

AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES

THIS AGREEMENT FOR CONSULTING SERVICES (this "AGREEMENT") is made and entered into this _____ day of _____, 2016, by and between the CITY OF LANCASTER, a municipal corporation and charter city (the "OWNER"), and TRC SOLUTIONS, 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 K 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: TRC Solutions, 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 Director of Development Services
 City of Lancaster
 44933 North Fern Avenue
 Lancaster, California 93534

CONSULTANT Mr. Raja Mitwasi, Vice President
 TRC Solutions, Inc.
 123 Technology Drive West
 Irvine, California 92618

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 (RFP 577-14) 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 61 pages
- Second: Request for Proposal (RFP 577-14)
- Third: 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 Director of Development Services 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 Director of Development Services, 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 \$1,111,779.08. 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, potholing and traffic control services. Per Labor Code 1720, 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 Director of Development Services 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
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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. Insurance shall be at least as broad as ISO form CG 20 10 11 85 or CG 20 10 10 01 and CG 20 37 10 01 covering Commercial General Liability. Commercial Automobile coverage shall be at least as broad as ISO form CA 00 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, and that are admitted insurers in the State of California.

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 and endorsements 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 City of Lancaster.

(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 K INTERCHANGE

The City of Lancaster, the Lancaster Successor Agency, the Lancaster Financing Authority, the Lancaster Housing Authority, the Lancaster Boulevard Corporation, the Lancaster Community Services Foundation, and the Lancaster Museum and Public Art Foundation, as well as their officers, servants, and employees are included as additional insured as respect to liability arising out of activities performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, occupied, or used by Consultant; or automobiles owned, leased, hired, or borrowed by the Consultant. (This does not apply to Professional Liability policies.)

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

The City of Lancaster
44933 Fern Avenue
Lancaster, California 93534

(4) List in the “Cancellation” section:

Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will mail 30 days written notice (10 days written notice for non-payment) to the Certificate Holders named to the left.

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.

O. CONSULTANT shall include all subcontractors performing less than 10% of the total value of the work as an insured under its policies or shall furnish separate certificates and endorsements for each subcontractor, which certificates and endorsements shall comply with each requirement set forth in Section 18.B. – 18.L and 18.N., and shall further include 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	\$1,000,000
Per Project General Aggregate	\$2,000,000
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	\$2,000,000
 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	\$2,000,000
General Aggregate	\$2,000,000

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 Director of Development Services 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: _____
Carlyle S. Workman, Public Works Manager

Dated: _____

By: _____
Mark V. Bozigian, City Manager

Dated: _____

"CONSULTANT"
TRC SOLUTIONS, INC.

By: _____
Raja Mitwasi, Vice President

Dated: _____

ATTEST:

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



SCOPE OF WORK

**PROJECT APPROVAL AND ENVIRONMENTAL
DOCUMENT**

For

**SR-14 (SR-138) / AVENUE K INTERCHANGE
IMPROVEMENT PROJECT**

Prepared by:

**TRC Solutions, Inc.
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December, 2015



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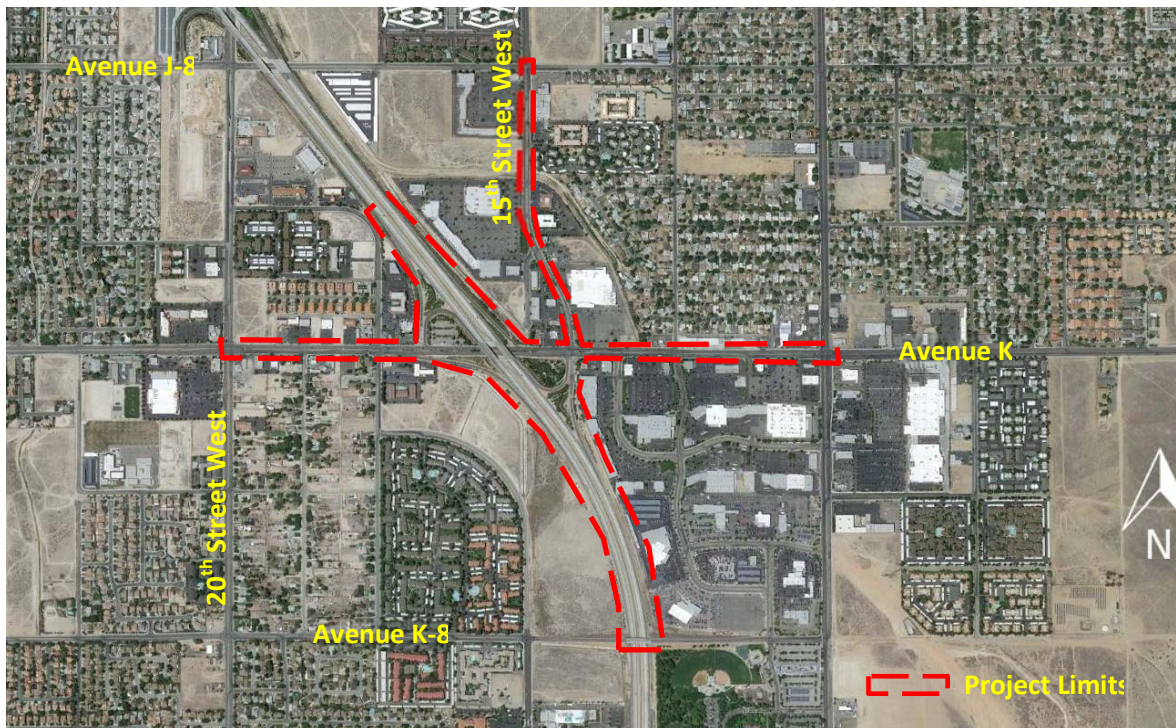
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PROJECT DESCRIPTION

The City of Lancaster, in cooperation with State of California Department of Transportation (Caltrans) and the Los Angeles Metropolitan Transportation Authority (Metro), is planning to modify the geometry and capacity of the SR-14 (SR-138) Avenue K Interchange. Modifications shall include the interchange footprint and improvements to Avenue K between 10th Street West and 20th Street West, and 15th Street West between Avenue K and Avenue J-8. The project area is entirely within the City of Lancaster, with interchange area within Caltrans right-of-way. The project will address safety, congestion, and operation issues along Avenue K and 15th Street West, including the SR-14/Avenue K Interchange. Improvements will include gap closures on local streets, interchange geometric enhancements, traffic signal modifications, intersection modifications on Avenue K between 10th Street West and 20th Street West, pedestrian safety improvements and other context sensitive solutions.

The SR-14 / Avenue K Interchange project includes the following three phases; a PSR-PDS, a Project Report and Environmental Clearance and final PS&E.

All services for each of these phases will be prepared in accordance with the most recent Caltrans guidelines as outlined in the Caltrans Project Development Procedures Manual (PDPM).





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This scope is for the PA&ED phase. A final draft PSR-PDS has been submitted to Caltrans for review and approval. The vehicle for project approval is the Project Report (PR). The PR will refine the information summarized in the PSR-PDS and assessing the feasibility of the needs, alternatives, costs, and overall impacts of the proposed improvements. The PR will provide additional detail beyond the PSR-PDS and as such the studies performed in the PSR-PDS are revised to further develop, and refine the geometrics, costs, and overall design intents.

DESCRIPTION OF TASKS

TASK 1 MEETING, ADMINISTRATION, AND PROJECT MANAGEMENT

Task 1.1 Meetings

There will be Project Development Team (PDT) meetings with staff from Caltrans and the City, along with internal team meetings and coordination meetings with Stakeholders to discuss progress and project issues, and to exchange project information. TRC shall prepare and distribute the agenda and associated materials in advance of each meeting. Draft minutes will be submitted for review and comment following each meeting. The final minutes will be distributed to all attendees within 3 to 4 weeks of the meeting.

Task 1.2 Administration

TRC shall prepare and review all necessary legal documents, insurance certificates, correspondence, invoices, and associated materials necessary for the successful execution of the contract.

Task 1.3 Project Management

TRC shall monitor and report on project progress, and notify the City Project Manager of any scope, schedule, or budget issues as they arise. Issues that may affect the contract shall be noted in the next invoice after identification. TRC shall prepare an Extra Work Order if resolution of issues requires a change to the contract budget. For the purposes of this work, TRC shall maintain a detailed schedule, risk register, submittal log and an action log along with any other project control tools agreed upon with the City Project Manager. TRC shall maintain a critical path schedule for the project.

TASK 2 DATA COLLECTION

As required, TRC and the team will conduct additional researches to collect data not available in the PID phase for the preparation of the Project Report and



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Environmental Document. The additional data will include but not limit to as-built plans for structures, utilities, previous study data, adjacent project information, accident data, and R/W maps etc.

TRC and the team will also gather relevant urban design studies completed for/by the City of Lancaster, including the Corridors Plan the Auto Mall Master Plan, the City's Master Plan of Trails and Bikeways, the City's Wayfinding Program, among others, and key those design elements to the urban design base map.

TASK 3 MAPPING – Consultant: AESI

AESI will set aerial control and provide data collected through photogrammetric processes as noted in detail below. All photogrammetric surveying shall be performed in accordance with the Caltrans Survey Manual Chapter 13.

Task 3.1 Horizontal and Vertical Control

AESI will set photo control targets that 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 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 format acceptable to Caltrans.

Task 3.2 Photogrammetric Survey

AESI will fly, photograph, provide analytical bridging, stereo compilation and editing, including 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 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 for the flight plan and control placement, the color stereo aerial photography will be completed along with Aerotriangulation. 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



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Caltrans for the “B” submittal. Once we receive approval of submittal “B”, DTM data will be extracted at 1” = 50’ and 2’ 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 a Microstation (dgn) format with Caltrans standards and Specifications. The “C” submittal will consist of the original film, mapping data on a DVD and a photo index for the project.

