PIR

Task 5.6 Air Quality/Greenhouse Gas Assessment (BAKER)

The analysis will be prepared in accordance with the latest following protocols/guidelines: Caltrans Standard Environmental Reference, U.S. Environmental Protection Agency's March 2006 Final Rule and Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas (December 2010), Federal Highway Administration's Interim Guidance on Air Toxic Analysis in NEPA Documents (December 2012), and Transportation Project-Level Carbon Monoxide Protocol. The particulate matter analysis will require coordination with the regional Transportation Conformity Working Group (TCWG) to determine project level conformity for particulate matter. This scope of work assumes that the project would not be considered a Project of Air Quality Concern by the TCWG and a Quantitative Transportation Conformity Hot-Spot Analysis is excluded. The Air Quality Report will also analyze and discuss the presence/absence of naturally occurring asbestos and construction-related emissions. The Greenhouse Gas Emissions

Analysis will be based on the Caltrans Climate Action Program and will require coordination with District Headquarters staff on the final methodology.

The analysis will address “existing”, “existing plus project”, “opening year”, “opening year plus project”, “forecast”, and “forecast plus project” conditions. The analysis will also document whether the proposed project is included in the latest Regional Transportation Plan (RTP), and Federal Transportation Improvement Program (FTIP) for preliminary engineering/environmental documentation. Mitigation measures will be defined for any construction and/or operational impacts that are identified. This scope excludes a separate stand-alone conformity analysis.

Task 5.6 Deliverables:

- One (1) electronic copy (PDF format) of the draft and final Air Quality Assessment for City submittal
- Four (4) hard copies, and one (1) electronic copy (PDF format) of the draft and final Air Quality Assessment for Caltrans submittal

Task 5.7 Noise Study Report (BAKER)

The noise analysis will be prepared in accordance with Caltrans SER Volume 1 Chapter 12 and CEQA and NEPA guidelines as well as the Caltrans’ Traffic Noise Analysis Protocol and Technical Noise Supplement. Prior to initiating the Noise Study Report (NSR), Michael Baker will initiate a teleconference call with Caltrans to review and confirm the proposed measurement locations. The NSR will be prepared consistent with the Caltrans Noise Analysis Protocol to address traffic noise impacts on noise-sensitive land uses located within the study area. Short-term (15-minute) noise measurements will be taken at up to two (2) locations to document the existing noise environment, as well as to calibrate the traffic noise model. The Federal Highway Administration (FHWA) Traffic Noise Model (TNM) version 2.5 will be used to evaluate traffic noise levels associated with the Existing, Future No Build, and Future Build conditions. The Traffic Noise Study Report shall take into consideration impacts to frequent outdoor uses, as defined by FHWA, and recommend mitigation as appropriate. Recommendations will be made for any required noise abatement measures, including sound walls. As the proposed project would generate construction noise result in temporary or periodic increases in ambient noise levels, the Noise Study Report will also address the full range of construction noise potential. A Noise Abatement Decision Report (NADR) will be prepared separately by a licensed professional engineer.

Task 5.7 Deliverables:

- One (1) electronic copy (PDF format) of the draft Noise Study for City submittal
- Four (4) hard copies, and one (1) electronic copy (PDF format) of draft and Final Noise Study for Caltrans submittal

Task 5.8 Initial Site Assessment (BAKER)

Michael Baker International (Michael Baker) will prepare a Phase I Initial Site Assessment (ISA) for the proposed project. The ISA will be prepared in accordance with the ASTM International (ASTM) Standard Practice E 1527-13 and the California Department of Transportation’s (Caltrans’) Standard Environmental Reference (SER). It is acknowledged in this scope of work that one (1) build alternative will be considered for the proposed improvements at SR-134 (SR-14) Avenue J

Intersection, in the City of Lancaster, California. The objectives of the ISA are to: (1) evaluate the potential for hazardous materials on the site based upon readily discernible and/or documented present and historic on-site uses and uses immediately adjacent to the site, and (2) generally characterize the expected nature of hazardous substances that may be present as a result of such uses, within the limits imposed by the scope of the ISA.

The Phase I ISA will consist of four components: Records Review; Site Reconnaissance; Interviews; and Report Preparation. Michael Baker will document past activities, facilities, and/or waste disposal practices, which may have resulted in soil or groundwater contamination. Past site usage will be investigated through an aerial photograph review, interviews, review of former permits, review of documents on file with applicable agencies, and research of former citations from State and local agencies. Current site conditions will be documented by an on-site inspection of the project area. A review of the commercial database summaries, provided by Environmental Data Resources, Inc. (EDR), regarding public agency records will be included. Regulatory sites within and surrounding the project area will be mapped within a one-mile radius (as required by the ASTM E 1527-13 search radius requirements). Potential hazardous materials conditions within the project site will be considered based on the EDR database search. The report will include a summary of the report findings and a discussion of our opinions and conclusions regarding the absence or presence of RECs in connection with the subject site. Documentation supporting the conclusions presented will be appended to the report.

Task 5.8 Deliverables:

- One (1) electronic copy (PDF format) of the Draft Phase I ISA for City submittal
- Four (4) hard copies, and one (1) electronic copy (PDF format) of the draft and final Phase I ISA for Caltrans submittal

Task 5.9 Water Quality Assessment Report (GPA)

As part of the Corridor studies, the City provided database research, field surveys, a Jurisdictional Delineation, and existing conditions mapping for the Avenue J project area in 2015. GPA will utilize the results of these surveys, as applicable, to prepare the Water Quality Assessment Memorandum (WQ Memo) for the project.

Amargosa Creek, and several surface drainages, are within the project area. GPA will identify and describe existing waterways and watersheds, identify specific water quality concerns in the area, evaluate the potential for project impacts, and identify appropriate measures to minimize these impacts. GPA will refer to the Location Hydraulic Study and Storm Water Data Report for supporting data, if available. Construction-related impacts and long-term impacts to water quality will be qualitatively evaluated, and both direct and cumulative impacts related to the project will be described. The WQ Memo will address regulatory compliance, including conformance with the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES), and identify applicable best management practices to be included in the project design. GPA will coordinate with the City for review and approval of the WQ Memo.

Task 5.9 Deliverables:

- One electronic copy and up to five hard copies of the Draft and Final WQ Memo

Task 5.10 Community Impact Assessment (GPA)

The City prepared the Community and Neighborhood Existing Conditions Report in 2015, which included the Avenue J project area. In order to complete the report, they conducted research of jurisdictional and agency boundaries, performed windshield site surveys, and created GIS maps of various community resources in the community and neighborhood study area. The Mini-PEAR included a recommendation to complete a Community Impacts Assessment (CIA) to analyze potential project impacts and identify appropriate measures to avoid, minimize, or mitigate potential impacts.

In order to support the CEQA document for the Avenue J project, GPA will prepare the CIA based work already completed for the Community and Neighborhood Existing Conditions Report and Mini-PEAR. The CIA will include a discussion of applicable regulations, report methodology, existing conditions, potential project impacts, and proposed avoidance, minimization, and mitigation measures to minimize and/or mitigate these impacts. GPA will coordinate as needed with the City and Caltrans for review and approval of the CIA.

