

SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA



ITEM  
3.36  
(ID # 6559)

**MEETING DATE:**

Tuesday, April 10, 2018

**FROM :** TLMA-TRANSPORTATION:

**SUBJECT:** TRANSPORTATION AND LAND MANAGEMENT AGENCY/TRANSPORTATION:  
Approval of the Engineering Services Agreement by and between the County of Riverside and Falcon Engineering Services, Inc. to Perform Construction Management Services for the Limonite Avenue Interchange Project. 2nd District; [\$6,528,381 Total]; Local Funds 100%

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve the Engineering Services Agreement by and between the County of Riverside Falcon Engineering Services Inc.; and
2. Authorize the Chairman of the Board to execute the same on behalf of the County; and
3. Authorize the Director of Transportation, or his designee, to sign amendments up to \$550,000 for a maximum contract amount of \$6,528,381

**ACTION:** Policy

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**MINUTES OF THE BOARD OF SUPERVISORS**

On motion of Supervisor Jeffries, seconded by Supervisor Perez and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Tavaglione, Washington, Perez and Ashley  
Nays: None  
Absent: None  
Date: April 10, 2018  
xc: Transp.

Kecia Harper-Ihem  
Clerk of the Board

By:   
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

<b>FINANCIAL DATA</b>	<b>Current Fiscal Year:</b>	<b>Next Fiscal Year:</b>	<b>Total Cost:</b>	<b>Ongoing Cost</b>
<b>COST</b>	\$ 500,000	\$ 4,000,000	\$ 6,528,381	\$ 0
<b>NET COUNTY COST</b>	\$ 0	\$ 0	\$ 0	\$ 0
<b>SOURCE OF FUNDS:</b> Mira Loma Road and Bridge Benefit District (100%) There are no General Funds used on this project.			<b>Budget Adjustment:</b> No	
			<b>For Fiscal Year:</b> 2017/18 – 2019/20	

**C.E.O. RECOMMENDATION:** Approve

**BACKGROUND:**

**Summary**

The County of Riverside Transportation Department (County) in cooperation with the Cities of Eastvale and Jurupa Valley desire to improve the Limonite Avenue Interchange at Interstate 15. The project proposes to reconstruct, realign, and widen the existing I-15 and Limonite Avenue Interchange to reduce operational deficiencies, improve traffic operations and improve access to I-15 and businesses along Limonite Avenue.

The project is located within the jurisdictional boundaries of the Cities of Eastvale and Jurupa Valley (Cities). On January 29, 2013 (Agenda Item 3-47), the County and the cities of Eastvale and Jurupa Valley entered into a Cooperative Agreement By and Between Riverside County (County) and City of Jurupa Valley and City of Eastvale for completing the Environmental, Design and Right-of-Way acquisition phases of the interchange Project.

On April 28, 2017, the Governor approved Senate Bill 132 (SB-132) which added an appropriation to the Budget Act of 2016 which included provisions for providing \$48,000,000 in State funding to reconstruct the existing I-15/Limonite Avenue Interchange.

On October 17, 2017, Agenda Item 3.24, the Board approved an amendment to the agreement between the County and the Cities that added the Riverside County Transportation Commission (RCTC) as a party to the agreement for the administration of SB-132 Funds and designated the County as the lead agency for construction of the Project. On the same Agenda (Item 3.25), the Board approved the Construction Cooperative Agreement between the County of Riverside and Caltrans to identify the roles and responsibilities for the construction phase of the project.

The County issued a Request for Proposals in compliance with the Caltrans Local Assistance Procedures Manual. Seven firms submitted written proposals, and the top five firms, based on the evaluation of the written proposals, were interviewed. The written proposals and interviews were evaluated by representatives from Caltrans, the Cities, and the County.

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Falcon Engineering Services, Inc. was selected as the top-ranked firm to provide the construction management services. The scope and the negotiated fee for performing construction management services to construct this interchange project are provided in detail in Appendices "A" and "B" of the subject agreement. A not-to-exceed budget amount of \$5,978,381 was negotiated with Falcon Engineering Services, Inc. to perform the desired services.

As part of the Board of Supervisor's action on this item, the Transportation Department is also requesting delegation of authority to approve amendments not to exceed \$550,000 (9.2%) for additional services that are determined to be needed and are consistent with the construction management services necessary for the project.

Construction is expected to begin in summer 2018.

Project Number: A3-0393

**Impact on Residents and Businesses**

The proposed Limonite Avenue/Interstate 15 Interchange will reduce traffic congestion and improve overall traffic flow within the interchange and on the I-15 corridor for the current and future residents and businesses within the project region. The interchange will remain open for the duration of the construction phase with the exception of limited short term closures, typically during night hours.

Construction is scheduled to begin in summer 2018 and will take approximately 1.5 years to complete.

**Additional Fiscal Information**

The consultant's negotiated fee for construction management services is \$5,978,381 and will be funded using Mira Loma Road and Benefit District funds. This item also provides for the Director of Transportation, or his designee, to execute contract amendments for contingencies related to claims, time extensions granted to the construction contractor, and other unforeseen issues with the contractor that may arise to ensure completion of the construction contract with a total contract amount not to exceed \$6,528,381.