Task 3.3 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. Rights-of-way will be approximated from the Los Angeles County Assessor’s parcel data.

TASK 4 TRAFFIC OPERATION ANALYSIS – Consultant: F&P

F&P will prepare the Traffic Operations Analysis Report for the proposed project. The following data will be collected for use in the operations analysis:

- The city will provide current and future traffic volumes for use in the analysis.
- Existing traffic signal timings for study intersections
- Site reconnaissance of the project location and surrounding roadway network to verify existing intersection control, lane configurations, traffic signal timings, and other roadway characteristics. Observations of peak hour traffic operations and vehicle queue lengths will be conducted.
- Collision summary based on Caltrans TASAS data and City traffic accident data for the most recent available three-year period in the study area.

The following facilities will be analyzed:

Study Intersections

1. 15th Street W./W. Avenue J-8
2. Avenue K/30th Street W.
3. Avenue K/20th Street W.
4. Avenue K/17th Street W.
5. EB Avenue K/Southbound On-Ramp
6. Avenue K/Southbound On-/Off-Ramp
7. WB Avenue K/Northbound On-Ramp
8. Avenue K/Northbound On-/Off-Ramp
9. Avenue K/12th Street W.
10. Avenue K/10th Street W.



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SR-14 (SR-138) Study Freeway Facilities

1. Ramp Merge Analysis – Northbound on-ramp from Avenue L
2. Mainline Analysis – Northbound between Avenue L and Avenue K
3. Ramp Diverge Analysis – Northbound Off-Ramp to Avenue K
4. Ramp Merge Analysis – Northbound On-Ramp from Eastbound Avenue K
5. Ramp Merge Analysis – Northbound On-Ramp from Westbound Avenue K
6. Ramp Diverge Analysis – Northbound Off-Ramp to 20th Street W.
7. Ramp Merge Analysis – Southbound On-Ramp from W. Avenue J-8
8. Ramp Diverge Analysis – Southbound Off-Ramp to Avenue K
9. Ramp Merge Analysis – Southbound On-Ramp from Westbound Avenue K
10. Ramp Merge Analysis – Southbound On-Ramp from Eastbound Avenue K
11. Mainline Analysis – Southbound between Avenue K and Avenue L
12. Ramp Diverge Analysis – Southbound Off-Ramp to Avenue L

F&P will prepare a Draft Traffic Analysis Assumptions and Methodologies Memorandum and submit to Caltrans and City for one round review at the beginning of the PA&ED phase. The memorandum will contain a list of assumptions and recommended methodologies to use for traffic forecasting and operations analysis

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. Opening year and design year LOS will be completed for both No Build and Project conditions during both peak hours. Traffic forecasts will be developed using the North County Sub-Area Travel Demand Forecasting Model as part of the City's Measure R Program Contract.

The operations analysis along Ave K will include a system of signals between 10th and 20th Streets with recommended signal timings. Project will recommend interconnecting these signals, and the Synchro software program will be used to optimize the signal timings along the corridor. Traffic operation and LOS will be based on the methodology in the 2010 Highway Capacity Manual.

The freeway mainline will analyze the operation of the Ave K interchange and the adjacent mainline segments for merge/diverge and weaving LOS as listed above. The analysis will be conducted for existing, opening year and design year conditions during the AM and PM peak hours based on the methodology in the 2010 Highway Capacity Manual.

The intersection analysis will determine the adequacy of the current lane geometries with recommendations to achieve an LOS of D or better, ability to clear traffic queues in one signal cycle and determine needed storage lengths for all signalized movements, including ramp metering.



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The recommended improvements will consider proposed developments within the corridor including the Toys-r-Us property and any new intersections proposed by the developer.

The transportation analysis will contain recommendations of bicycle facilities and design features, such as the width of the facility. Recommendations will also include an evaluation of potential vehicle-bicycle conflict areas and design treatments to mitigate these conflicts.

The transportation analysis will also provide recommendations for the locations of pedestrian facilities, such as crosswalks.

A review and recommendation of the impacts to traffic during construction and any recommendations for mitigation will be provided.

F&P will prepare the Traffic Operations Analysis Report summarizing the results and findings. A Draft Report will be submitted to Caltrans and other PDT members for up to two rounds of review and comments. We will submit the Final Report to City and Caltrans. The Traffic Operations Analysis Report will be incorporated into the Project Report and Environmental Document.

Deliverable(s):

- Administrative Draft, Draft and Final Traffic Operations Analysis Reports

TASK 5 ENVIRONMENTAL STUDIES AND PUBLIC MEETING – Consultant: ICF

Task 5.1 Environmental Studies

ICF will be responsible for preparing the environmental documentation for the proposed project in compliance with state CEQA environmental regulations. It is anticipated that an Initial Study (IS) leading to a Mitigated Negative Declaration (MND) will be the appropriate environmental documentation for the proposed project; however, that determination will be contingent upon the results of the technical studies (identified below) and consultation with Caltrans, the lead agency for CEQA.

Task 5.1.1 Preparation of Technical Studies

All technical studies and environmental documentation will follow the guidelines in Caltrans Standard Environmental Reference (SER). An administrative draft of each technical study shall be provided to the City for review prior to any submittal to Caltrans. Following initial review by Caltrans a second administrative draft of each technical study shall be provided to the City for review prior to finalizing any of the below listed technical reports. We would also note that it is our



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understanding that GPA will be responsible for preparing the existing conditions information for the Natural Environmental Study.

The following technical studies would be prepared in support of the IS/MND:

- Water Quality Study (by TRC)
- Noise Study (by ICF)
- Air Quality Study (by ICF)
- Cultural Resources Studies (by ICF)
- Initial Site Assessment (by TRC)
- Natural Environment Study – Minimal Impacts (by ICF)
- Community Impacts Study (by ICF)
- Visual Impact Assessment (by ICF)
- Traffic Study (by F&P)

The following describes each technical study in detail:

Natural Environment Study – Minimal Impacts (NES- MI)

The PEAR prepared in PID phase indicates the absence of sensitive biological resources in the project vicinity. However, in order to demonstrate that this remains the correct assessment, preparation of a Natural Environment Study Minimal Impacts (NES-MI) is recommended. ICF will utilize the Existing Conditions Report prepared by GPA to determine existing conditions and then perform field surveys, and prepare a NES-MI report analyzing potential impacts to biological resources. It is assumed that the information provided by GPA will be of sufficient scope and content to properly prepare the associated field reports and corresponding NES. The report will be prepared in accordance with Caltrans SER guidance and will conform to the Caltrans NES-MI annotated outline that is available at the time that the NES-MI is initiated.

ICF will address direct and indirect impacts of the proposed project on biological resources, including impacts on native and non-native vegetation communities, wildlife habitat, sensitive species and their habitats, and adjacent biological resources. The significance of such effects will be determined in accordance with the applicable CEQA Guidelines. The discussion will include potential impacts associated with applicable laws, including the federal and state Endangered Species Acts (ESA), Migratory Bird Treaty Act (MBTA), Sections 401 and 404 of



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the Clean Water Act, the Porter Cologne Water Quality Act, and Sections 1600-1616 of the California Fish and Game Code.

A Habitat Assessment will be conducted to determine the likelihood of occurrence for the following species:

- Bats and Colonial Nesting Birds
- Special Status Plants
- Desert Tortoise
- Mojave Ground Squirrel
- Burrowing Owl (Optional Task)

The habitat assessments will be conducted by a qualified biologist to determine the potential for suitable habitat and establish whether species specific focused surveys are needed. No permits are required to perform the habitat evaluations, but the biologist must be experienced with the species' biology, identification of direct and indirect sign, and physical characteristics of potentially suitable habitat. Habitat evaluations for these species can be performed any time of year. If no potential habitat for these species is found, no additional surveys will be performed, and the results of this habitat evaluation will be provided in the NES-MI. The following describes preliminary assumptions about the potential sensitive species constraints presented by the project:

Focused Survey for Bats and Colonial Nesting Birds - If potential habitat for roosting bats and/or colonial nesting birds is present, focused surveys for bats and crevice colonial nesting birds will be conducted during the spring or summer months and will consist of up to two visits per structure being surveyed. All surveys will be conducted in accordance with survey standards for the species being surveyed.

- Focused Survey for Special Status Plants (to be completed by the City and provided to TRC/ICF to incorporate into the NES Technical Report)
- Desert Tortoise – Desert tortoise (*Gopherus agassizii*), a federally listed species, is known within the vicinity of the project site. A preliminary review of the site indicates that potential desert tortoise habitat may be present; however, since the site is completely surrounded by development and is subject to continuous human disturbance, the potential for desert tortoise to be present at the site is not expected. A review of the site for potential desert tortoise habitat will be performed by a qualified biologist. Any potential habitat found for desert tortoise will be mapped. If no potential for desert tortoise is found, results of this evaluation will be provided in the NES-MI. This scope



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assumes that desert tortoise is absent from the site, and would not pose a constraint to the project. If potential for desert tortoise is found during the habitat assessment, a scope and cost for focused desert tortoise surveys can be provided at that time at the City's request.

- Focused survey for Mojave Ground Squirrel – Mojave ground squirrel (*Xerospermophilus mohavensis*), a state Threatened species, is known within the vicinity of the project site. A preliminary review of the site indicates that potential Mojave ground squirrel habitat may be present; however, since the site is completely surrounded by development and is subject to continuous human disturbance, the potential for Mojave ground squirrel to be present at the site is not expected. A review of the site for potential Mojave ground squirrel habitat will be performed by a qualified biologist. Any potential habitat for Mohave ground squirrel will be mapped. If no potential for Mojave ground squirrel is found, results of this evaluation will be provided in the NES-MI. This scope assumes that Mojave ground squirrel is absent from the site, and would not pose a constraint to the project. If potential for Mojave ground squirrel is found during the habitat assessment, a scope and cost for focused Mojave ground squirrel trapping surveys can be provided at that time at the City's request.