Task 5.10 Deliverables:

- One electronic copy and up to five hard copies of the draft and final CIA

Task 5.11 Initial Study/Mitigated Negative Declaration (GPA)Admin Draft Initial Study

Following completion of the appropriate database research and technical analysis, GPA will reference the results of the technical studies and the existing conditions reports to prepare an Administrative Draft Initial Study (IS), consistent with CEQA Guidelines Appendix G. The document will be prepared in a format approved by Caltrans, and will include all of the required sections for an IS. GPA will then submit the Administrative Draft IS to the City and Caltrans for review and will coordinate, as needed, for review and approval of the document. GPA will also prepare the Notice of Intent to Adopt a Mitigated Negative Declaration (NOI), and coordinate with the City and Caltrans for any final reviews and approval to circulate the document.

Task 5.11 Deliverables:

- Three electronic copies of the Administrative Draft IS

Draft Initial Study (with MND)

Once the Administrative Draft IS has been approved by the City and Caltrans, GPA will prepare the Draft IS (with MND) and coordinate to transmit it to Caltrans for review. GPA will coordinate with Caltrans staff to ensure that the sections are formatted for ease of use and to meet the criteria for the IS template. Upon receipt of Caltrans comments, GPA will revise the Draft IS, and re-submit it to Caltrans for a second review. Assuming no further comments from Caltrans, GPA will coordinate with the City to circulate the Draft IS to the public for the 30-day public review period. GPA staff will also prepare a Notice of Availability. GPA will deliver hard copies of the document to area libraries, and will maintain a file of any comments received during the circulation period, for use in preparing the final document. It is assumed that the City or Caltrans will be responsible for any local postings and public hearings.

Task 5.11 Deliverables:

- Three electronic copies of the Draft IS and up to 25 hard copies

Initial Study/Mitigated Negative Declaration

Following circulation of the Draft IS/MND, GPA will coordinate with the City to prepare responses to the public comments received and incorporate the responses and any required revisions into the document. GPA will then prepare a Final MND and submit it the City for review. GPA will coordinate as needed to make further revisions and obtain approval to finalize the document. GPA will also prepare the Notice of Determination (NOD), to be filed with the Los Angeles County Clerk upon approval of the project. GPA will coordinate for the adoption of the Final MND by the City and will prepare any documentation needed to support this adoption, including staff reports, resolutions, and other documentation. If the City approves the project concurrently with the CEQA document, GPA will also file the NOD with the Los Angeles County Clerk.

Task 5.11 Deliverables:

- Three electronic copies and ten hard copies of the Final IS/EA

Task 5.12 Public Meeting (GPA)

KHA will assist the City with the public hearing during the draft circulation period. KHA will work with the City to provide support during the public hearing, as needed. It is assumed that support provided by KHA will include the preparation of notifications of a public hearing, preparation of handouts and comment/speaker cards, and presentation of project status during the hearing. GPA will maintain a file of any comments received for use in preparing the Final EA.

Task 5.12 Deliverables:

- One Public Meeting and Public Meeting Information Material

Task 5.13 Quality Control/Quality Assurance (GPA)

GPA will perform regular reviews of staff work, and will review all documents prior to their submittal. At project initiation, GPA will assist in creating a detailed and realistic project schedule, making sure to identify all critical path items and seasonal constraints. GPA will review the status of all project tasks regularly to be sure that they are progressing within the scheduled timeframe. GPA will be proactive in communicating upcoming tasks so that the necessary preparations can be made and the work is started on time. If issues arise that could result in schedule delays, GPA will make it a priority to coordinate as needed to find the necessary solutions to move the project forward.

GPA will prepare a detailed and accurate scope of work at project initiation, thereby avoiding unnecessary work and costly delays. GPA will leverage technical knowledge and experience with the CEQA process and prior project experience, to avoid unnecessary studies, while ensuring that all appropriate analysis is conducted. GPA will ensure that all documents submitted will be presented in an approved format and that it will be of high quality, reducing the need for multiple reviews and revisions.

Task 6 Project Report (KHA, BAKER & EMI)

Task 6.1 Alternatives Development

Three build alternatives were proposed that Kimley-Horn developed in coordination with the City’s Capital Program and Planning Department staff during the PID phase. The range of potential improvements is specifically designed to meet the project objectives while maintaining flexibility and providing reasonable options that can be refined during the PA&ED phase. The following build alternatives will be the basis of our effort in this task:

Alternative 1: Construct a full access interchange at Avenue J and maintain existing ramps at Avenue J-8 and 20th Street West

Alternative 2: Construct a full access interchange at Avenue J and eliminate existing ramps at Avenue J-8 and 20th Street West

Alternative 3: Construct a full access interchange at Avenue J, with a new northbound collector-distributor (C-D) road between Avenue J and 20th Street West, and maintain existing ramps at Avenue J-8 and 20th Street West

The two principles in our approach to developing the alternatives were: 1. Minimize right of way impacts; and 2. Meet highway standards to the extent reasonable. At several locations retaining walls may be required to avoid impacts to private properties and Amargosa Creek.

These alternatives will be further developed based upon input from the City, Caltrans and the Public Scoping Meeting. Three build alternatives will be developed for consideration. If alternatives can be eliminated based on the input and City acceptance of the developed alternatives, they will be dropped to reduce the effort required to analyze and clear three build alternatives in the PA&ED phase.

Additional Sensitivity Testing

As part of the preparation for the PID phase of the Avenue J interchange project, our team conducted some initial sensitivity testing using the City of Lancaster Travel Demand Forecasting Model. Our initial observations were as follows:

Full Access Interchange at Avenue J

Providing a full access interchange at Avenue J was found to provide the following benefits:

- Congestion relief at Avenue K: The construction of new ramps connecting Avenue J to and from the south on SR-14 helps to alleviate congestion along Avenue K, especially at the Avenue K northbound off-ramp.
- Improved Access for Uses West of SR-14: The construction of the new ramps at Avenue J improves access to/from SR-14 for those traveling to uses on the west side of SR-14.
- Improved Access to Hospital District: The new ramps are better able to serve vehicles traveling to the north of Avenue J. Currently, vehicles can utilize the Avenue J-8 northbound off-ramp to access 20th Street West and then continue north. Travel demand on 20th Street West is expected to increase with the expansion of the Hospital District.

Removal of Ramps at Avenue J-8 and 20th Street West

Removing the ramps at J-8 minimizes the overall access benefits of provide a full interchange at Avenue J as follows:

- Minimal Congestion Relief Benefits at Avenue K: Without the Avenue J-8 ramps, vehicles would likely continue to utilize the Avenue K off-ramp to access 15th Street West towards the Hospital District and minimal, if any, congestion benefits would occur at Avenue K.
- Potential for Increased Congestion on Avenue J: Without the Avenue J-8 ramps, travel demand on Avenue J could exceed the current capacity, especially at key intersections adjacent to SR-14, such as 25th Street West and 20th Street West.

C-D Road between Avenue J and 20th Street West

Providing a collector-distributor road from Avenue J-8 to Avenue J would provide many of the same benefits outlined above with the full access interchange at Avenue J.