No General Funds will be used for this agreement.

**Contract History and Price Reasonableness**

The consultant's negotiated fee proposal of \$5,978,381, excluding contingency, is below the County's independent estimate of \$6,168,300.

**ATTACHMENTS:**

Vicinity Map  
Engineering Services Agreement

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*Kristine Bell-Valdez*  
Kristine Bell-Valdez, Supervising Deputy County Counsel

3/19/2018

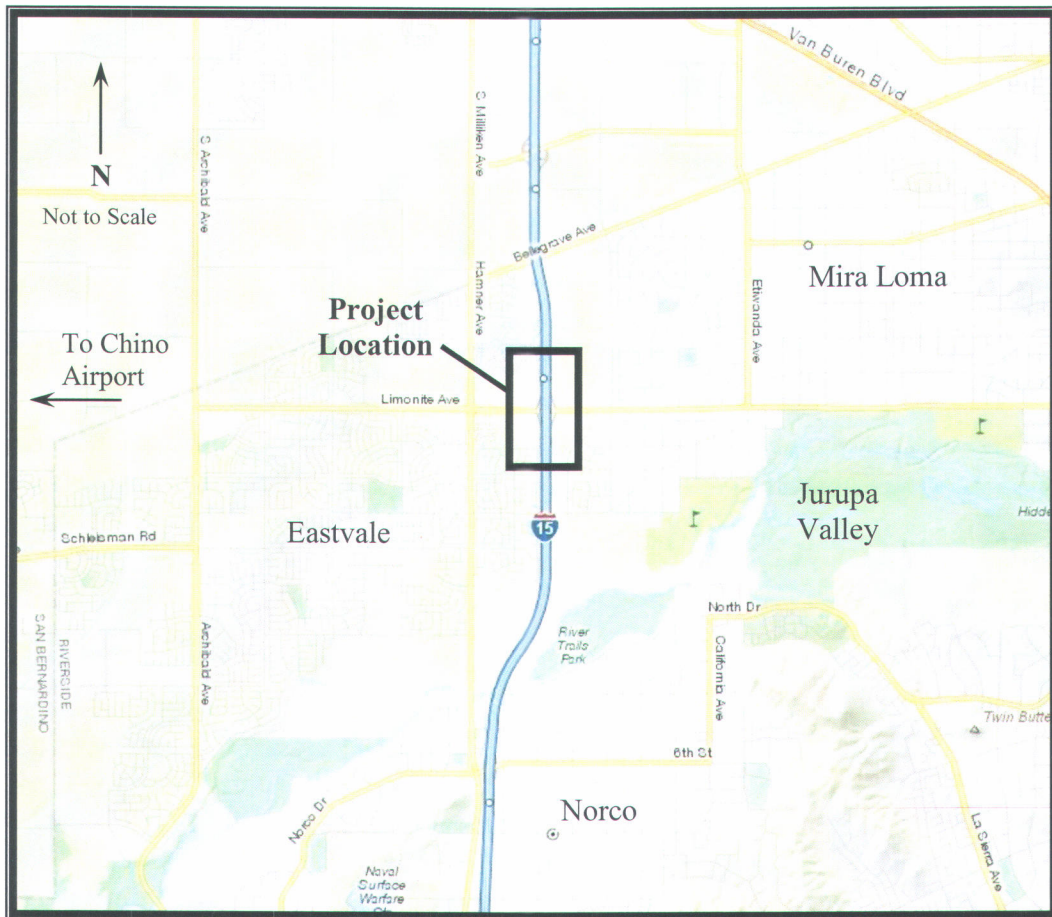
*Scott Bruckner*  
Scott Bruckner

4/2/2018

*Gregory V. Priamos*  
Gregory V. Priamos, Director County Counsel

3/19/2018

## Vicinity Map



On Route 15 from 0.7 miles south of Limonite Avenue  
to 0.7 miles north of Limonite Avenue



Federal Project No.  
Caltrans EA No. 0E150

Contract No. 18-03-006  
Riverside County Transportation

## ENGINEERING SERVICES AGREEMENT

for

**Construction Management Services**

between

**County of Riverside • Transportation Department**

and

**Falcon Engineering Services, Inc.**



APR 10 2018

3.36

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**ENGINEERING SERVICES AGREEMENT**

COUNTY OF RIVERSIDE, hereinafter referred to as "COUNTY", and Falcon Engineering Services, Inc., hereinafter referred to as "ENGINEER", located at the following addresses:

County of Riverside • Transportation Department	Falcon Engineering Services, Inc.
4080 Lemon Street, 8 <sup>th</sup> Floor	341 Terrace Circle Suite 101
Riverside, CA 92502	Corona, CA 92879

do hereby agree as follows:

**ARTICLE I • DESIGNATED CONTACTS**

Coordination of ENGINEER, and COUNTY activities shall be accomplished through an ENGINEERING PROJECT MANAGER, and a COUNTY PROJECT MANAGER.