Optional Task

- Focused Survey for Burrowing Owl – As an optional task, a focused survey for burrowing owl will be conducted if the habitat assessment determines that there is suitable habitat for burrowing owl and Caltrans requires focused surveys to determine owl presence. The survey would consist of four visits made to all potential habitat within the BSA on four separate days between February 15 and July 15, in accordance with survey guidance described in CDFW's 2012 Staff Report on Burrowing Owl Mitigation. The visits will occur during one hour before sunrise to two hours after and/or two hours before sunset to one hour after. The results of the focused survey for Burrowing Owl will be directly incorporated into the NES-MI.

Deliverables:

- Administrative Draft, Draft, and Final Natural Environment Study – Minimum Impacts Reports



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Jurisdictional Delineation and Report (to be completed by the City)

Noise Study

ICF will assess the noise impacts associated with implementation of the proposed SR-14/Avenue K interchange project. The noise analysis will be presented in a noise study report consistent with the CEQA Considerations in the Caltrans Protocol (Protocol). The noise study report will be in support of an IS/MND to satisfy the requirement under CEQA.

Relevant noise regulations and planning standards (i.e. City of Lancaster noise ordinance and general plan noise element) will be identified and discussed. Existing land uses in the project area will be identified along with existing sources of noise. An initial review of the project site conducted as part of the PEAR indicates that noise-sensitive land uses in the project vicinity include multi-family and single-family residences, a church, hotels, and schools. Other non-noise-sensitive land uses consisting of business/commercial uses exist in all four quadrants of the interchange.

Existing noise conditions in the project area will be quantified based on noise measurements conducted at locations along the project alignment. Short-term monitoring (10 to 15 minutes) will be conducted during daylight hours at selected locations in the project area at up to twelve (12) locations. Unattended long-term monitoring (continuous hourly measurements over at least 24 hours) will be conducted at three (3) locations in the project area if secure measurement sites can be identified. Using traffic data provided by the project traffic engineer, traffic noise along SR-14 and West Avenue K will be modeled for existing and design year build conditions. The FHWA Traffic Noise Model Version 2.5 (TNM 2.5) will be used for the traffic noise assessment. It is assumed that 3D geometric CADD files and maximum 2 foot increment topographic files will be supplied by the City of the Applicant for the purposes of modeling the proposed interchange.

Significance thresholds based on relevant noise standards and the CEQA checklist will be identified by the Project Design Team (PDT), consistent with the CEQA guidance in the Protocol. Construction noise will be evaluated based on construction equipment data to be provided by the city or project engineer and noise modeling methods recommended by the U.S. Department of Transportation.

This scope assumes that mitigation in the form of sound walls will not need to be evaluated for the residences noise-sensitive receptors described above. Should significant noise impacts be identified based on the significance threshold(s) identified by the PDT, the scope will need to be amended to address the analysis



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of mitigation measures to reduce noise impacts to less than significant (where feasible).

Deliverables:

- Administrative Draft, Draft, and Final Noise Technical Memorandums

Air Quality Study

ICF will prepare an air quality technical report that analyzes air emissions associated with changes in vehicle traffic patterns resulting from the proposed project. The Los Angeles County portion of the Mojave Desert Air Basin fails to meet state and federal air quality standards for ozone and particulate matter (PM₁₀). The air quality analysis will focus on emissions of ozone precursors (reactive organic gases and nitrogen oxides), inhalable particulates (PM₁₀), and carbon monoxide (CO) emitted by vehicles operating on existing roadways under future buildout conditions. Mobile-source air toxics (MSAT) and greenhouse gas (GHG) emissions will also be evaluated. Information from the Traffic Analysis in the draft project report (DPR) will be used as a basis for completing the air quality reports.

Regional Conformity Analysis

ICF will confirm that the proposed project is accurately characterized, as currently defined, in the most recent Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) documents prepared by the Southern California Association of Governments (SCAG). Should any RTP/FTIP issues be discovered, ICF will work with the City of Lancaster and SCAG to resolve said issues.

Construction-Related Emissions

Construction-related emissions will be analyzed quantitatively, based on the guidelines provided by the Antelope Valley Air Quality Management District (AVAQMD). Mitigation measures for construction impacts will be recommended that are consistent with the AVAQMD's applicable rules and regulations for fugitive dust.

Localized Carbon Monoxide Hot Spot Analysis

ICF will use the procedure outlined in Caltrans' Transportation Project Level Carbon Monoxide Protocol to determine if CO modeling is needed. The CALINE4 model and California Air Resources Board emission factors will be used to estimate CO concentrations at sensitive receptors near the project. Up to four (4) sites are assumed for CO modeling. The CO modeling analysis will focus on completion-, and design-horizon-year conditions as modeled in the traffic analysis.



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Additionally, ICF will summarize the results of the air quality analysis in tables showing CO concentrations.

Mobile Source Air Toxics

ICF will evaluate proposed project-related mobile source air toxics (MSATs) emissions in accordance with current Federal Highway Administration (FHWA) guidance on how MSATs should be addressed in Environmental Document.

Climate Change/Greenhouse Gas Emissions

ICF will quantify the proposed project's construction- and operations-period greenhouse gas (GHG) emissions using EMFAC2011 emissions factors for the build and no-build project alternatives under the opening-year and horizon-year conditions, as well as the existing/baseline condition. The GHG analysis will meet AVAQMD and Caltrans requirements.

Deliverables:

- Administrative Draft, Draft, and Final Air Quality Technical Reports

Community Impacts Study

Construction of the proposed project could result in minor impacts to nearby residences, businesses, schools, and churches during construction, including impacts related to access, noise, and utility relocation, along with impacts related to growth, environmental justice, aesthetics, and context-sensitive design. These potential impacts would be documented in a Community Impacts Technical Memorandum to support the IS/MND document.

The Community Impacts Technical Memorandum will rely on the Existing Community and Neighborhood Setting provided by City to describe the existing conditions relevant to Community Impacts. In preparing the Community Impacts Technical Memorandum, ICF will identify the community impacts on neighborhoods, businesses, and minority and low-income populations, as well as the project's consistency/compatibility with the existing and future land uses and plans in the area. The community impact analysis will be prepared in accordance with Caltrans Environmental Handbook Volume 4: Community Impacts. Topics to be addressed in the community impact technical memorandum will include social impacts, economic impacts (change in employment and tax base changes), land use/growth (consistency with local plans, development opportunities), farmland, and public services impacts (accessibility and parking, utilities).

The community impacts technical memorandum will consider how the proposed project activity would affect the people, institutions, neighborhoods, communities, organizations, and larger social and economic systems. The community impact



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analysis will provide a clear description of the existing conditions, the potential impacts of the project on the community and how the project relates to other development (existing and proposed) in the area. The significance of the identified impacts, and mitigation measures to best avoid the adverse impacts resulting from the project will be identified and discussed, as appropriate.

Deliverables:

- Administrative Draft, Draft, and Final Community Impacts Technical Memorandums

Cultural Resources Studies

Archeological Resources

It is anticipated that an Archaeological Survey Report (Finding of No Archaeological Resources Present) will be prepared by ICF. The analyses will be prepared in accordance with CEQA and its substantive requirements; Section 106 of the National Historic Preservation Act will not apply. ICF will also support GPA, if requested by the City, to contact the Native American Heritage Commission and request a Tribal Consultation List, and will assist in coordinating AB 52 consultation. ICF has scoped time to assist in coordinating AB 52 consultation; ICF can assist the City in preparing letters for the NAHC and Native Americans. However, since work under AB 52 is a new process with unknown parameters--this scope assumes only that ICF will provide this level of service to the City for the hours allotted. If further AB 52 related work is required, an amendment to the scope and budget will be required.

Historical Resources

Following completion of the record search/review, a qualified architectural historian will conduct a field survey of the proposed study area to record buildings, structures, and historic features through photography and written descriptions. It is anticipated that up to four (4) buildings and structures will require evaluation on California historic resource inventory forms (series DPR 523). Any buildings beyond this number would be considered out of scope. ICF will send out letters requesting information on historic properties to local governments, historical societies, and historic preservation organizations. The evaluation of properties within the study area will be reported in the Historical Resource Compliance Report (HRCR), which will include a historic context statement. In addition, ICF will review the Caltrans historic bridge inventory, and identify previously evaluated state and local bridges within the Project Area Limits. Following completion of the survey and detailed reports discussed above, a summary document (Historic Property Survey Report or HPSR) shall be generated in accordance with Caltrans



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standards. It is anticipated that the proposed project shall result in an HPSR with a finding that only properties previously determined not eligible for inclusion in the National Register of Historic Places (NRHP) or that are determined to be not eligible for inclusion in the NRHP are present within the project area. No further cultural work, including Phase II analyses/investigations are assumed or included in this scope of work. No evaluation of historic resources under Section 106 of the National Historic Preservation Act of 1966 will be necessary because there will be no federal undertaking associated with the project.

Paleontological Resources

To characterize existing conditions, ICF will summarize all state and local regulations that apply to the project and will also summarize bedrock and sedimentary geologic information regarding the presence and absence of paleontological resources.

ICF will request a Paleontological Records check from the Los Angeles County Natural History Museum. This records check will indicate known paleontological discoveries in the project area. Based on the Paleontological Records check, ICF will assess the project site and determine if it has known fossil resources in or adjacent to each project element.