It is anticipated that the City will provide additional sensitivity testing through traffic corridor studies to assist and coordinate the improvements between Avenue J and Avenue K interchange improvement projects. Kimley-Horn will work with the City and refine the alternatives through the various sensitivity testing and updated forecasts provided by the City in coordination with the Avenue K interchange studies.

Task 6.2 Geometric Drawings and Design Exception Fact Sheets (KHA)

Kimley-Horn will prepare geometric drawings to provide the basis for design of the three build alternatives. The geometric drawings will be completed per Caltrans requirements and will accompany the Design Exception Fact Sheets prepared for the project. The geometric drawings will be prepared to include all the interchange details for Caltrans review on one sheet that will include the layout, profile, superelevation and typical cross sections.

Kimley-Horn will identify and document the proposed mandatory and advisory design exceptions based on the developed geometric drawings for the alternatives. Mandatory and Advisory Design Exception Fact Sheets will be prepared based upon the design exceptions identified in the PSR (PDS) for review and approval.

Task 6.2 Deliverables:

- Draft and Final Fact Sheets for Mandatory and Advisory Design Exceptions
- Geometric Drawings of the Build Alternatives (maximum of three)

Task 6.3 Preliminary Drainage Report (KHA)

We understand that a Corridor Existing Hydrology study will be made available to the consultant team selected for this project. Kimley-Horn anticipates that information contained in the study would include existing condition hydrology, regional watershed delineation, and estimate of “offsite” peak discharge rate (“Q”) for the appropriate design events. Kimley-Horn will incorporate the information into the Avenue J Preliminary Drainage Report, and develop the following additional information:

- Proposed condition hydrology (peak discharge rate of drainage areas within the limits of work);
- Mapping of the existing drainage system and hydraulics of existing cross culverts that convey off-site flows within the limits of work;
- Layout of the modifications to the existing drainage system on the State Highway and City streets within the limits of work, and hydraulics of the proposed drainage system.

Results from the Preliminary Drainage Report will provide the basis for the estimated cost of drainage work.

Based on the preliminary review of existing drainage facilities, we understand that there are no major cross culverts within the limits of work for the current build alternatives. However, as the alternatives are refined during the PA&ED phase and limits of work are expanded, Kimley-Horn will re-evaluate the need to evaluate existing cross culverts.

Given that the project would add new impervious areas and therefore increase peak discharge rates downstream, it is likely that the project could require construction of a detention basin to mitigate downstream effects. One potential location of a detention basin is in the vacant privately-owned parcel that would be fully acquired for construction of the southbound on-ramp from Avenue J. The need for and feasibility of a detention basin at this location will be evaluated during the PA&ED phase and documented in the Preliminary Drainage Report.

Task 6.3 Deliverables:

- One electronic and three hardcopies of the Draft and Final Preliminary Drainage Report

Task 6.4 Storm Water Data Report (KHA)

Kimley-Horn will update the PID long-form level Storm Water Data Report (SWDR) to include more information on proposed treatment BMP, most likely in the form of infiltration devices such as infiltration basins and trenches. In addition any refinements to the build alternatives may require revisions to the disturbed soil areas and added impervious areas reported in the PID level SWDR. The PA&ED and PS&E level SWDR will be prepared in accordance with the latest edition of the Storm Water Quality Handbooks – Project Planning and Design Guide. The goals of the PA&ED level SWDR are:

- Determine the need for storm water treatment;
- Assess the project risk level (sediment risk and water body risk);
- Identify the preferred treatment BMP option;
- Establish a sufficient budget for permanent treatment BMP, design pollution treatment BMP, and construction site (temporary) treatment BMP.

The potential acquisition of the two private parcels on 22nd Street West for the proposed southbound on-ramp may create an opportunity for an infiltration basin with the remnant right of way. The feasibility will be evaluated during the PA&ED phase and confirmed during the PS&E phase with permeability testing of the potential site.

Task 6.4 Deliverables:

- One electronic and three hardcopies of the Draft and Final SWDR

Task 6.5 Preliminary Geotechnical Reports (EMI)

District Preliminary Geotechnical Report (DPGR)

EMI will prepare a report following the format of a Caltrans DPGR documenting the site geotechnical and geologic conditions to support the PA&ED. The DPGR will include topography, geology and

identification of potential geologic hazards, liquefaction potential and general mitigation measures with respect to geologic and seismic hazards for input to the environmental document.

The report will also address stability and settlement of proposed roadway embankments. This evaluation will be based on a review of existing subsurface data and will not include field investigations, borings, or laboratory testing. This report will include recommendations regarding Caltrans Standard retaining walls.

A Geotechnical Report will also be completed for final design that will include field investigative borings and laboratory testing to provide actual design parameters.

Task 6.5 Deliverables:

- One electronic copy and 3 hardcopies of the draft and final District Preliminary Geotechnical Report (DPGR) with Standard Walls

Structure Preliminary Geotechnical Reports (SPGR)

The project involves improvements at the twin bridges of the Avenue J Overcrossing and construction of three special-design retaining walls are along the ramps and SR 138. Based on our preliminary evaluation of site constraints and potential project improvements, special-design retaining walls may include Mechanically Stabilized Earth (MSE) walls, Soil Nail walls, and Tieback walls. EMI will prepare individual SPGR's for the APS for each of the special design walls per Caltrans guidelines (Foundation Reports for Earth Retaining Structures, 2015).

An idealized soil profile and design strength parameters for foundation analysis will be developed based on existing subsurface data obtained from the as-built plans. We will provide seismic design parameters (acceleration and response spectrum) using the latest Caltrans seismic design criteria.

Using the soil profile and strength parameters, EMI will provide preliminary foundation type and foundation design data for the bridge and standard walls. For pile foundations, EMI will estimate the required pile length based on preliminary axial nominal resistances provided by KHA. For spread foundations, the report will provide permissible contact stress and allowable gross bearing capacity for abutments, permissible net contact stress and factored gross nominal bearing resistances for bents, and soil resistance for lateral loading. For soil nail, MSE and tieback walls, recommendations will be provided following Caltrans and AASHTO procedures including design pressure diagrams, over excavation requirements, and estimates of ground anchor lengths and ultimate bond strengths.

Task 6.5 Deliverables:

- One electronic copy and 3 hardcopies of the draft and final (3) Structure Preliminary Geotechnical Report (SPGR) for Special Walls

Task 6.6 Preliminary Materials Report (EMI)

EMI will prepare a Preliminary Materials Report (PMR) to provide pavement structural sections, corrosion potential of on-site soils and culvert foundation/material requirements for the PA&ED. The evaluation will be based on a review of existing subsurface data including Caltrans As-Built plans for the 20th St West UC, SR-138 over Ave J UC, Lancaster Blvd UC bridges. Field investigations, borings or laboratory testing are not proposed at this stage. We will follow Caltrans pavement design

procedures with Traffic Indices and existing pavement sections and incorporate inputs from the Caltrans District 7 Materials Engineer.

A Materials Report will also be completed for final design that will include field investigative borings and laboratory testing to provide actual design parameters.