The ENGINEERING PROJECT MANAGER for ENGINEER shall be:

Wael Faqih, P.E.

The RESIDENT ENGINEER for ENGINEER shall be:

Wael Faqih, P.E.

The STRUCTURES REPRESENTATIVE for ENGINEER shall be:

John Buckley, P.E.

The COUNTY PROJECT MANAGER for COUNTY shall be:

Cindi Wachi, P.E.

**ARTICLE II • PROJECT DEFINITION**

ENGINEER shall furnish all technical and professional services including labor, material, equipment, transportation, supervision, and expertise to fully and adequately perform and complete the covenants set forth in Appendix A, Scope of Services, which is attached hereto and incorporated herein by reference. All services and deliverables associated with the performance and accomplishment of the covenants described in the Scope of Services is hereinafter collectively referred to as the "PROJECT".

**ARTICLE III • COOPERATIVE AGENCIES**

**A. Lead Agency**

COUNTY is designated as the lead agency for PROJECT and is working cooperatively with other agencies



1 in the effort to complete PROJECT.

2 **B. Cooperative Agencies**

3 The cooperating agencies are listed below and will hereinafter be collectively referred to as the  
4 "AGENCIES".

5 Caltrans	City of Eastvale
6 City of Jurupa Valley	Utility Companies
7 Riverside County Transportation Commission	

8 **C. COUNTY/AGENCIES Standards**

9 All deliverables shall be prepared in accordance with the current COUNTY and AGENCIES practices,  
10 regulations, policies, procedures, manuals and standards where applicable. All deliverables are subject to  
11 review and approval by COUNTY and AGENCIES as applicable.

12 **ARTICLE IV • CONDITIONS**

13 **A. Notifications**

14 All notices hereunder and communications regarding interpretation of the terms of this contract and  
15 changes thereto shall be effected by the mailing thereof by registered or certified mail, return receipt  
16 requested, postage prepaid and addressed to the attention of the ENGINEERING PROJECT MANAGER  
17 or the COUNTY PROJECT MANAGER at the respective addresses provided on page one of this contract.

18 **B. Assignment**

19 Without written consent of COUNTY, this contract is not assignable by ENGINEER either in whole or in  
20 part.

21 **C. Subcontracts**

- 22 1. ENGINEER shall perform the services contemplated with resources available within its own organization  
23 and listed sub-consultants. No portion of the services pertinent to this contract shall be subcontracted  
24 without written authorization by the COUNTY PROJECT MANAGER, except that which is expressly  
25 identified in this contract.
- 26 2. In the event ENGINEER subcontracts any portion of ENGINEER's duties under this contract, ENGINEER  
27 shall require its subcontractors to comply with the terms of this contract in the same manner as required of  
28 ENGINEER including, but not limited to; indemnification of the COUNTY, requiring the same insurance of  
29 Subcontractors as required of ENGINEER, and having Subcontractor's insurance name the COUNTY as

1 Additional Insured for each type of insurance where this Agreement requires ENGINEER's insurance to  
2 name COUNTY as Additional Insured.

- 3 3. Any substitution of subconsultants must be approved in writing by COUNTY's PROJECT MANAGER prior  
4 to the start of work by the subconsultant.

5 **D. Modifications**

- 6 1. This contract may be amended or modified only by mutual written agreement of the parties. No alteration  
7 or variation of the terms of this contract will be valid unless made in writing and signed by the parties hereto  
8 and no oral understanding or agreement not incorporated herein, will be binding on any of the parties hereto.
- 9 2. Minor modifications are changes that do not substantially affect the Scope of Service. Minor modifications  
10 may be: a shift of funds between tasks within a budget category; the shifting of work and/or funding from  
11 one phase to another; use of contingency pursuant to Article VI.B.1. All requests for minor modifications  
12 must be approved in writing by the Director of Transportation, or his designee, prior to implementing the  
13 change.
- 14 3. There shall be no change in the ENGINEERING PROJECT MANAGER, the identified RESIDENT  
15 ENGINEER, the identified STRUCTURES REPRESENTATIVE or key members of the PROJECT team  
16 without prior written approval by the COUNTY PROJECT MANAGER.
- 17 4. All modifications that do not fit within the definition of a minor modification to the contract shall be considered  
18 a major change and must be approved in writing by the ENGINEER and COUNTY Board of Supervisors  
19 prior to implementing the major change.

20 **E. COUNTY Directives**

21 ENGINEER shall receive contract directions and interpretations from the COUNTY PROJECT MANAGER.

22 **F. Liability**

- 23 1. ENGINEER has total responsibility for the accuracy and completeness of all documentation, reports, plans,  
24 calculations and estimates prepared by or on behalf of ENGINEER for this PROJECT and shall check all  
25 such material accordingly. The data and plans will be reviewed by COUNTY. The responsibility for  
26 accuracy and completeness of such items remains solely that of ENGINEER. Neither COUNTY'S review  
27 or approval shall give rise to any liability or responsibility on the part of COUNTY, or waive any of  
28 COUNTY'S rights, or relieve ENGINEER of its professional responsibilities or obligations under this  
29 contract.