Deliverables:

- Administrative Draft, Draft, and Final Cultural Resources Technical Reports (Archaeological Survey Report, Historical Resource Compliance Report, and Historic Property Survey Report)

Visual Impact Assessment

In accordance with FHWA and the U.S. Department of the Interior guidelines, the visual analysis will be prepared under the direction of a licensed Landscape Architect and based on FHWA's Visual Impact Assessment for Highway Projects. The existing visual environment and viewshed will be analyzed using available mapping, aerial photos, GIS, and site reconnaissance. Project plans and profiles will be analyzed to identify proposed physical changes to the study area and to aid in the identification of key observer viewpoints.

Key viewpoints (visual quality "sensitive receptors") will be identified for the proposed project. Visual quality of proposed conditions will be evaluated OF and FROM the key viewpoints. That is, visual quality will be evaluated "OF" the proposed improvements and "FROM" the improved facility toward the viewpoint. It is assumed that up to three key viewpoints will be identified and assessed. These viewpoints will be submitted to Caltrans for approval prior to starting the analysis. FHWA methodology, including the evaluation of unity, intactness, and



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vividness, will be applied. Mitigation measures, such as finish treatment of structures and sound barriers and plantings, will be recommended, if necessary. Noise mitigation, including walls and/or berms will be included in the analysis if identified in the noise report.

It is our understanding that the City will provide a corridor approach to the aesthetic framework. This framework and any design features affecting visual impacts will be incorporated into the Visual Impact Assessment Report and referenced as an appendix.

Deliverable:

- Administrative Draft, Draft, and Final Visual Impact Assessment Reports

Task 5.1.2 Prepare Draft Environmental Document

The technical studies and draft and final IS/MND will address in detail the preferred Build Alternative as well as the No Build Alternative.

Draft technical studies will be submitted to the City and Caltrans for review and comment. Revisions will be made in response to agency comments and if necessary one additional round of review and revisions will be made. Additional revisions can be made on a time and materials basis and an estimate to make these provided in advance of the work.

Based on the environmental technical studies discussed above, an Administrative Draft IS/MND in accordance with § 15063 of the CEQA Guidelines, the City of Lancaster's CEQA Guidelines, and Caltrans SER guidance will be prepared utilizing the IS/MND format annotated outline included in the Caltrans SER at the time that the IS/MND document is initiated, and modified as appropriate to use in preparing an IS/MND. Technical studies that support the IS/MND are a part of the environmental compliance record and will be public documents available for review at the City, local libraries, and Caltrans District 7.

The IS/MND will provide adequate documentation to identify the significance of the project's effect on each environmental topic as required by CEQA. Following approval of the technical studies by the project team and Caltrans, the Screencheck Draft IS/MND, External Quality Control (QC) Certification, and Environmental Document (ED) Review Checklist will be provided for the City and Caltrans for concurrent review. Following review by the City and Caltrans, the document will be revised and an Administrative Draft IS/MND will be submitted, along with a Comment/Response matrix, External QC Certification, and ED Review Checklist, and forwarded for the City and Caltrans review. Following this review, the document will be revised and a Screencheck Draft IS/MND will be prepared along with the Comment/Response matrix, External QC Certification,



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and ED Review Checklist, and forwarded to the City and Caltrans for their Environmental Branch Chief Review. To reduce iterations of the document, ICF will conduct a revision workshop with the City and Caltrans to facilitate the next review. Once concurred upon, the IS/MND signature page will be submitted to Caltrans for signature.

Upon signature of the cover sheet and approval to circulate, ICF will provide hard copies and an electronic copy of the Draft IS/MND. The electronic copy will be in Adobe Acrobat PDF format to allow for publication on the project website.

The Initial Site Assessment (ISA) will take into account the analysis already conducted as part of any previous projects along the corridor limits or projects immediately adjacent to the project study area and build on them. The work shall be based on the ISA format as described in the Caltrans Project Development Procedures Manual and the American Society for Testing and Materials Designation E1527- 05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

The preliminary ISA was developed in PID phase and ready for review. In PA&ED phase, the work for ISA will be limited to submit the ISA for agency review, respond to the review comments, and to finalize the ISA.

Deliverable(s):

- Administrative Draft IS/MND, External QC Form, Environmental Document Review Checklist (10 copies each and electronic file) – Volume 1 only
- Screencheck Draft IS/MND, Comment/Response Matrix, External QC Form, Environmental Document Review Checklist (10 copies each and electronic file) – Volume 1 only
- Draft IS/MND for Circulation, Comment/Response Matrix, External QC Form, Environmental Document Review Checklist (10 copies each and electronic file) – Volume 1 only
- Draft IS/MND (4 copies, 1 PDF web-ready version) – Volume 1 only
- Draft and Final Initial Site Assessment

Task 5.2 Draft Environmental Document (DED) Circulation

ICF will follow Chapter 3 of the Caltrans SER in preparing the Notice of Intent (NOI) to adopt a Mitigated Negative Declaration. The NOI will briefly describe the project, identify the review period and information regarding any public hearings for the proposed project, and the locations where copies of the IS/CE are available for review. The NOI will be distributed to the public, responsible



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agencies, trustee agencies, and the county clerk within which the proposed project is located at least thirty (30) days prior to adoption by the lead agency of the mitigated negative declaration to allow the public and agencies the review period provided under CEQA Section 15105. No noticing in a Spanish language newspaper is assumed.

The City and/or Caltrans District 7 will mail the NOI to the last known name and address of all organizations and individuals who have previously requested such notice in writing and either publish the NOI in a newspaper of general circulation in the area affected by the proposed project, post the NOI on and off site in the area where the project is to be located, or direct mail the NOI to the owners and occupants of contiguous property shown on the latest equalized assessment roll, as required by CEQA.

Copies of the Draft IS/MND will be distributed to those persons, organizations, and agencies included in the IS/MND distribution list. It is assumed that up to twenty (20) hard copies of Volumes 1 and 2 (Volume 2 will contain the technical studies) will be distributed along with an additional forty (40) copies of Volume 1 with Volume 2 on CD. This includes the copies to be submitted to the State Clearinghouse along with a Notice of Completion.

Deliverable(s):

- Draft and Final NOI
- Draft IS/MND (20 copies of Volume 1, 20 copies of Volume 2, and 40 CDs)
- Public notice/newspaper notice draft

Task 5.3 Final Environmental Document

Task 5.3.1 Public Comment Responses and Correspondence

At the close of the public availability period for the Draft IS/MND, ICF, with assistance from members of the project team will review and respond to all comments received. The public comments submitted on the Draft IS/MND, including comments at the public hearing recorded by the court reporter (if applicable), will be organized, categorized, and numbered by ICF for distribution to the appropriate members of the project team for their response. If necessary, ICF's Project Manager will attend a meeting with the City and Caltrans to discuss the comments received. For easy reference and review, a matrix listing each of the numbered comment letters and individual comments will be provided. ICF will assemble the responses and submit a draft document consisting of public comments and responses to those comments for review (to accompany each version of the Final IS/MND identified in this scope of work. It is assumed that a



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reasonable number of comments (not more than 20 comments) based on the magnitude of this project will be received and that no comments from lawyers or requiring legal evaluation or new or extensive analyses will be received. If an excessive number of comments, comments from lawyers, comments requiring legal evaluation, or comments requiring new or extensive analyses are received then this will be discussed with the City and Caltrans to identify an appropriate scope/budget augment to address these items. It is assumed that the individual/company responsible for the particular technical analyses will respond to the comment received.

Deliverable(s):

- Response to Comments Matrix/Document (to be included and reviewed with the Final IS/MND)

Task 5.3.2 Preparation and Approval of Final Environmental Document

ICF will prepare an Administrative Final IS/MND that will identify the preferred alternative and will include public comments on the Draft IS/MND and responses on environmental issues raised in the comments. Each submittal of the Final IS/MND will include the External Quality Control (QC) Certification and Environmental Document (ED) Review Checklist. Following review by the City and Caltrans of the Administrative Final IS/MND, the document will be revised and a Screencheck Final IS/MND will be submitted, along with a Comment/Response matrix, and forwarded for the City and Caltrans review. To reduce iterations of the document, ICF will conduct a revision workshop with the City and Caltrans to facilitate the next review. Once revisions are incorporated into the document that address comments received from the City and Caltrans, a Pre-Approval Final IS/MND will be prepared along with the Comment/Response matrix, and forwarded for concurrence by the City and Caltrans. Once concurred upon, the Final IS/MND signature page will be submitted to Caltrans for signature.

Upon signature of the cover sheet and approval, ICF will provide hard and electronic copies of the Final IS/MND. The electronic copy will be in Adobe Acrobat PDF format. ICF will utilize the updated mailing list (with commenter names and other changes), as prepared and maintained by outreach consultant, for the Final IS/MND and distribute the document.

Deliverables:



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- Administrative Final IS/MND, External QC Form, Environmental Document Review Checklist (10 copies each and electronic file) – Volume 1 only
- Screencheck Final IS/MND, Comment/Response Matrix, External QC Form, Environmental Document Review Checklist (10 copies each and electronic file) – Volume 1 only
- Pre-Approval Final IS/MND, Comment/Response Matrix, External QC Form, Environmental Document Review Checklist (10 copies each and electronic file) – Volume 1 only
- Final IS/MND (20 hardcopies each, Volumes 1 and 2, 1 PDF web-ready version; 10 CDs with Volumes 1 and 2)

Task 5.3.3 Completed Environmental Document

ICF will prepare a Notice of Determination (NOD) in compliance with CEQA for filing with the State Clearinghouse. The NOD would also be posted with the Los Angeles County Clerk. It is assumed the City will be responsible for California Department of Fish and Game (CDFG) filing fees. The Final NOD will be prepared once Caltrans adopts the IS/MND, adopts the Environmental Commitments Record (ECR), and approves the project. This notice starts a statute of limitation period under CEQA. The NOD will include an identification of the project and its location, description of the project, date of agency approval, determination that the project will not have a significant effect on the environment, statement that an IS/MND has been prepared pursuant to the provisions of CEQA, and an address of where a copy of the IS/MND may be examined.