Task 6.6 Deliverables:

- One electronic copy and 3 hardcopies Preliminary Materials Report (PMR)

Task 6.7 Advanced Planning Study (BAKER)

The proposed project may require construction of wall structures along the interchange ramps and within the north abutment slope of the Avenue J bridge structures. In accordance with Caltrans' (Structures) Office of Special Funded Projects (OSFP) Information and Procedures Guide, Section 3-2, "Advance Planning Studies," Advance Planning Studies (APS's) for non-standard retaining walls will be prepared to support the Project Report. Subsequent to the approval of the Project Report, Type Selection Reports will be prepared at the initiation of the Plans, Specifications & Estimate (PS&E) phase.

The walls can be classified into several types including stand-alone retaining walls, stand-alone soundwalls, and possibly, combined sound / retaining walls. Key factors that must be considered early in the preparation of the APS's includes knowledge of underground obstructions, utility constraints, right-of-way constraints, construction access, maintenance access to slopes, landscaping, drainage facilities and structure aesthetics. The walls are an important feature of the project and will have a significant impact on the project construction staging, schedule and overall cost. Selection of the appropriate wall type for the various wall heights and configurations is a key issue for this project. Fill Condition Strategy - There are two primary wall types to consider in a fill condition, Mechanically Stabilized Earth (MSE) walls and standard Caltrans Type 1 retaining walls. It is anticipated that a combination of MSE and Type 1 walls will be constructed to accommodate the new and realigned ramps. The Type 1 walls are economical and easily constructed for retained heights up to about 12 feet. For walls taller than this, soil bearing capacities and settlement may become an issue unless they are constructed on piles. In most cases it is desirable to avoid the pile foundation system due to added costs and complexity of construction. For taller walls, the MSE option becomes more economical.

Cut Wall Strategy – There are two locations within the interchange where retaining walls will be constructed in a cut condition, at the base of an existing slope. Under the Avenue J bridge structures, sub horizontal ground anchor walls (tie back walls) will be constructed because this wall system is most structurally compatible with the existing bridge foundations. A cut wall is required along the collector-distributor road proposed by Alternative 3. A Type 1 wall on spread footing will be most economical for wall heights up to about 12 feet. Above this height piles may be required. Alternatively, a soil nail wall will be considered and would avoid the need for a back cut or shoring.

Stand-Alone Soundwall Strategy – If proposed stand-alone soundwalls are proposed, they typically are supported on a Cast-in-Drilled-Hole (CIDH) pile system, spread footings, or a trench footing. The CIDH pile system is the most often used because it is easy to construct and is less obtrusive to

existing improvements or underground obstructions as the spacing of piles can be adjusted to avoid obstructions.

Structures Advanced Planning Study

As part of the preparation of the Project Report, Michael Baker will prepare (1) Advance Planning Study (APS), which includes up to (6) non-standard retaining wall structures listed below. The APS will include preparation of a “Design Memo”, an “Itemized Cost Estimate”, and a “Consultant Prepared Structures Advance Planning Study (APS) Checklist” for each structure in accordance with the requirements in Caltrans’ (Structures) Office of Special Funded Projects (OSFP) Information and Procedures Guide, Section 3-2, “Advance Planning Studies.” Specifically excluded from this scope of work is review of the maintenance records for the Avenue J Undercrossing bridge structures (Bridge Numbers 53-2384R/L) in an effort to identify potential maintenance work needed on the existing structures.

Based upon the PSR plans, the following inventory of wall structures are included as part of the scope of work:

Wall ID	Description	Wall Length (feet)	Max H (feet)	Assumed Wall Type	APS
1	Cut wall north abutment slope under Ave J UC	250	14	Tie Back	Y
2	Fill wall along SB on-ramp	1000	20	MSE	Y
3	Fill wall along SB off-ramp	600	15	MSE	Y
4	Cut wall along NB C-D road	1700	15	Soil Nail	Y
5	Fill wall along NB on-ramp	1050	20	MSE	Y
6	Fill wall along NB off-ramp	850	15	MSE	Y
7	Soundwall along SB on-ramp	1800	16	Soundwall	N
8	Soundwall along NB on-ramp	1300	16	Soundwall	N

Task 6.7 Deliverables:

- Three copies of the draft and final Advanced Planning Study (APS)

Task 6.8 Preliminary Cost Estimates (KHA)

Kimley-Horn will complete a preliminary cost estimate for each of the build alternatives based upon Caltrans PDPM. A draft of the preliminary cost estimate will be included in all copies of the Draft Project Report (Admin, District Circulation, Draft and Final).

Task 6.8 Deliverables:

- Copies of the Preliminary Cost Estimates be included with the Draft and Final Project Report submittals as attachments.

Task 6.9 Transportation Management Plan Data Sheet (KHA)

Kimley-Horn will prepare the Transportation Management Plan Data Sheet in accordance with Caltrans PDPM. A draft of the Transportation Management Plan Data Sheet will be included in all copies of the Draft Project Report (Admin, District Circulation, Draft and Final).

Task 6.9 Deliverables:

- The Transportation Management Plan Data Sheet will be included with the Draft and Final Project Report submittals as attachments.

Task 6.10 Life Cycle Cost Analysis (KHA)

Kimley-Horn will complete a Life Cycle Cost Analysis (LCCA) for the project, which will focus on the life cycle of the pavement and structures required to construct the project in accordance with Caltrans PDPM. The LCCA will be submitted once the Preliminary Materials Report identifies the optional pavement sections for consideration. A draft will be submitted for review and acceptance and will be included as an attachment to the Draft and Final Project Reports.

Task 6.10 Deliverables:

- One electronic and 3 hard copies of the Life Cycle Cost Analysis will be submitted for review and copies will be included with the Draft and Final Project Report submittals as attachments.

Task 6.11 Right of Way Data Sheet (OPC)

OPC will base all assumptions of potential impacts and needed alternative analysis on three alternatives to be delivered during the preparation of the Project Report. Based upon preliminary analysis, additional ROW and or permanent or temporary easements will be necessary for two privately owned properties and one City property with potential impacts.

- Take an inventory of the affected properties.
- Secure preliminary parcel information from online database sources and investigate current ownerships. Utilizing this information and Assessor’s Roll information, determine other valuation considerations such as zoning, lot and building size, current usage, and other relevant factors.
- Visually inspect each property (aerial and street-level views) and note the effects of all proposed acquisitions.
- Sort each property into product types to determine the set of real estate data to be researched and create valuation data sets for each product type.

- Prepare an estimate of the probable cost of each partial acquisition, as well as permanent and temporary easement interests, including (for partial acquisitions) damages to the remaining parcel, using created data sets from various real estate value databases.
- Prepare an estimate of the probable relocation assistance (if applicable) for each residential or non-residential occupant located on each property.
- Prepare an estimate of the total probable loss of business goodwill (if applicable) attributable to each operating business.
- Prepare an estimate of the inspection and demolition costs (if applicable) associated with SR-138 (SR-14) Avenue J Interchange PA/ED ROW Services delivering each cleared site.
- Prepare an estimate of the total services and incidental costs associated with each real estate acquisition program (appraisals, acquisition and relocation consultants, title/escrow, legal services, etc.).
- Prepare the latest Right of Way Data Sheet form according to the Caltrans Right of Way Manual.
- Provide QA/QC of final work product, submit to client and other Project Team members and respond to inquiries.