2. The plans, estimates, calculations, reports and other documents furnished in accordance with the Scope of Services shall meet the criteria for acceptance and be a product of neat appearance, well organized, technically and grammatically correct, checked and having the preparer and checker identified. The minimum standard of appearance, organization and contents shall be of similar types produced by COUNTY and AGENCIES. If any work product submitted is not complete and ready for use by COUNTY, it shall be marked "Draft" or similar designation to indicate it is not ready for use by COUNTY. COUNTY expects that all work product not so designated is ready for and can be used on PROJECT.
3. The page identifying preparers of engineering reports, the title sheet for calculations and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of the certificate, and signature of the professional engineer(s) responsible for their preparation.
4. COUNTY and ENGINEER agree that reports, plans, drawings or other work products prepared by ENGINEER are for the exclusive use of COUNTY and will be used by COUNTY for the PROJECT for which they were specifically designed. ENGINEER shall not be responsible for use of such plans, drawings or other work products if used on a different project without the written authorization or approval by ENGINEER.
5. ENGINEER acknowledges that the plans, drawings and/or other work products may be used by COUNTY for the PROJECT regardless of any disputes that may develop between ENGINEER and COUNTY. All plans, drawings, or other work product shall be deemed the sole and exclusive property of COUNTY and ownership thereof is irrevocably vested in COUNTY whether the PROJECT is executed or not.
6. ENGINEER, and the agents and employees of ENGINEER, in the performance of this contract, shall act in an independent capacity and not as officers, employees or agents of COUNTY.

**G. Indemnification and Defense**

1. To the fullest extent permitted by applicable law, ENGINEER agrees to and shall indemnify, defend and hold harmless the County of Riverside, its Agencies, Districts, Departments and Special Districts, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents, volunteers and representatives (hereinafter individually and collectively referred to as "Indemnitees") from all liability, including, but not limited to loss, suits, claims, demands, actions, or proceedings caused by any alleged or actual negligence, recklessness, or willful misconduct, of ENGINEER, its directors, officers, partners, employees, agents, subconsultants or representatives or any person or organization for whom

- 1 ENGINEER is responsible, arising out of or from the performance of services under this Agreement.
- 2 2. ENGINEER further agrees to and shall indemnify and hold harmless the County of Riverside, its Agencies,  
3 Districts, Departments and Special Districts, their respective directors, officers, Board of Supervisors,  
4 elected and appointed officials, employees, agents and representatives (hereinafter individually and  
5 collectively referred to as "Indemnitees") from all liability arising from suits, claims, demands, actions, or  
6 proceedings made by agents, employees or subcontractors of ENGINEER for salary, wages,  
7 compensation, health benefits, insurance, retirement or any other benefit not explicitly set forth in this  
8 contract and arising out of work performed for COUNTY pursuant to this contract or any Work Assignment.
- 9 3. The duty to indemnify does not include loss, suits, claims, demands, actions, or proceedings caused by  
10 actual negligence of Indemnitees; however, any actual negligence of Indemnitees will only affect the duty  
11 to indemnify for the specific act adjudged by findings of a court of competent jurisdiction to be negligence  
12 of the Indemnitees, and will not preclude a duty to indemnify for any negligence, recklessness, or willful  
13 misconduct of ENGINEER.
- 14 4. To the fullest extent permitted by applicable law, ENGINEER shall defend and pay, at its sole expense, all  
15 costs and fees, including but not limited to attorney fees, cost of investigation, and defense, in any loss,  
16 suits, claims, demands, actions, or proceedings based or alleged to be based on any negligence,  
17 recklessness or willful misconduct of ENGINEER arising out of or from the performance of services under  
18 this Agreement. The duty to defend applies to any alleged or actual negligence, recklessness, or willful  
19 misconduct of ENGINEER. The duty to defend shall apply whether or not ENGINEER is a party to the  
20 lawsuit, and shall apply whether or not ENGINEER is directly liable to the plaintiffs in the lawsuit. The duty  
21 to defend applies even if Indemnitees are alleged or found to be actively negligent, unless the negligent act  
22 error or omission at issue was caused by the sole active negligence of Indemnitees.
- 23 5. The specified insurance provisions and limits required in this Agreement shall in no way limit or circumscribe  
24 ENGINEER'S obligations to indemnify and hold harmless Indemnitees from third party claims.
- 25 6. In the event there is conflict between the indemnity and defense provisions and California Civil Code  
26 Sections 2782 and 2782.8, the indemnity and defense provisions shall be interpreted to comply with Civil  
27 Code sections 2782 and 2782.8.

28 **H. Quality Control**

29 ENGINEER shall implement and maintain the following quality control procedures during the preparation  
Engineering Services Agreement

1 of the reports, calculations, plans and other documents relating to PROJECT. ENGINEER shall have a  
2 quality control plan in effect during the entire time services are being performed under this Agreement. The  
3 plan shall establish a process whereby reports are reviewed and calculations are independently checked,  
4 plans checked, corrected and back-checked, and all job related correspondence and memoranda routed  
5 and received by affected persons and then bound in appropriate job files. The COUNTY PROJECT  
6 MANAGER may request evidence that the quality control plan is functional.