Presumably City shall be responsible for the CEQA filing fee.

Deliverable(s):

- 2 hard copies and one electronic copy of NOD
- NOD filed with SCH
- NOD filed with LA County Clerk

Task 5.3.4 Mitigation Monitoring Program

To comply with the Public Resources Code Section 21081.6 (AB 3180), ICF will prepare a Draft Mitigation Monitoring Program, which will be submitted to the City and Caltrans for review and approval. ICF will respond to one complete set of Caltrans comments on the Draft Mitigation Monitoring program including comments provided by City staff. The Mitigation Monitoring Program will be defined through working with staff to identify appropriate monitoring steps and



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procedures in order to provide a basis for monitoring such measures during and upon project implementation.

Deliverable(s):

- Draft and Final Mitigation Monitoring Program

Task 5.4 Public Meeting – Consultant: TRC/ICF/Epic

City is going to implement the Public Outreach Program for the entire SR-14 corridor by others under a separated contract. TRC and ICF will support the public outreach effort and provide exhibits and needed information for the SR-14/Avenue K Interchange project. TRC and ICF will also attend public meetings regarding to the environmental impacts, engineering design, right of way process, and relocation assistance on an as-needed basis.

If it is determined that a public hearing (or workshop) will be held on the project, TRC and ICF will work with the Public Outreach team in coordinating and conducting the hearing. If needed, project managers from TRC/ICF/Epic and up to one additional staff will be available to make presentations at the hearing and provide support.

TRC is assuming no more than 4 public meetings will be required. Additional scope & fees will be included if more than 4 public meetings occurred.

TASK 6 PROJECT REPORT

TRC will prepare the Project Report for the proposed project in accordance with the Caltrans Project Development Procedures Manual (PDPM), Appendix K – Preparation Guidelines for Project Report. TRC will deliver AUTOCAD format files to the City for their use as needed. Draft and screen check plans developed will be delivered in hardcopy format and / or part of a PDF document for review. This will facilitate easy viewing by all potential readers of e-documents. Most plan sheets incorporated into reports will be no larger than a standard 11"x17" format to facilitate easy printing on most 'engineering department' printers. Upon request larger format exhibits can be prepared for use in presentations made by City staff or TRC.

Task 6.1 Preliminary Geometric Design and Alternative Analysis – Consultant: TRC

In this task, TRC will work iteratively with the traffic study to refine the previously prepared conceptual geometrics. This would include developing lane configurations and widths, storage requirements, horizontal alignments/vertical profiles, and typical cross sections in order to accommodate the urban design elements, to establish enough details to acquire the needed Right-of-Way, to



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ensure constructability, to identify what nonstandard design features should be included, and to determine a realistic construction cost estimate. Only one build alternative was identified in PID phase, and in this task, 2 design options are expected to be studied for the build alternative.

The preliminary geometric design plans will be developed to ensure a clear understanding of the project and is instrumental in identifying key design parameters that are unknown in PID phase. In addition, these plans can be used to facilitate the review and approval of the Design Exceptions to Design Standards in the PA&ED phase.

Deliverable(s):

- Preliminary typical cross sections, layout, and profile/superelevation diagram. Those plans will be included in the Project Report as an attachment.

Task 6.2 Design Exceptions to Design Standards (Fact Sheet) in State Right-of-Way – Consultant: TRC

Although some nonstandard design features with in State R/W were listed in the PSR–PDS, those features with any additional nonstandard design elements must be approved by Caltrans through Fact Sheet. Two reports will likely be prepared: Design Exceptions to Mandatory Standards and Design Exceptions to Advisory Standards. Through the Stewardship Agreement with Caltrans Headquarter in March 2015, the mandatory and the advisory fact sheets will be reviewed and approved by Caltrans District 7.

Deliverable(s):

- Draft and Final Mandatory Design Exceptions to Design Standards
- Draft and Final Advisory Design Exceptions to Design Standards

Task 6.3 Preliminary Geotechnical Reports – Consultant: Leighton

The geotechnical scope of work will include a geotechnical-impact evaluation study to support CEQA, a preliminary geotechnical study to support Advanced Planning Study; all in accordance with Caltrans requirements. Scope for these tasks is described in further detail in the following subsections:

- **Geotechnical Impact Evaluation Study**

Leighton will conduct a preliminary assessment of potential geologic hazards along the project alignment by reviewing readily available relevant geotechnical literature, reports, deterministic and probabilistic seismic hazards maps, geologic maps and



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historic aerial photographs available from our in-house library. Geologic hazard issues addressed will include faulting and seismicity, liquefaction potential, earthquake-induced settlements and lateral spreading, slope instability and landslides, dam-inundation and flooding. Findings and conclusions from this study will be included in a Geotechnical Impact Evaluation Study Report, which will be a part of the Environmental Document for CEQA approval.

- **Preliminary Geotechnical Study**

Purpose of a preliminary geotechnical study is to provide adequate geotechnical data and recommendations for preliminary engineering design of the project. Preliminary engineering analyses, recommendations and Preliminary Geotechnical Design Reports (PGDR) for Structural Advanced Planning Study will be provided in accordance with Caltrans requirements.

The proposed geotechnical scope will be as follows:

- Task 6.3.1 Review of Background Information**

Leighton will collect and review available relevant as-built roadway and bridge plans, existing soil, geology, seismic hazard and groundwater data, and maps maintained and provided by Caltrans and other agencies. This will include bridge general and foundation plans, Log of Test Borings (LOTB) sheets, roadway materials reports and bridge foundation reports.

- Task 6.3.2 Field Activities**

Leighton will conduct a site reconnaissance and geologic surface mapping of the alignment to observe existing conditions. This may encompass several probable alignments at once to provide input for final alignment selection.

- Task 6.3.3 Preliminary Engineering Analyses and Report Preparation**

Based on results of our review of as-built data, and available reports, we will perform preliminary geotechnical engineering analyses. Preliminary geotechnical findings and design parameters will be evaluated and provided. Also included will be discussions about alignment/site geology, subsurface conditions, faulting and seismicity, liquefaction potential and corrosion potential. Conceptual recommendations will also be provided for earthwork and grading, discussions of embankment fill induced settlement, roadway structural sections/pavement design, excavations, slope stability, lateral earth pressures, rippability evaluation, material specifications, material sources and disposal. Geotechnical recommendations will be provided for preliminary design of bridges, retaining walls, soil nail and/or tie-back walls, sound walls, drainage improvements and proposed culverts.



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The preliminary reports will be prepared by a California licensed Geotechnical Engineer (GE) and a Certified Engineering Geologist (CEG) and will include the following:

- **Alignment Conditions:** We will review and summarize surface and subsurface geologic conditions and materials, groundwater conditions, and engineering properties of soils anticipated.
- **Seismic Design Parameters:** We will present results of site-specific seismic hazard evaluation including recommended soil profile type, peak bedrock acceleration and design acceleration response spectra (ARS) curves in accordance with the latest version of Caltrans Seismic Design Criteria (SDC).
- **Earthwork and Grading Considerations:** We will present earthwork criteria, including recommendations for clearing and site preparation, subgrade preparation, recommendations for removal of unsuitable soil or fill, utility trench backfill, surface drainage, and landscaping considerations, as necessary. Recommendations for imported soil engineering and compaction criteria will also be provided.
- **Soil Corrosivity Considerations:** Results of corrosivity tests, if available, will be presented and analyzed in accordance with Caltrans Corrosion Guidelines. Recommendations for corrosion protection and mitigation of steel and concrete foundation elements will also be provided.
- **Pavement Design:** We will present both flexible hot-mix asphalt concrete (HMA) and Portland cement concrete (PCC) pavement sections for Traffic Indexes (TI) specified by Caltrans. The latest edition of Caltrans Highway Design Manual and Caltrans District 7 design practice will be used in evaluating pavement sections. Pavement design will be based on encountered subgrade soil measured R-values and anticipated properties of imported soils. A Life-Cycle Cost Analysis of proposed Caltrans pavement sections will also be performed in accordance with the current policy of Caltrans District 7.

Deliverable(s):

- Draft and Final Geotechnical Impact Evaluation Study Report
- Draft and Preliminary Geotechnical Design Report
- Draft and Preliminary Material Report
- Draft and Preliminary Foundation Reports (Optional)
- Life Cycle Cost Analysis



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Task 6.4 Preliminary Drainage Report – Consultant: TRC

The existing hydrology data will be prepared under a separated contract for City. Following review the adequacy of the existing hydrology data, TRC will perform preliminary hydraulic analysis for all of the drainage facilities on the project site. The corresponding drainage report shall be prepared to incorporate updated hydrology calculations. At the locations where the existing flow pattern will be modified by the proposed improvements, the hydraulic analysis will be performed to reflect the post-construction conditions. In addition, the preliminary drainage plans of proposed drainage facilities will be included in this report.

Deliverable(s):

- Draft Drainage Report and Preliminary Drainage Report

Task 6.5 Utility Coordination and Right of Way Data Sheet

Task 6.5.1 Utility Coordination – Consultant: AESI

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. AESI will coordinate with the City of Lancaster and utility companies to determine what facilities are located within the project corridors. A utility tracking sheet will be completed for each entity contacted and all collected documents will be scanned into digital format, and provided with completed tracking sheet. Upon receipt of the preliminary design plans we will contact any potentially affected utility company to receive a rough estimate of the costs for utility modification or relocation.

Deliverable(s):

- Draft and Final Utility Identification Plans

Task 6.5.2 Right of Way Data Sheet – Consultant: TRC/Epic

TRC will use a Geographic Information System (GIS) provided by Epic to identify impacted properties along the proposed alignment, evaluate the extent of impacts, and estimate the level of effort to acquire property necessary for the project.