Task 6.11 Deliverables:

- Draft and Final R/W Data Sheet

Task 6.12 Utility Coordination (KHA)

Once the Utility Base Map is created, it will be transmitted back to the utility owners requesting for confirmation of type and location of the utility facilities shown. The goal of this exercise is a solid Utility Base Map that can be used for determining utility conflicts and the need for utility relocation. A utility tracking matrix will be used to document correspondence with each utility owner, records received, status of the coordination, and need for relocation.

For the PA&ED phase, Kimley-Horn will complete the Utility Information Sheet as part of the ROW Data Sheet with descriptions of the utilities that will likely need to be relocated, and more importantly the extent and estimated cost of the relocation.

Task 6.12 Deliverables:

- One electronic copy of the utility data sheet to be included with the R/W Data Sheets

Task 6.13 Administrative Draft Project Report (KHA)

An administrative Draft Project Report (DPR) will be prepared in accordance with the latest edition of the Caltrans Project Development Procedures Manual (PDPM) to document the preliminary engineering performed for the project and provide inputs to the Draft Environmental Document (DED). From our recent experience working with Caltrans District 7, our approach to an expedited review and approval of the Draft Project Report focuses on three elements:

- Concurrence on the Preliminary Geometric Drawings: geometric drawings for each of the build alternatives will be developed to demonstrate how highway design standards are met and where exceptions to standards are required. It is critical to obtain early feedback and concurrence from Caltrans District 7 Design staff on the proposed project geometrics.

- Approval of design exception fact sheets: Once we receive conceptual concurrence from Caltrans staff on the project geometrics and the required design exceptions, fact sheets will be prepared to provide reasons for design exceptions and cost to meet standard. The build alternatives cannot be considered completed without the approval of the fact sheets.
- Approval of Traffic Operation Analysis Report (TOAR): Getting approval from Office of Traffic Engineering staff on the TOAR that covers all build alternatives is important because results from the TOAR will support the need for the project and demonstrate the benefits from the proposed improvements.

The administrative Draft Project Report will be prepared and submitted to the City and Caltrans for a screen check to insure all items are incorporated into the report prior to circulation within the District for functional unit review.

Task 6.13 Deliverables:

- One electronic copy and 5 hardcopies of the Admin Draft Project Report

Task 6.14 Draft Project Report - District Circulation (KHA)

Once comments are received and addressed in the administrative (Screen Check) Draft Project Report the draft will be updated and the Draft Project Report will be prepared for district circulation. The Draft Project Report will be distributed to the appropriate District Functional Units for review and comment. This review usually takes up to about 8 weeks for Caltrans to provide comprehensive review comments. Once the comments are received and a response to comments matrix is prepared with draft responses, a PDT meeting is usually held to coordinate the review of the comments and the proposed resolution of those comments prior to updating the report. This helps to reduce review cycles and provides the design team with the opportunity to gain clarification on comments and concurrence with the proposed revisions and responses to comments.

Task 6.14 Deliverables:

- One electronic copy and up to 25 hardcopies of the Draft Project Report

Task 6.15 Draft Project Report (KHA)

Once all comments have been resolved the Draft Project Report will be prepared and submitted to the City and Caltrans for final concurrence. The Draft Project Report will be signed and circulated for all the appropriate signatures. Final copies of the signed Draft Project Report will be distributed to the PDT through Caltrans Design Manager. Caltrans requires that the Draft Project Report is signed prior to release of the Draft Environmental Document (DED) for public circulation. Once the Draft Project Report is signed, the DED can be circulated with confidence that the District Functional Units have accepted the preliminary design as presented.

Task 6.15 Deliverables:

- One electronic copy and up to 10 hardcopies of (Final) Draft Project Report

Task 6.16 Final Project Report (KHA)

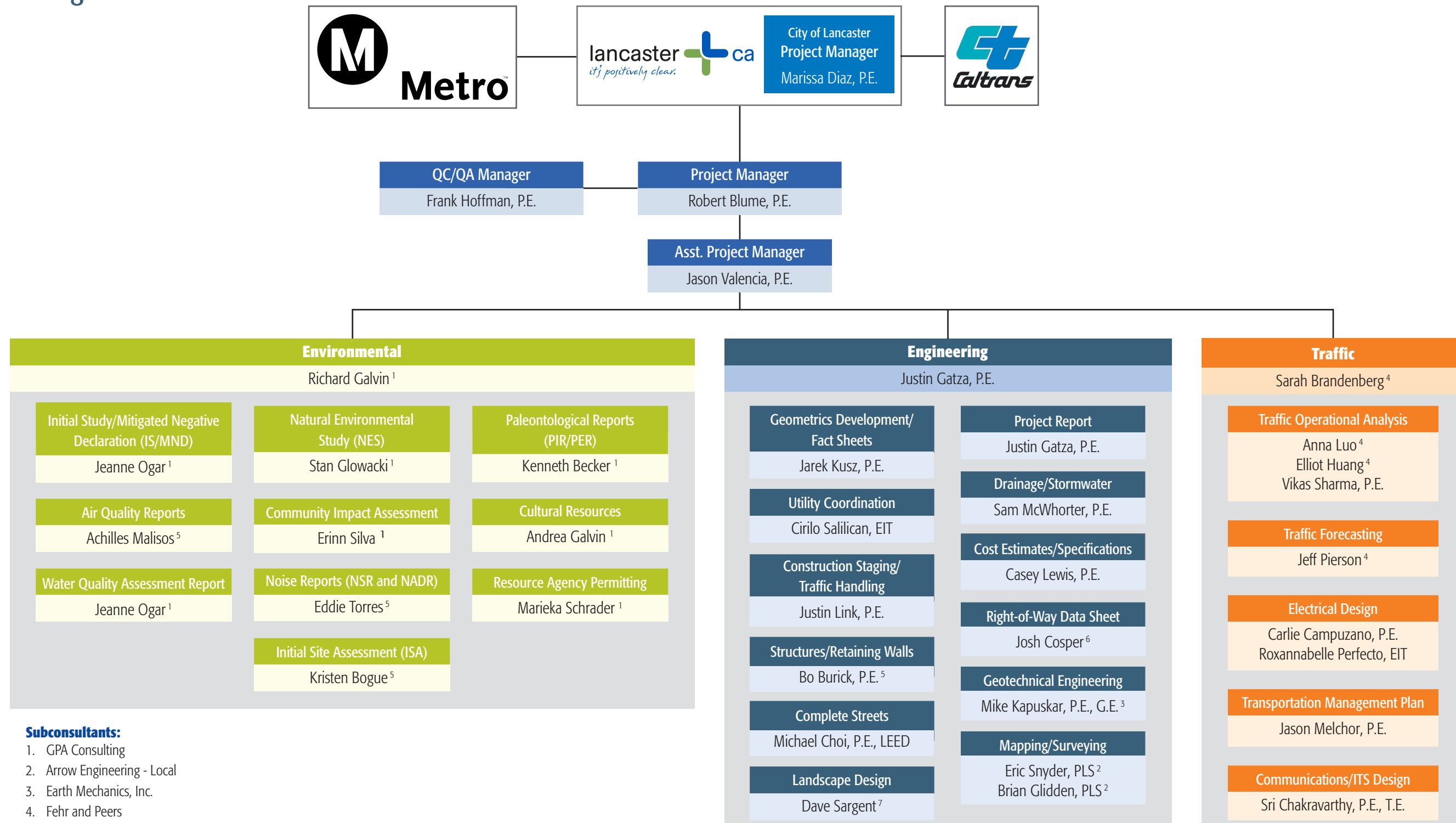
Once the DED is circulated to the public and the public review period closes, comments received on the DED will need to be reviewed by the project development team. Subsequently a preferred