7 **I. Extra Work**

- 8 1. ENGINEER shall not perform Extra Work until receiving written authorization from the COUNTY PROJECT  
9 MANAGER.
- 10 2. In the event that COUNTY directs ENGINEER to provide services constituting Extra Work, COUNTY shall  
11 provide extra compensation to the ENGINEER. Allowable compensation for approved extra work will be  
12 based on the provisions of Appendix B, Budget, which is attached hereto and incorporated herein by  
13 reference.
- 14 3. An amendment to this contract providing for such compensation for Extra Work shall be issued by COUNTY  
15 to ENGINEER. Such Amendment shall not be effective until executed by both parties.

16 **J. Disputes**

- 17 1. In the event ENGINEER considers any work demanded of him to be outside the requirements of the  
18 contract, or if he considers any order, instruction, or decision of COUNTY to be unfair, he shall promptly  
19 upon receipt of such order, instruction or decision, ask for a written confirmation of the same whereupon  
20 he shall proceed without delay to perform the work or to conform to the order, instruction, or decision; but  
21 unless ENGINEER finds such order, instruction, or decision satisfactory, he shall within 20 days after receipt  
22 of same, file a written protest with COUNTY stating clearly and in detail his objections and reasons  
23 therefore. Except for such protests or objections as are made of record in the manner specified and within  
24 the time stated herein, and except for such instances where the basis of a protest could not reasonably  
25 have been foreseen by ENGINEER within the time limit specified for protest, ENGINEER hereby waives all  
26 grounds for protests or objections to the orders, instruction, or decisions of COUNTY and hereby agrees  
27 that, as to all matters not included in such protests, the orders, instructions and decisions of COUNTY will  
28 be limited to matters properly falling within COUNTY's authority. In the event of a dispute or objection over  
29 work requested by COUNTY pursuant to this contract, ENGINEER agrees to first consult with COUNTY

1 PROJECT MANAGER regarding the dispute or objection and to take all appropriate action to protect the  
2 interests of COUNTY and the PROJECT, including promptly complying with COUNTY requests when time  
3 is of the essence.

- 4 2. Any controversy or claim arising out of or relating to this contract which cannot be resolved by mutual  
5 agreement may be settled by arbitration in accordance with the rules of the American Arbitration  
6 Association, provided that the parties mutually agree to submit to arbitration.
- 7 3. Neither the pendency of a dispute nor its consideration by arbitration will excuse ENGINEER from full and  
8 timely performance in accordance with the terms of the contract.

9 **K. Termination Without Cause**

- 10 1. COUNTY reserves the right to terminate this contract at COUNTY's discretion and without cause, upon  
11 thirty (30) calendar days written notice to ENGINEER.
- 12 2. In the event of termination of the Agreement, upon demand, ENGINEER shall deliver to COUNTY all field  
13 notes, surveys, studies, reports, plans, drawings, specifications, and all other materials and documents  
14 prepared by or provided to ENGINEER in the performance of this contract. All such documents and  
15 materials shall be property of COUNTY.
- 16 3. In the event that this Agreement is terminated, ENGINEER is entitled to full payment for all services  
17 performed up to the time written notice of contract cancellation is received by ENGINEER. Payment shall  
18 be made for services performed to date based upon Appendix A, Scope of Services, as contracted for, less  
19 payments made to date; plus any amount for authorized, but unpaid, extra work performed and costs  
20 incurred.

21 **L. Termination for Lack of Performance**

22 COUNTY may terminate this contract and be relieved of the payment of any consideration to ENGINEER  
23 should ENGINEER fail to perform the covenants herein contained at the time and in the manner herein  
24 provided. In the event of such termination, COUNTY may proceed with the work in any manner deemed  
25 proper by COUNTY. In such event, ENGINEER shall be paid only for work completed and delivered to  
26 COUNTY in a timely and successful manner. In the event of termination for cause or failure to perform by  
27 ENGINEER, COUNTY will be relieved of the payment of any consideration to ENGINEER should  
28 ENGINEER fail to perform the covenants herein contained at the time and in the manner herein provided.

29 **M. Insurance**

1 Without limiting or diminishing the ENGINEER'S obligation to indemnify or hold the COUNTY harmless,  
2 ENGINEER shall procure and maintain or cause to be maintained, at its sole cost and expense, the following  
3 insurance coverages during the term of this Agreement. As respects to the insurance section only, the COUNTY  
4 herein refers to the County of Riverside, its Agencies, Districts, Special Districts, and Departments, their  
5 respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or  
6 representatives as Additional Insureds.

7 1. Workers' Compensation:

8 If the ENGINEER has employees as defined by the State of California, the ENGINEER shall maintain  
9 statutory Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of  
10 California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits  
11 not less than \$1,000,000 per person per accident. The policy shall be endorsed to waive subrogation in  
12 favor of The County of Riverside.