Contract amendment will be needed if Caltrans Draft Relocation Impact Report is required and/or the impacted number increases beyond 90 parcels due to the alignment change.

An overview of the Right of Way Data Sheet process includes:

- Data acquisition



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- Obtain property boundary/ownership data from available sources and import the information into the GIS
- Obtain available project design work in CAD format and incorporate into the GIS
- Impact analysis
 - Use GIS to overlay design plans onto existing ownership data and identify necessary fee acquisition and easement areas
 - Determine where full vs. partial acquisitions are required
- Appraisal/Valuation
 - Perform a market survey of comparable property sales in the region using a number of real estate data resources
 - Assign values to real property and easements to be acquired
- Relocation costs
 - Evaluate properties requiring a full acquisition and estimate cost to relocate occupants
 - Calculate fixtures and equipment, business goodwill, and other costs required for relocation of businesses
- Estimate totals
 - Combine real estate and relocation costs with other necessary fees to generate a final cost estimate for individual properties and the entire project
- Right of Way Data Sheet
 - Prepare the Caltrans Right of Way Data Sheet for the Build Alternative to identify the right of way, utility impacts and relocation displacement information for the inclusion in the Project Report.

Deliverable(s):

- Draft and Final Right of Way Data Sheet. The Final Right of Way Data Sheet will be included to the Project Report as an attachment

Task 6.6 Storm Water Data Report (SWDR) – Consultant: TRC

TRC will update the SWDR developed in PID to incorporate the proposed construction Best Management Practices (BMPs) that will be needed to ensure that



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the construction activities do not impact the existing stormwater drainage systems. The SWDR shall summarize how the project will address temporary, permanent, and treatment (BMPs) for each alternative, at a PA&ED level.

Deliverable(s):

- Draft and Final PA&ED level SWDR. The Draft and Final SWDR will be delivered to Caltrans for review and approval.

Task 6.7 Stage Construction – Consultant: TRC

TRC will work closely with Caltrans, City and other stakeholders to develop stage construction/traffic handling concepts for the build alternative detailing the overall impact to local traffic circulations and businesses during the various construction stages. The goal is to minimize any disruption to traffic passing through the construction area.

Deliverable(s):

- Draft and Preliminary Stage Construction plans. The Preliminary Stage Construction plans will be included to the Project Report as an attachment.

Task 6.8 Transportation Management Plan – Consultant: TRC

TRC will coordinate with the Caltrans, City and other stakeholders to prepare the Transportation Management Plan (TMP). This plan presents the preliminary evaluation of concepts developed to alleviate existing congestion and improve traffic flow within the project limits. The TMP will identify traffic handling strategies that would help minimize construction related impacts and ensure that traffic moves safely and efficiently during the construction period. A TMP Data Sheet will be prepared and their associated costs of implementing the TMP elements will be developed and incorporated into overall project estimate.

Deliverable(s):

- Draft and Final Transportation Management Plan Data Sheet. The Final TMP Data Sheet will be included to the Project Report as an attachment.

Task 6.9 Landscape Concept/Aesthetic Concept – Consultant: Sargent

The city has contracted to provide a master plan for the SR-14 corridor aesthetic and landscaping. Sargent will use this information to coordinate with the City to gather any additional information about the site and the existing landscape. A study of existing projects and their success will be done to determine the best direction for successful plant selection, irrigation and landscape development. Presentation of a conceptual landscape plan for key areas of the project will be provided on an



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as-needed basis. A preliminary cost estimate will be developed and incorporated into overall project estimate.

Deliverable(s):

- The highway planting concept will be included to the Project Report.

Task 6.10 Urban Planning – Consultant: STP

Based on the concepts and recommendations of the Draft Framework and on those of the 2012 Corridors Plan, STP will provide recommendations and exhibits for urban design elements within the project area, generally organized into the following topics:

- **Freeway Identity and Wayfinding**

The Avenue K interchange is the primary gateway to the South Commerce Center. Specific improvements envisioned to signal the approach to the Avenue K interchange include enhanced landscape at Avenue K-8, and along the east side of SR-14 between Avenue K-8 and Avenue K to improve the visibility, appearance and identify of the Auto Mall. Similar improvements may be contemplated for the west side of SR-14 as well, along the frontage of City-owned properties.

- **Gateway Identity and Wayfinding**

Redevelopment opportunities surrounding the Avenue K corridor will be taken into consideration. 12th Street West and 15th Street West are key gateway intersections into the Lancaster Auto Mall, and South Commerce district, and 15th St/Hospital District, and wayfinding signage and streetscape and landscape improvements for these intersections and frontages will be studied.

- **Corridor Identity, Wayfinding, Function and Development Potential**

A Complete Streets strategy – integrating landscape, wayfinding signage and public art with the all-mode transportation solutions identified in Caltrans' Complete Streets program – is recommended for all of the major streets within the project area. Key destinations include the Lancaster Auto Mall, and the Amargosa Creek Specific Plan area to the south of Avenue K and the Health District and Boulevard/Downtown District to the north.

- **Bicycle and Pedestrian Facilities**

As the area around the Avenue K Interchange is expected to become increasingly more bikable and walkable in accordance with the Master Plan of Trails and Bikeways (MPTB), the pedestrian and bicycle facilities on streets within the



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project area should be studied to identify the potential bicycle and pedestrian facility improvements. As such, there is an opportunity for the Avenue K corridor improvements to facilitate and potentially improve the bicycle facilities and routing described in the MPTB.

Deliverable(s):

- Exhibits of key destinations, wayfinding signage location/information, including those for pedestrian and bicycle and streetscape improvements along Avenue K, 15th Street West, and potentially 12th Street West, to accommodate gateway and infill possibilities.
- Exhibits of cross sections of Avenue K, 15th Street West, and potentially 12th Street West to incorporating the proposed facilities into streetscape improvements.

Task 6. 11 Structural Advance Planning Studies – Consultant: TRC

TRC will address necessary modifications to the existing Amargosa Creek Reinforce Concrete Box Culvert affected by the proposed improvements.

In this project phase, the nonstandard retaining walls are assumed on the existing Avenue K Undercrossing abutment slopes to accommodate shoulders/bike lanes and therefore the APS will be prepared for the retaining walls.

Deliverable(s):

- Draft and Final Advance Planning Studies (APS). The Final APS will be submitted to DOE for review and approval.

Task 6. 12 Cost Estimates – Consultant: TRC

TRC shall prepare a PA&ED level estimate of construction quantities and costs based upon the approved geometric approval drawings utilizing current edition of Caltrans Contract Cost Data Book. In addition to the construction material, other key components include ROW, environmental, and utility costs will be included into the PA&ED level cost estimate.

Deliverable(s):

- Draft and Final PA&ED level cost estimates. The final cost estimate will be included to the Project Report as an attachment.



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Task 6. 13 Draft Project Report – Consultant: TRC

Initial Study with Mitigated Negative Declaration (IS/MND) was identified as a prospective environmental document in PID phase. According to the Caltrans PDPM Appendix K, TRC shall prepare a Draft Project Report (DPR) to identify and select of preferred alternative/option, the project cost, right-of-way needs, and project schedule.

Prior to finalize the formal DPR, an administrative DPR will be submitted to City for review and concurrence. The DPR shall be approved by Caltrans to permit the DED release to public.

Deliverable(s):

- Administrative Draft Project Report with all attachments
- Draft Project Report with all attachments

Task 6. 14 Prepare Project Report – Consultant: TRC

The Project Report is prepared to document any changes to the project preferred alternative that produce during the environmental process that were not originally included in the approved DPR. This is a separate report from the DPR, which would include the basic DPR data in addition to these changes.

TRC will prepare an administrative PR for City review and concurrence with a comment disposition matrix to summarize the responses to the comments from Caltrans, City, and other stakeholders. After reviewing, assessing, and documenting comment responses, a final version of the Project Report will be prepared for final review and approval by Caltrans.

If required, TRC will assist the City in presenting the Project Report to the City Council and answering any questions pertaining to the technical aspects of the report. As part of this task, TRC will assist the City on abstracting key points and illustrations from the report and developing exhibits for the presentation.

Deliverable(s):

- Comment disposition matrix
- Administrative Project Report
- Project Report. Up to five hardcopies for final submittal.



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Attachments

Attachment No. 1: Scope of Work Assumptions for Environmental Studies

Attachment No. 2: Other Scope of Work Assumptions

Attachment No. 1: Scope of Work Assumptions for Environmental Studies

General Environmental Document Assumptions:

For scope and cost that ICF provided the following general assumptions have been made:

- No more than 2 rounds of review from the City and 2 rounds of review from Caltrans are assumed for any technical study and the ED.
- Focused protocol surveys for any species are not included in this scope and cost, other than those specified under the Natural Environment Study scope. If additional focused surveys are identified during the biological field reconnaissance, then this will be communicated to the City and an extra scope and cost for this work will be requested.
- A maximum of one build alternative (with design options as stated in scope of services) and a no-build alternative (i.e., project and no project) will be evaluated.
- Hazardous material (Initial Site Assessment), geotechnical, traffic assessments, Storm Water Data Report (SWDR), and any floodplain analyses/technical reports (Location Hydraulic Study and Summary Floodplain Encroachment Report or Floodplain Evaluation Report, etc.), if required, will be included into the environmental documents and for use in the technical analyses. Hazardous Waste Studies, including Aerially Deposited Lead (ADL) Assessment Report will be developed in PS&E phase,
- NEPA documentation will not be required.
- It is assumed that the right of entry onto private property is not included in the scope and fee for field work and surveys. If required obtaining a right of entry will be considered an out of scope task.