alternative will be selected and the Draft Project Report will be revised to become the Final Project Report. A draft of the (Final) Project Report will be prepared for review and comment. The Final approved Project Report will summarize the approved project and the Final ED will provide environmental clearance of the project. The comments on the draft of the (Final) Project Report should be fairly minor and the PDT will meet and confer on the final approved project.

Task 6.16 Deliverables:

- One electronic copy and up to 5 hardcopies of the draft (Final) Project Report.
- One electronic copy and up to 10 hardcopies of the Final Project Report

3. Organization Chart



Subconsultants:

- 1. GPA Consulting
- 2. Arrow Engineering - Local
- 3. Earth Mechanics, Inc.
- 4. Fehr and Peers
- 5. Michael Baker International
- 6. Overland, Pacific & Cutler, Inc.
- 7. Sargent Town Planning

EXHIBIT "B"

TERM, PAYMENT AND TIME FOR COMMENCEMENT AND COMPLETION CLAUSE

Term

This Agreement shall become effective and shall be in full force and effect upon the execution of the Agreement by the City and the CONSULTANT. This Agreement shall continue in full force and effect for a period of thirty-one (31) months from the effective date of the Agreement (the "Term), unless the Agreement is sooner terminated in accordance with the Terms and Conditions in the Agreement; provided, however, that the City and the CONSULTANT may mutually agree in writing to extend the Term of this Agreement.

Payment

The City of Lancaster shall reimburse the CONSULTANT for actual costs, including labor costs and employee benefits incurred by the CONSULTANT in performance of the work, in an amount not to exceed \$1,099,513.00. Actual costs shall not exceed the estimated wage rates and other costs as set forth in the CONSULTANT'S proposal. Source documentation supporting billed costs must be submitted with invoice. CONSULTANT shall provide a cost breakdown with hourly rates for each office and field function in the event that additional work is required beyond the not to exceed amount specified above. Any additional work will require a separate Authorization for Consultant Services signed by both parties.

CONSULTANT will be reimbursed, as promptly as fiscal procedures will permit, upon receipt by the City of itemized invoices. Invoices shall be submitted no later than forty-five (45) calendar days after the performance of work for which CONSULTANT is billing. Invoices shall detail the work performed on each milestone, on each project, as applicable. Invoices shall follow the format stipulated for the Cost Proposal and shall reference this contract number and project title. Final invoice must contain the final cost and all credits due City. The final invoice should be submitted within sixty (60) calendar days after completion of CONSULTANT's work.

Consultant shall not be reimbursed for actual travel expenses incurred in the performance of the work.

Time for Commencement and Completion

CONSULTANT shall commence performance of the work no later than five (5) days following issuance of Notice to Proceed. It is anticipated that performance of the work will be completed within five hundred ninety (590) calendar days from commencement. In no event shall performance of the work be completed later than June 30, 2018 from commencement without the prior written authorization of the City. If Consultant fails to complete the work in this time period, City may avail itself of any and all remedies provided for in this Agreement.

Enda Melvin, Senior Vice President
Kimley-Horn and Associates, Inc.

EXHIBIT "B"