13 2. Commercial General Liability:

14 Commercial General Liability insurance coverage, including but not limited to, premises liability, unmodified  
15 contractual liability, products and completed operations liability, personal and advertising injury, and cross  
16 liability coverage, covering claims which may arise from or out of ENGINEER'S performance of its  
17 obligations hereunder. Policy shall name the COUNTY as Additional Insured. Policy's limit of liability shall  
18 not be less than \$1,000,000 per occurrence combined single limit. If such insurance contains a general  
19 aggregate limit, it shall apply separately to this Agreement or be no less than two (2) times the occurrence  
20 limit.

21 3. Vehicle Liability:

22 If vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then  
23 ENGINEER shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an  
24 amount not less than \$1,000,000 per occurrence combined single limit. If such insurance contains a general  
25 aggregate limit, it shall apply separately to this Agreement or be no less than two (2) times the occurrence  
26 limit. Policy shall name the COUNTY as Additional Insureds.

27 4. Professional Liability

28 ENGINEER shall maintain Professional Liability Insurance providing coverage for the ENGINEER'S  
29 performance of work included within this Agreement, with a limit of liability of not less than \$1,000,000 per



1 occurrence and \$2,000,000 annual aggregate. If ENGINEER's Professional Liability Insurance is written on  
2 a claims made basis rather than an occurrence basis, such insurance shall continue through the term of  
3 this Agreement and ENGINEER shall purchase at his sole expense either 1) an Extended Reporting  
4 Endorsement (also, known as Tail Coverage); or 2) Prior Dates Coverage from new insurer with a  
5 retroactive date back to the date of, or prior to, the inception of this Agreement; or 3) demonstrate through  
6 Certificates of Insurance that ENGINEER has Maintained continuous coverage with the same or original  
7 insurer. Coverage provided under items; 1), 2), or 3) will continue as long as the law allows.

8 5. General Insurance Provisions - All lines:

9 a. Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of  
10 California and have an A M BEST rating of not less than A: VIII (A:8) unless such requirements are  
11 waived, in writing, by the County Risk Manager. If the County's Risk Manager waives a requirement for  
12 a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

13 b. The ENGINEER must declare its insurance self-insured retention for each coverage required herein. If  
14 any such self-insured retention exceed \$500,000 per occurrence each such retention shall have the  
15 prior written consent of the County Risk Manager before the commencement of operations under this  
16 Agreement. Upon notification of self-insured retention unacceptable to the COUNTY, and at the election  
17 of the Country's Risk Manager, ENGINEER'S carriers shall either; 1) reduce or eliminate such self-  
18 insured retention as respects this Agreement with the COUNTY, or 2) procure a bond which guarantees  
19 payment of losses and related investigations, claims administration, and defense costs and expenses.

20 c. ENGINEER shall cause ENGINEER's insurance carrier(s) to furnish the COUNTY with either 1) a  
21 properly executed original Certificate(s) of Insurance and certified original copies of Endorsements  
22 effecting coverage as required herein, and 2) if requested to do so orally or in writing by the County  
23 Risk Manager, provide original Certified copies of policies including all Endorsements and all  
24 attachments thereto, showing such insurance is in full force and effect. Further, said Certificate(s) and  
25 policies of insurance shall contain the covenant of the insurance carrier(s) that thirty (30) days written  
26 notice shall be given to the COUNTY prior to any material modification, cancellation, expiration or  
27 reduction in coverage of such insurance. In the event of a material modification, cancellation, expiration,  
28 or reduction in coverage, this Agreement shall terminate forthwith, unless the COUNTY receives, prior  
29 to such effective date, another properly executed original Certificate of Insurance and original copies

1 of endorsements or certified original policies, including all endorsements and attachments thereto  
2 evidencing coverages set forth herein and the insurance required herein is in full force and effect.  
3 ENGINEER shall not commence operations until the COUNTY has been furnished original Certificate  
4 (s) of Insurance and certified original copies of endorsements and if requested, certified original policies  
5 of insurance including all endorsements and any and all other attachments as required in this Section.  
6 An individual authorized by the insurance carrier to do so on its behalf shall sign the original  
7 endorsements for each policy and the Certificate of Insurance.

- 8 d. It is understood and agreed to by the parties hereto that the ENGINEER's insurance shall be construed  
9 as primary insurance, and the COUNTY's insurance and/or deductibles and/or self-insured retentions  
10 or self-insured programs shall not be construed as contributory.
- 11 e. If, during the term of this Agreement or any extension thereof, there is a material change in the scope  
12 of services; or, there is a material change in the equipment to be used in the performance of the scope  
13 of work; or, the term of this Agreement, including any extensions thereof, exceeds five (5) years; the  
14 COUNTY reserves the right to adjust the types of insurance and the monetary limits of liability required  
15 under this Agreement, if in the County Risk Manager's reasonable judgment, the amount or type of  
16 insurance carried by the ENGINEER has become inadequate.
- 17 f. ENGINEER shall pass down the insurance obligations contained herein to all tiers of subconsultants  
18 working under this Agreement.
- 19 g. The insurance requirements contained in this Agreement may be met with a program(s) of self-  
20 insurance acceptable to the COUNTY.
- 21 h. ENGINEER agrees to notify COUNTY of any claim by a third party or any incident or event that may  
22 give rise to a claim arising from the performance of this Agreement.