Technical Report Assumptions:

For scope and cost, the following are assumptions related to the technical studies:

Natural Environment Study – Minimal Impacts (NES- MI) and Jurisdictional Delineation Report Assumptions:

- This scope (as stated above) assumes that an existing conditions report will be prepared by GPA and that the information provided will be used to prepare the NES and associated field studies (e.g., bat and bird assessment).
- Jurisdictional Delineation Report will be developed and furnished by City.
- This scope and cost assumes that the City will be responsible for providing all necessary access.

Attachment No. 1: Scope of Work Assumptions for Environmental Studies

The following tasks will not be included in the scope of work:

- Review of Project Information and Applicable Literature (to be provided in the existing conditions report prepared by GPA or City). It is assumed that the information provided by GPA will contain (at a minimum) the following:
 - Special status species lists from the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS);
 - Database searches of current versions of the California Natural Diversity Database (CNDDDB) and the Online Inventory of the California Native Plant Society (CNPS);
 - The most recent applicable Federal Register listing package and critical habitat determination for each federally listed Endangered or Threatened species potentially occurring within the project site;
 - The most recent CDFW Annual Report on the status of California's listed Threatened and Endangered plants and animals; and
 - Other available biological studies conducted in the vicinity of the project site.
- Field Evaluation for Biological Resource Constraints (to be provided in the existing conditions report prepared by GPA). It is assumed that the information provided by GPA will contain (at a minimum) the following:
 - Review of relevant information, thorough walkover covering all portions relevant to potential biological resource constraints, detailed field notes (including conditions, visible disturbance factors, species, habitats, and more general biological resource issues observed or detected), evaluation regarding the presence, absence, or likelihood of occurrence for all special status species, habitats, or more general biological resource issues potentially posing a constraint to the project through applicable laws and regulations, or contextual evaluation of adjacent areas. The study area is assumed to be the proposed project footprint plus 300 feet (where access is permissible).

Community Impacts Technical Memorandum Assumptions:

- GPA to provide the existing condition report which will include data from the 2010 U.S. Census to identify characteristics of populations within census block groups traversed by or adjacent to the proposed project. Community profiles will also be provided by GPA for the local project area, City, County, and the State of California to help identify regional and local trends in regards to demographics, local industry, occupations, and tax base.

Attachment No. 1: Scope of Work Assumptions for Environmental Studies

Cultural Resources Technical Reports Assumptions:

- Section 106 of the National Historic Preservation Act will not apply.
- Tribal Consultation and contact with NAHC has been completed by SRI. On August 19, 2015, a request for a Sacred Lands Files Search was submitted to the NAHC. A copy of the letter can be provided. An attempt was made on September 2, 2015, to inquire about the results of the request, but as of September 4, 2015, SRI has received no response from the NAHC.
- ICF will also support GPA, if requested by the City, to conduct follow up contact with the Native American Heritage Commission and request a Tribal Consultation List, and will assist in coordinating AB 52 consultation
- It is assumed that no additional records search will be conducted beyond that already conducted and provided by GPA
- It is assumed that no additional imitation of contact with the Native American Heritage Commission (NAHC) will be required beyond that already conducted and provided by GPA. If interested Native American individuals are identified with knowledge of resources of concern, GPA will contact them by letter and with follow up phone calls, if needed.
- Following completion of the record search/review, GPA will conduct a field survey of the study area for archaeological resources. It is assumed that the City will be responsible for obtaining access for conducting the surveys. This scope of work assumes that no archaeological sites will be identified in the study area and that no testing and/or evaluation will be required.

Attachment No. 2: Other Scope of Work Assumptions

Urban Planning

TRC realize that the City is currently preparing an SR-14/138 Framework Study to establish design concepts and guidelines for all freeway/interchange improvement projects. This will include establishing design themes for landscape, landmarks, interchange structures, and signage to support City identity and wayfinding. TRC assumes that the Corridor Framework Study and/or the 2012 Corridors Plan will provide clear initial direction on the following topics:

- Freeway identify and Wayfinding
- Gateway Identify and Wayfinding
- Corridor Identify, Wayfinding, Function and Development Potential
- Bicycle and Pedestrian Facilities

Existing Hydrology and Hydraulic

- A Corridor Master Drainage Study will be prepared under a separate contract. It is assumed that the listed-below information will be provided by the Master Plan so TRC will be able to proceed the preliminary drainage report for the SR-14/Avenue K project:
 - The Master Plan will provide the runoff generated within the project area, inflow from watersheds beyond the project limits.
 - The on-site hydrologic computations and analyses will be included into the Master Study.
 - Drainage plans identifying the location of existing drainage facilities shall be included within the report.
 - The Master Drainage Report is reviewed and concurred by Caltrans.

Public Outreach

- It is assumed that the City and the Corridor Public Outreach team will develop the Public Outreach Plan and host the required public meetings. In addition to public meetings, RBF will also make presentations to community groups, business groups and metro meeting group as requested by the city.
- The Corridor Public Outreach team will also develop appropriate communication materials, online presence and engage in ongoing proactive media communications regarding project (developing press releases, pitching stories to educate public, answering queries, etc.)

Attachment No. 2: Other Scope of Work Assumptions

- The Corridor Public Outreach team will assist Caltrans and the City in coordinating and conducting the hearing and preparing the necessary handouts, materials, and exhibits for the hearing.
- The Corridor Public Outreach team will prepare the following deliverables:
 - Mailing Lists
 - Mailings
 - Meeting Materials
 - Ad in the newspaper
 - Documentation of Attendance
 - Recording of Comments
 - Public Hearing Plan
 - Record of Public Hearing
 - Public Hearing Plan (if needed)
 - Record of Public Hearing (if needed)

Stakeholders
 North County Transportation Coalition (NCTC)

M Metro

Caltrans

lancaster ca
it's positively clear.

Principal-in-Charge
***Raja Mitwasi, PE**

Project Manager
***Norman Suydam, PE**

QA/QC
Leslie Lui, PE

Design
***Richard Norton, PE**

Geometrics/Stage Construction/ Fact Sheets
 Ehsan Tavassoli, PE
 Kevin Yang, PE

Structural Engineer
 Faysal Aridi, PE
 Todd Lambert, PE

Drainage/SWDR
 Marlin Cruz

Cost Estimate/ Specification
 Leslie Lui, PE
 Danny Pheng

Pavement Delineation/Signage
 Kevin Yang, PE

Survey/Right-of-Way
 Brian D. Glidden, RE, LS, QSD⁴
 Eric Snyder, PLS⁴

Utilities
 Jim Schroeter, PE, LS⁴

Geotechnical
 Tom Benson, Jr, PE, GE³
 Gareth I. Mills, PG, CEG³

Landscape Concept
 David Sargent⁵

Project Report
 Ehsan Tavassoli, PE

Environmental
***Michael Amling¹**

CEQA/NEPA Environmental Planner
 Namrata Cariapa¹
 Mark Robinson, RPA¹
 Andrew Johnson¹
 Keith Cooper¹
 Zackry West¹
 Jon Hardie¹

Growth Inducement/Community Impacts/Section 4(f)/Visual
 Peter Feldman¹

Hazardous Material/ISA
 David Lennon, REA, CEM

Support Staff

Right-of-Way Acquisition
 Ron Wicks⁶
 Eva Polizzi⁶
 Mike Mason⁶

Urban Planning
 David Sargent⁵

Traffic Engineering
***Sarah Brandenburg, PE²**

Traffic Analysis
 Elliot Huang²

Traffic Safety Assessment

* Indicates Key Team Member

**Indicates Local Firm

Subconsultants:

1. ICF
2. Fehr & Peers
3. Leighton Group
4. Arrow Engineering Services, Inc. (AESI)**
5. Sargent Town Planning
6. Epic Land Solutions, Inc.

SR-138 (SR-14) Avenue K Interchange - PAED Project Schedule



WBS	Task Name	Duration	Start	Finish	2016												2017					
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	Notice to Proceed	0 days	2/1/16	2/1/16	◆																	
1	TASK 1 - Project Management	400 days	2/1/16	8/11/17																		
2	TASK 2 - Data Collection	24 days	2/1/16	3/3/16																		
3	TASK 3 - Mapping	70 days	2/19/16	5/26/16																		
4	TASK 4 - Traffic Operation Analysis	140 days	6/24/16	1/5/17																		
5	TASK 5 - Environmental Studies & Public Meeting	375 days	2/22/16	7/28/17																		
5.1	Technical Studies	190 days	2/22/16	11/11/16																		
5.2	Draft Environmental Document (DED) Circulation	125 days	9/19/16	3/10/17																		
5.3	Final Environmental Document	100 days	3/13/17	7/28/17																		
5.4	Public Meeting	0 days	2/22/17	2/22/17																		
6	TASK 6 - Project Report	353 days	4/25/16	8/30/17																		
6.1	Preliminary Geometric Design and Alternative Analysis	40 days	5/27/16	7/21/16																		
6.2	Design Exceptions to Design Standards	80 days	7/6/16	10/25/16																		
6.3	Preliminary Geotechnical Reports	50 days	7/22/16	9/29/16																		
6.4	Preliminary Drainage Report	50 days	7/22/16	9/29/16																		
6.5	Utility Coordination and Right of Way Data Sheet	150 days	4/25/16	11/18/16																		
6.6	Storm Water Data Report (SWDR)	50 days	7/22/16	9/29/16																		
6.7	Stage Construction	50 days	7/22/16	9/29/16																		
6.8	Transportation Management Plan	50 days	7/22/16	9/29/16																		
6.9	Landscape Concept/Aesthetic Concept	50 days	7/22/16	9/29/16																		
6.10	Urban Planning	50 days	7/22/16	9/29/16																		
6.11	Structural Advance Planning Studies	50 days	7/22/16	9/29/16																		
6.12	Cost Estimates	50 days	7/22/16	9/29/16																		
6.13	Draft Project Report	80 days	9/30/16	1/19/17																		
6.14	Final Project Report	50 days	6/22/17	8/30/17																		

Milestone ◆ Summary ■ Task ■ Critical Task ■

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 two (2) years 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 \$1,111,779.08. 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 three (3) calendar days following issuance of Notice to Proceed. It is anticipated that performance of the work will be completed within eighteen (18) months from commencement. In no event shall performance of the work be completed later than eighteen (18) months 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.