City of Lancaster
Measure R Program
Avenue J PAD
Kimley-Horn Associates

Anticipated Level of Effort Staff/Task	KIMLEY-HORN AND ASSOCIATES, INC.										RHA Traffic		AESI		Sargent Town Planning		Earth Mechanics		Fehr and Peers		GFA		Michael Baker		Overland Pacific Butler		Totals	
	Project Manager	Asst. Project Manager	Project Engineer	Traffic Manager	QA/QC Manager	Design Engineer	Analyst	Admin Support	ICHA Hours Total	RHA Labor Totals	Admin Total Hours	Admin Total Budget *	Sargent Town Planning Total Hours	Sargent Town Planning Total Budget	Earth Mechanics Total Hours	Earth Mechanics Total Budget *	Fehr and Peers Total Hours	Fehr and Peers Total Budget *	GFA Environmental Total Hours	GFA Environmental Total Budget *	Michael Baker Total Hours	Michael Baker Total Budget *	Overland Pacific Butler Total Hours	Overland Pacific Butler Total Budget *	Total Hours	Total Budget		
TASK 1: Meetings, Administration and Project Management	180	120	60	18	0	40	80	120	618	\$ 110,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,032	\$ 110,130
1.1 Coordination and Meetings	80	80	60	18	0	40	80	80	368	\$ 64,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	358	\$ 64,030
1.2 Administration	40	0	0	0	0	0	0	80	100	\$ 18,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	\$ 18,200
1.3 Project Management	60	40	0	0	0	0	0	40	140	\$ 27,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140	\$ 27,900
TASK 2: Data Collection	0	8	24	0	0	40	60	0	132	\$ 17,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	\$ 17,060
2.1 Research and Data Collection	0	8	24	0	0	40	60	0	132	\$ 17,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	\$ 17,060
TASK 3: Mapping	2	10	40	0	0	20	40	0	112	\$ 15,420	381	\$ 62,578	0	0	0	0	0	0	0	0	0	0	0	0	0	0	293	\$ 78,098
3.1 Photogrammetric mapping & Boundary	0	4	16	0	0	0	0	0	20	\$ 3,090	243	\$ 52,712	0	0	0	0	0	0	0	0	0	0	0	0	0	0	233	\$ 55,772
3.2 Supplemental Field Survey	0	2	8	0	0	0	0	0	10	\$ 1,530	63	\$ 9,966	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	\$ 11,496
3.3 Utility Coordination and Base Mapping	2	4	16	0	0	20	40	0	82	\$ 10,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	\$ 10,830
TASK 4: Traffic Forecasting and Operation Analysis	0	0	90	22	0	0	110	0	222	\$ 29,770	0	0	0	0	0	0	466	\$ 67,910	0	0	0	0	0	0	0	0	688	\$ 97,680
4.1 Traffic Forecasts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	398	\$ 13,360	0	0	0	0	0	0	0	0	398	\$ 13,360
4.2 Existing Conditions	0	0	0	10	0	0	100	0	160	\$ 20,680	0	0	0	0	0	0	24	\$ 3,730	0	0	0	0	0	0	0	0	186	\$ 24,390
4.3 Traffic Operation Analysis Report	0	0	40	12	0	0	10	0	62	\$ 9,170	0	0	0	0	0	0	254	\$ 37,540	0	0	0	0	0	0	0	0	316	\$ 46,710
4.4 Safety Template	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	\$ 2,590	0	0	0	0	0	0	0	0	18	\$ 2,590
4.5 Intersection Control Evaluation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	\$ 9,690	0	0	0	0	0	0	0	0	70	\$ 9,690
TASK 5: Environmental Studies and Public Meeting	28	8	40	0	0	0	0	0	76	\$ 15,260	0	0	0	0	0	0	0	0	1284	\$ 246,413	258	\$ 44,737	0	0	0	0	1,628	\$ 306,410
5.1 Project Management & Meetings	2	0	4	0	0	0	0	0	6	\$ 1,150	0	0	0	0	0	0	0	0	192	\$ 36,696	0	0	0	0	0	0	198	\$ 37,846
5.2 Jurisdictional Delineation	2	0	4	0	0	0	0	0	6	\$ 1,150	0	0	0	0	0	0	0	0	68	\$ 9,460	0	0	0	0	0	0	74	\$ 10,610
5.3 Natural Environment Study	2	0	4	0	0	0	0	0	6	\$ 1,150	0	0	0	0	0	0	0	0	128	\$ 16,896	0	0	0	0	0	0	134	\$ 18,046
5.4 Cultural Resources	2	0	4	0	0	0	0	0	6	\$ 1,150	0	0	0	0	0	0	0	0	28	\$ 3,300	0	0	0	0	0	0	34	\$ 4,450
5.5 Archaeology & Paleontology	2	0	4	0	0	0	0	0	6	\$ 1,150	0	0	0	0	0	0	0	0	292	\$ 45,927	0	0	0	0	0	0	298	\$ 47,077
5.6 Air Quality Study/Greenhouse Gas Assessment	2	0	4	0	0	0	0	0	6	\$ 1,150	0	0	0	0	0	0	0	0	0	0	74	\$ 12,595	0	0	0	0	80	\$ 13,745
5.7 Noise Study	2	0	4	0	0	0	0	0	6	\$ 1,150	0	0	0	0	0	0	0	0	0	0	130	\$ 21,263	0	0	0	0	136	\$ 22,413
5.8 Initial Site Assessment	2	0	4	0	0	0	0	0	6	\$ 860	0	0	0	0	0	0	0	0	0	0	64	\$ 10,879	0	0	0	0	68	\$ 11,739
5.9 Water Quality Assessment	2	0	4	0	0	0	0	0	6	\$ 860	0	0	0	0	0	0	0	0	104	\$ 13,288	0	0	0	0	0	0	108	\$ 14,148
5.10 Community Impact Assessment	2	0	4	0	0	0	0	0	6	\$ 860	0	0	0	0	0	0	0	0	120	\$ 17,424	0	0	0	0	0	0	124	\$ 18,284
5.11 Initial Study/Mitigated Negative Declaration	2	0	4	0	0	0	0	0	6	\$ 860	0	0	0	0	0	0	0	0	620	\$ 86,790	0	0	0	0	0	0	624	\$ 87,650
5.12 Public Meeting	8	8	8	0	0	0	0	0	24	\$ 4,920	0	0	0	0	0	0	0	0	24	\$ 4,752	0	0	0	0	0	0	48	\$ 9,672
5.13 Quality Control Plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	\$ 11,880	0	0	0	0	0	0	72	\$ 11,880
TASK 6: Project Report	90	274	736	0	60	600	880	40	2860	\$ 378,880	0	0	0	0	334	\$ 39,385	0	0	0	0	218	\$ 38,555	24	\$ 3,740	0	0	3,256	\$ 460,538
6.1 Alternatives Development	8	40	80	0	6	80	100	0	214	\$ 44,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	314	\$ 44,500
6.2 Geometric Drawings & Design Exception Fact Sheet	8	40	120	0	4	80	120	0	372	\$ 52,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	372	\$ 52,160
6.3 Preliminary Drainage Report	8	40	80	0	4	80	120	0	312	\$ 46,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	332	\$ 46,360
6.4 Storm Water Data Report	8	20	40	0	2	40	80	0	180	\$ 26,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190	\$ 26,620
6.5 Preliminary Geotechnical Reports	2	4	8	0	0	0	0	0	14	\$ 2,470	0	0	0	0	168	\$ 19,692	0	0	0	0	0	0	0	0	0	0	182	\$ 22,162
6.6 Preliminary Materials Reports	2	4	8	0	0	0	0	0	14	\$ 2,470	0	0	0	0	165	\$ 19,692	0	0	0	0	0	0	0	0	0	0	180	\$ 23,162
6.7 Advanced Planning Study	2	4	40	0	4	0	12	0	62	\$ 9,370	0	0	0	0	0	0	0	0	0	0	214	\$ 38,555	0	0	0	0	280	\$ 47,925
6.8 Preliminary Cost Estimate	4	8	40	0	2	20	24	0	98	\$ 14,220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	\$ 14,220
6.9 Transportation Management Plan Data Sheet	0	4	20	0	2	20	24	0	70	\$ 9,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	\$ 9,440
6.10 Life Cycle Cost Analysis	0	2	20	0	2	20	40	0	84	\$ 10,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	\$ 10,910
6.11 Right of Way Data Sheet	2	2	30	0	2	20	40	0	66	\$ 12,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	\$ 12,930
6.12 Utility Coordination	4	6	30	0	2	40	80	0	160	\$ 21,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160	\$ 21,440
6.13 Draft Project Report (Admin Draft)	8	20	80	0	8	80	120	0	316	\$ 44,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	316	\$ 44,390
6.14 Draft Project Report (District Circulation)	12	20	40	0	6	40	40	0	168	\$ 24,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166	\$ 24,320
6.15 Draft Project Report	10	20	20	0	8	30	40	0	138	\$ 20,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138	\$ 20,560
6.16 Final Project Report	14	40	80	0	8	50	40	0	242	\$ 36,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242	\$ 36,700
ODC's									20,000		1,700				57		300		5,540		2,000		0				29,997	
Total Hours/Budget	300	420	990	40	60	700	1170	160	3840	\$ 586,500	273	\$ 64,378	0	\$ -	122	\$ 39,440	466	\$ 68,210	1284	\$ 251,953	486	\$ 85,292	24	\$ 3,740	0	\$ -	6,497	\$ 1,099,513

* subs costs include 10% markup (not ODC's)



Standard Rate Schedule

Effective June 1, 2016 to June 30, 2017

<u>Classification</u>	<u>Billing Rate per Hour</u>
Project Manager	\$285
Assistant Project Manager	\$185
QA/QC	\$220
Traffic Manager	\$185
Project Engineer	\$145
Design Engineer	\$130
Analyst	\$115
Administrative Support	\$85

Other Direct Costs: Outside Printing/Reproduction, Delivery Services/USPS, Misc. Field Equipment/Supplies, and Travel Expenses will be billed at actual cost. Mileage will be billed at the Federal Rate.