23 **N. Conflict of Interest**

- 24 1. ENGINEER warrants, by execution of this contract, that no person or selling agency has been employed or  
25 retained to solicit or secure this contract upon an agreement or understanding for a commission,  
26 percentage, brokerage or contingent fee, excepting bona fide employees or bona fide established  
27 commercial or selling agencies maintained by ENGINEER for the purpose of securing business. For breach  
28 or violation of this warranty, COUNTY has the right to annul this contract without liability, pay only for the  
29 value of the work actually performed, or in its discretion to deduct from the contract price or consideration,

1 or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.  
2 ENGINEER may be requested to complete a Conflict of Interest Statement prior to, during, or after  
3 execution of this contract. ENGINEER understands that as a condition of this contract ENGINEER agrees  
4 to complete the Conflict of Interest Statement when requested to do so by COUNTY.

5 2. ENGINEER shall disclose any financial, business, or other relationship with COUNTY that may have an  
6 impact upon the outcome of this contract, or any ensuing COUNTY construction project. ENGINEER shall  
7 also list current clients who may have a financial interest in the outcome of this contract, or any ensuing  
8 COUNTY construction project, which will follow.

9 3. ENGINEER hereby certifies that it does not now have, nor shall it acquire any financial or business interest  
10 that would conflict with the performance of services under this contract.

11 4. ENGINEER hereby certifies that neither ENGINEER, its employees, nor any firm affiliated with ENGINEER  
12 providing services on this project prepared the Plans, Specifications, and Estimate for any construction  
13 project included within this contract. An affiliated firm is one, which is subject to the control of the same  
14 persons through joint- ownership, or otherwise.

15 5. ENGINEER further certifies that neither CONSULTANT, nor any firm affiliated with ENGINEER, will bid on  
16 any construction subcontracts included within the construction contract. Additionally, ENGINEER certifies  
17 that no person working under this contract is also employed by the construction contractor for any project  
18 included within this contract.

19 6. Except for subconsultants whose services are limited to materials testing, no subconsultant who is providing  
20 service on this contract shall have provided services on the design of any project included within this  
21 contract.

22 **O. Legal Compliance**

23 ENGINEER shall comply with all Federal, State and local laws, statutes, ordinances, rules and regulations,  
24 and the orders and decrees of any courts or administrative bodies or tribunals currently in effect and in any  
25 manner affecting the performance of this contract, including, without limitation, workers' compensation laws  
26 and licensing and regulations. Failure to comply by ENGINEER may impact the continued availability of  
27 funding for this Agreement and may be grounds for termination by the COUNTY.

28 **P. Nondiscrimination**

29 1. During the performance of this contract, ENGINEER and its Subcontractors shall not act unlawfully against

1 any employee or applicant for employment because of race, religion, color, national origin, ancestry,  
2 physical handicap, medical condition, marital status, age or sex. ENGINEER and Subcontractor shall  
3 comply with the provisions of the Fair Employment and Housing Act (Government Code, Section 12900 et  
4 seq.) and applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section  
5 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing  
6 Government Code, Section 12900, set forth in Chapter 5 of Division 4 of Title 2 of the California  
7 Administrative Code are incorporated into this contract by reference and made a part hereof as if set forth  
8 in full. ENGINEER and its Subcontractors shall give written notice of their obligations under this clause to  
9 labor organizations with which they have a collective bargaining or other agreement.

- 10 2. ENGINEER will provide all information and reports required by the Regulations, or orders and instructions  
11 issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information,  
12 and its facilities as may be determined by COUNTY or AGENCIES to be pertinent to ascertain compliance  
13 with such Regulations, orders and instructions. Where any information required of ENGINEER is in the  
14 exclusive possession of another who fails or refuses to furnish this information, ENGINEER shall so certify  
15 to COUNTY, or the Federal Highway Administration as appropriate and shall set forth what efforts he has  
16 made to obtain the information.
- 17 3. In the event of ENGINEER's noncompliance with the nondiscrimination provisions of this contract, COUNTY  
18 shall impose such contract sanctions as it determines to be appropriate, including, but not limited to:
- 19 • Withholding of payments to ENGINEER under the contract until ENGINEER complies;
  - 20 • Cancellation, termination, or suspension of the contract in whole or in part.
- 21 4. ENGINEER shall include the nondiscrimination and compliance provisions of this clause in all subcontracts  
22 to perform work under this contract.
- 23 5. ENGINEER shall comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, 49 CFR  
24 21 through Appendix H and 23 CFR 710.405(b) are applicable to this contract by reference.