Raya Mitwasi, Vice President
TRC Solutions, Inc.



**PROJECT APPROVAL AND ENVIRONMENTAL DOCUMENT FOR
SR-14 (SR-138) AVENUE K INTERCHANGE**

December 8, 2015

Consultant	Labor	Expenses	Subtotal Cost
TRC	\$617,825.16	\$10,000.00	\$627,825.16
ICF Jones & Stokes, Inc.	\$220,383.30	\$4,200.00	\$224,583.30
Fehr & Peers	\$66,418.69	\$450.00	\$66,868.69
Leighton	\$20,973.11	\$500.00	\$21,473.11
Sargent	\$35,718.96	\$100.00	\$35,818.96
Arrow Engineering Services, Inc.	\$52,418.68	\$16,060.00	\$68,478.68
EPIC	\$63,231.19	\$3,500.00	\$66,731.19
TOTAL	\$1,076,969.08	\$34,810.00	\$1,111,779.08

SR-138 (SR-14) Avenue K Interchange PA/ED



TRC															
Activity	N. Suydam Project Manager \$285.63	L.Lui QA Manager \$161.07	R. Norton Sr. Project Engineer \$259.64	E.Tavassoli Project Engineer \$252.92	K.Yang Roadway/ Drainage Design \$171.05	D. Pheng Engineer \$114.55	M. Cruz Engineer \$131.35	F. Aridi Engineer \$171.36	T. Lambert Engineer \$202.24	D. Lennon ISA \$213.82	J. Ferrara ISA \$173.29	CADD Technician \$116.44	Administrato r/clerical \$91.64	Total Hours	Total Cost
PROJECT APPROVAL AND ENVIRONMENTAL DOCUMENT															
TASK 1 – PROJECT MANAGEMENT													40	433	\$110,736.40
1.1 Meetings	205		144	44										174	\$47,386.66
1.2 Administration	85		89										40	104	\$21,160.73
1.3 Project Management	40		55	20										155	\$42,189.01
TASK 2 – DATA COLLECTION				4	4	12	4						8	32	\$4,328.93
TASK 3 – MAPPING															
TASK 4 – TRAFFIC FORECASTING AND OPERATION ANALYSIS															
TASK 5 – ENVIRONMENTAL STUDIES AND PUBLIC MEETING															
5.1 Environmental Studies	40		40							30	30	16		156	\$35,287.08
5.2 Public Meeting										30	30			60	\$11,613.15
5.2 Public Meeting	40		40								16			96	\$23,673.93
TASK 6 – PROJECT REPORT															
6.1 Preliminary Geometric Design and Alternative Analysis	330	26	196	80	1,220		174	140	20			280		2,516	\$467,472.75
6.2 Design Exceptions to Design Standards (Fact Sheet) in State ROW	100	5	40	20	325		40					160		690	\$124,288.71
6.2 Design Exceptions to Design Standards (Fact Sheet) in State ROW	24	3	10		180							40		257	\$45,381.78
6.3 Preliminary Geotechnical Reports															
6.4 Preliminary Drainage Report	8	4	4		120		16							152	\$26,595.67
6.5 Utility Coordination and ROW Data Sheet	24		24		35	50								133	\$24,800.66
6.6 Storm Water Data Report (SWDR)	2	2	40		120		10					16		190	\$34,981.87
6.7 Stage Construction	4	2	6		80		16					16		124	\$20,671.28
6.8 Transportation Management Plan	4		4		40		8							56	\$10,073.94
6.9 Landscape Concept/Aesthetic Concept															
6.10 Urban Planning															
6.11 Structural Advance Planning Studies	4		4		20		24	140	20			20		232	\$39,118.62
6.12 Cost Estimates			4		40		40							84	\$13,134.48
6.13 Draft Project Report	80	5	40	40	180		20					8		373	\$78,505.88
6.14 Final Project Report	80	5	20	20	80							20		225	\$49,919.88
ODC															\$10,000.00
Total Design Hours	575	26	380	128	1,224	62	178	140	20	30	30	296	48	3,137	
Total Costs	\$164,237	\$4,188	\$98,664	\$32,373	\$209,368	\$7,102	\$23,380	\$23,991	\$4,045	\$6,415	\$5,199	\$34,467	\$4,399		\$627,825.16

**SR-138 (SR-14) Avenue K Interchange
PA/ED**



ICF Jones & Stokes, Inc.

Activity	Amling Michael Project Director \$278.89	Cariapa Namrata Senior Consultant II \$140.29	Johnson Andrew Associate Consultant II \$77.78	Crossen Shannon Senior Consultant I \$130.21	West Zackry Managing Consultant \$150.11	Franklin Lisa Associate Consultant III \$88.74	Parra Amanda Associate Consultant I \$88.87	Higginson Jon Senior Consultant II \$138.69	Hardie Jon Senior Consultant II \$144.01	Cooper Keith Sr Technical Analyst \$197.19	Whisman Russell Senior Consultant I \$98.07	Feldman Jessica Senior Consultant II \$137.13	Robinson Mark Sr Technical Analyst \$184.63	Richards Michael Senior Consultant I \$101.89	Feldman Peter Senior Consultant II \$105.84	Buscombe Brittany Associate Consultant III \$127.76	Mathias John Assistant Consultant \$99.48	Total Hours	Total Cost
PROJECT APPROVAL AND ENVIRONMENTAL DOCUMENT																			
TASK 1 – PROJECT MANAGEMENT																			
1.1 Meetings																			
1.2 Administration																			
1.3 Project Management																			
TASK 2 – DATA COLLECTION																			
TASK 3 – MAPPING																			
TASK 4 – TRAFFIC FORECASTING AND OPERATION ANALYSIS																			
TASK 5 – ENVIRONMENTAL STUDIES AND PUBLIC MEETING	58	260	420	40	16	58	58	120	100	40	170	104	12	20	40	176	164	1,856	\$220,383.30
5.1 Environmental Studies *	54	250	404	40	16	58	58	120	100	40	170	104	12	20	40	176	164	1,826	\$216,620.36
5.2 Public Meeting	4	10	16															30	\$3,762.94
TASK 6 – PROJECT REPORT																			
6.1 Preliminary Geometric Design and Alternative Analysis																			
6.2 Design Exceptions to Design Standards (Fact Sheet) in State ROW																			
6.3 Preliminary Geotechnical Reports																			
6.4 Preliminary Drainage Report																			
6.5 Utility Coordination and ROW Data Sheet																			
6.6 Storm Water Data Report (SWDR)																			
6.7 Stage Construction																			
6.8 Transportation Management Plan																			
6.9 Landscape Concept/Aesthetic Concept																			
6.10 Urban Planning																			
6.11 Structural Advance Planning Studies																			
6.12 Cost Estimates																			
6.13 Draft Project Report																			
6.14 Final Project Report																			
ODC																			\$4,200.00
Total Design Hours	58	260	420	40	16	58	58	120	100	40	170	104	12	20	40	176	164	1,856	
Total Costs	\$16,175	\$36,476	\$32,668	\$5,208	\$2,402	\$5,147	\$5,155	\$16,643	\$14,401	\$7,888	\$16,672	\$14,261	\$2,216	\$2,038	\$4,234	\$22,486	\$16,314		\$224,583.30

* TASK 5.1 Environmental Studies DOES NOT include OPTIONAL NES-MI Habitat Assessment for Burrowing OWL

OPTIONAL Additional Hours = 24
OPTIONAL Additional Cost = \$2,231.38

If Authorized:
TASK 5.1 TOTAL HOURS = 1826 + 24 = 1850
TASK 5.1 TOTAL COST = \$216,620.36 + \$2,231.38 = \$218,851.74

HOURLY RATE

All rates are "fully loaded", i.e., including all overhead costs, general, administrative and profit.

Key Personnel - TRC Solutions, Inc.

Name	Classification	Job Function	Hourly Billing Rate For 2014	Hourly Billing Rate For 2015	Hourly Billing Rate For 2016
Norm Suydam	Sr. Project Manager	Project Manager	\$261.27	\$269.10	\$277.18
Ehsan Tavassoli	Project Manager	Roadway	\$209.22	\$215.50	\$221.96
Kevin Yang	Sr. Project Engineer	QA Manager	\$153.66	\$158.27	\$163.02
Faysal Aridi	Sr. Project Engineer	Structures	\$159.82	\$164.62	\$169.56
Ka Lok Lui	Project Engineer	Roadway	\$141.86	\$146.12	\$150.50
Danny Pheng	Engineer	Roadway	\$104.79	\$107.93	\$111.17
Glenn Armstrong	Project Engineer	Roadway	\$134.02	\$138.04	\$142.18
Sanam Zinali	Engineer	Roadway	\$72.65	\$74.83	\$77.07
David Lennon	Sr. Project Manager	Hazardous Waste	\$195.59	\$201.46	\$207.51
Kathleen Stevens	Sr. Scientist	Hazardous Waste	\$135.53	\$139.60	\$143.78
Glenn Matsumoto	CADD/Technician	Roadway	\$90.52	\$93.23	\$96.03
Rose Moreno	Project Support/Administration	Roadway	\$69.74	\$71.83	\$73.99

Note:

These rates were calculated using the named personnel's actual salary as of 2/26/2014 and includes the following to develop fully burdened rates:

Overhead Rate:	164.17%
Profit:	10.0%
Annual Escalation Rate:	3.0%