Subconsultant Mark-up: 10%



**GPA 2016 Fee Schedule
Effective 1/1/2016**

Principal Environmental Planner	\$210.00/hr
Senior Environmental Planner	\$150.00/hr
Associate Environmental Planner	\$110.00/hr
Assistant Environmental Planner	\$90.00/hr
Senior Biologist	\$150.00/hr
Associate Biologist	\$110.00/hr
Principal Architectural Historian	\$205.00/hr
Senior Architectural Historian	\$150.00/hr
Associate Architectural Historian	\$125.00/hr
Architectural Historian II	\$100.00/hr
Architectural Historian I	\$90.00/hr
GIS Analyst	\$150.00/hr
Administrative Assistant/ Clerical	\$70.00/hr

DIRECT EXPENSES

Direct expenses, including but not limited to those items presented below, will be billed at actual cost:

- Purchases of project materials.
- Reproduction, printing and photographic costs.
- Postage, messenger and overnight mailing.
- Travel, telephone, Internet access and research fees and other miscellaneous costs.

Technical sub-consultants will be billed with a 10% markup.

Mileage will be billed at the current IRS rate.

TERMS OF PAYMENT

GPA submits invoices on a monthly cycle for work completed within the previous month.

Michael Baker

INTERNATIONAL

HOURLY RATE SCHEDULE

OFFICE PERSONNEL	\$/ Hour
Senior Principal	\$285.00
Principal.....	260.00
Project Director.....	245.00
Program Manager.....	235.00
Senior Project Manager.....	225.00
Project Manager	208.00
Structural Engineer.....	205.00
Technical Manager.....	195.00
Senior Engineer.....	178.00
Senior Planner.....	175.00
Electrical Engineer.....	170.00
Biologist.....	168.00
Landscape Architect.....	164.00
Senior GIS Analyst.....	156.00
Project Engineer.....	155.00
Project Planner.....	155.00
Environmental Specialist.....	152.00
Design Engineer/Senior Designer/Survey Analyst.....	150.00
GIS Analyst.....	135.00
Designer/Planner.....	130.00
Project Coordinator.....	125.00
Graphic Artist.....	110.00
Environmental Analyst/Staff Planner.....	112.00
Design Technician.....	112.00
Assistant Engineer/Planner.....	104.00
Permit Processor.....	93.00
Engineering Aid/Planning Aid.....	84.00
Office Support/ Clerical.....	70.00
SURVEY PERSONNEL	
2-Person Survey Crew	\$265.00
1-Person Survey Crew	170.00
Licensed Surveyor.....	188.00
Field Supervisor.....	178.00
CONSTRUCTION MANAGEMENT PERSONNEL	
Principal Construction Manager.....	\$235.00
Construction Manager	215.00
Contract Manager.....	180.00
Resident Engineer.....	180.00
Construction Inspector (Prevailing Wage).....	175.00
Construction Inspector (Non-Prevailing Wage).....	145.00
Field Office Engineer.....	120.00
Construction Technician.....	97.00
Contract Support.....	80.00

Note: Blueprinting, reproduction, messenger service and other direct expenses will be charged as an additional cost plus 15%. A Sub-consultant Management Fee of fifteen-percent (15%) will be added to the direct cost of all sub-consultant services to provide for the cost of administration, sub-consultant consultation and insurance. Vehicle mileage will be charged as an additional cost at the IRS approved rate.

FEHR & PEERS

2015-2016

(July 2015 through June 2016)

Hourly Billing Rates

Classification Hourly Rate

Principal	\$195.00	-	\$325.00
Senior Associate	\$200.00	-	\$310.00
Associate	\$130.00	-	\$210.00
Senior Engineer/Planner	\$140.00	-	\$190.00
Engineer/Planner	\$110.00	-	\$145.00
Senior Technical Support	\$125.00	-	\$175.00
Senior Administrative Support	\$110.00	-	\$140.00
Administrative Support	\$100.00	-	\$125.00
Technician	\$105.00	-	\$135.00
Intern	\$80.00	-	\$95.00

- *Other Direct Costs/Reimbursable expenses are invoiced at cost plus 10% for handling.*
- *Personal auto mileage is reimbursed at the then current IRS approved rate (57.5 cents per mile as of Jun 2015).*
- *Voice & Data Communications (Telephone, fax, computer, e-mail, etc.) are invoiced at cost as a percentage of project labor.*

Earth Mechanics, Inc. Billing Rates Table 2016

Name	Classification	2016 Direct Hourly Rate	Overhead	Fee	2016 Hourly Billing Rate
Classifications					
	Principals	\$ 80.00	177.70%	10%	\$ 244.38
	Principal Engineers/Geologists	\$ 68.75	177.70%	10%	\$ 210.01
	Senior Engineers/Geologists	\$ 56.75	177.70%	10%	\$ 173.35
	Senior Project Engineers/Geologists	\$ 50.80	177.70%	10%	\$ 155.18
	Project Engineers/Geologists	\$ 43.25	177.70%	10%	\$ 132.12
	Senior Staff Engineers/Geologists	\$ 34.00	177.70%	10%	\$ 103.86
	Staff Engineers/Geologists	\$ 31.80	177.70%	10%	\$ 97.14
	Senior Technicians	\$ 36.30	177.70%	10%	\$ 110.89
	Technicians	\$ 16.00	177.70%	10%	\$ 48.88
	Project Administrators	\$ 61.75	177.70%	10%	\$ 188.63
	Administrative Assistants	\$ 30.00	177.70%	10%	\$ 91.64



CIVIL ENGINEERING ■ SURVEYING ■ SOILS ■ MAPPING/GIS

Certified SBE and WBE

42140 Tenth Street West
Lancaster, CA 93534

661-940-0043
Fax: 661-949-9775

aesi@aesi-consulting.com

April 14, 2016

Job No. 16-6516

Robert D. Blume, P.E.
Kimley-Horn and Associates, Inc.
660 South Figueroa Street, Suite 2050
Los Angeles, CA 90017

RE: Lancaster Ave J Interchange Project

ENGINEERING AND SURVEYING FEE SCHEDULE

Services performed on an hourly or portal to portal basis will be billed as follows:

Principal Engineer	\$	160.00/hr
Land Surveyor	\$	120.00/hr
Office Engineer	\$	110.00/hr
Secretary	\$	55.00/hr
Survey Crew	\$	235.00/hr
Bond copies	\$	10.00/sheet
Bond plots	\$	10.00/sheet
Mylar plots	\$	20.00/sheet
Mileage	\$	0.55/mi

Reimbursable Expenses

- Payments for reimbursable expenses are due 30 days from date of invoice.
- Reproduction of all documents, including postage and shipping charges shall be paid for at cost plus 15% for handling.
- Fees paid for securing approval of authorities having jurisdiction over the project.
- Preparation of electronic documents for distribution (i.e. PDF, DWG, DWF, etc.).
- Plotting sheets for Government submittals and Client requests.
- Attendance at conferences and meetings, other than those mentioned above, as requested by client.
- Fees to agencies, utility companies, etc. for processing or acquisition of data for project.

2016 Schedule of Hourly Rates
Overland, Pacific & Cutler, Inc.

Right of Way Engineering

Special Services Manager (PE / PLS)	\$200.00 per hour
ROWE / Survey Analyst	\$130.00 per hour