25 **Q. Labor Code and Prevailing Wages**

- 26 1. Certain Classifications of Labor under this contract may be subject to prevailing wage requirements.
- 27 2. Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section  
28 1720). By this reference said Chapter 1 is incorporated herein with like effect as if it were here set forth in  
29 full. The parties recognize that said Chapter 1 deals, among other things with discrimination, penalties and

1 forfeitures, their disposition and enforcement, wages, working hours, and securing worker's compensation  
2 insurance and directly effect the method of prosecution of the work by ENGINEER and subject it under  
3 certain conditions to penalties and forfeitures. Execution of the contract by the parties constitutes their  
4 agreement to abide by said Chapter 1, their stipulation as to all matters which they are required to stipulate  
5 as to by the provisions of said Chapter 1, constitutes ENGINEER's certification that he is aware of the  
6 provisions of said Chapter 1 and will comply with them and further constitutes ENGINEER's certification as  
7 follows: "I am aware of the provisions of Section 3700 of the California Labor Code which require every  
8 employer to be insured against liability for worker's compensation or to undertake self-insurance in  
9 accordance with the provisions of that Code, and I will comply with such provisions before commencing the  
10 performance of the work of this contract."

- 11 3. Pursuant to Section 1770 of the Labor Code, the general prevailing wage rates, including the per diem  
12 wages applicable to the work, and for holiday and overtime work, including employer payments for health  
13 and welfare, pension, vacation, and similar purposes, in the county in which the work is to be done have  
14 been determined by the Director of the California Department of Industrial Relations. These wages are  
15 available from the California Department of Industrial Relations' Internet website at <http://www.dir.ca.gov>.
- 16 4. Should a portion of the project contain Federal funding, Federal minimum wages shall be used. The Federal  
17 minimum wage rates for this project as determined by the United States Secretary of Labor are available  
18 from the U.S Department of Labor, Employment Standards Administration, Wage and Hour Division's  
19 Internet website at <http://www.access.gpo.gov/davisbacon>. If there is a difference between the minimum  
20 wage rates determined by the Secretary of Labor and the general prevailing wage rates determined by the  
21 Director of the California Department of Industrial Relations for similar classifications of labor, the  
22 ENGINEER and subcontractors shall pay not less than the higher wage rate. The Department will not  
23 accept lower State wage rates determinations. This includes "helper" (or other classifications based on  
24 hours of experience) or any other classification not appearing in the Federal wage determinations. Where  
25 Federal wage determinations do not contain the State wage rate determination otherwise available for use  
26 by the ENGINEER and subcontractors, the ENGINEER and subcontractors shall pay not less than the  
27 Federal minimum wage rate which most closely approximates the duties of the employees in question.

28 **R. Review and Inspection**

29 ENGINEER and any Subcontractors shall permit COUNTY and/or AGENCIES to review and inspect

1 PROJECT activities and files at all reasonable times, including review and inspection on a daily basis,  
2 during the performance period of this contract.

3 **S. Record Retention / Audits**

- 4 1. ENGINEER's and subconsultants' contracts, including cost proposals and indirect cost rates (ICR), are  
5 subject to audits or reviews such as, but not limited to, a Contract Audit, an Incurred Cost Audit, an ICR  
6 Audit, or a certified public accountant (CPA) ICR Audit Workpaper Review. If selected for audit or review,  
7 the contract, cost proposal and ICR and related workpapers, if applicable, will be reviewed to verify  
8 compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR  
9 Audit Workpaper Review, it is ENGINEER's responsibility to ensure federal, state, or local government  
10 officials are allowed full access to the CPA's workpapers. The contract, cost proposal, and ICR shall be  
11 adjusted by ENGINEER and approved by COUNTY contract manager to conform to the audit or review  
12 recommendations. ENGINEER agrees that individual terms of costs identified in the audit report shall be  
13 incorporated into the contract by this reference if directed by COUNTY at its sole discretion. Refusal by  
14 ENGINEER to incorporate audit or review recommendations, or to ensure that the Federal, State, or local  
15 governments have access to CPA workpapers, will be considered a breach of contract terms and cause for  
16 termination of the contract and disallowance of prior reimbursed costs.
- 17 2. ENGINEER, Subcontractors, and COUNTY shall maintain all books, documents, papers, accounting  
18 records, and other evidence pertaining to the performance of the contract, but not limited to, the costs of  
19 administering the contract. All parties shall make such materials available at their respective offices at all  
20 reasonable times during the contract period and for ten years from the date of final payment under the  
21 contract or ten years from project closeout, whichever is later.
- 22 3. COUNTY, Caltrans, the State Auditor General, FHWA or any duly authorized representative of the Federal  
23 Government shall have access to any books, records, and documents of ENGINEER that are pertinent to  
24 the contract for audits, examinations, excerpts, and transactions, and copies thereof shall be furnished if  
25 requested.
- 26 4. Any dispute concerning a question of fact arising under an interim or post audit of this contract that is not  
27 disposed of by agreement, shall be reviewed by COUNTY's Chief Financial Officer.
- 28 5. Not later than 30 days after issuance of the final audit report, ENGINEER may request a review by  
29 COUNTY's Chief Financial Officer of unresolved audit issues. The request for review will be submitted in

1 writing.

- 2 6. Neither the pendency of a dispute nor its consideration by COUNTY will excuse ENGINEER from full and  
3 timely performance, in accordance with the terms of this contract.

4 **T. Rebates, Kickbacks, or Other Unlawful Consideration**

- 5 1. ENGINEER warrants that this contract was not obtained or secured through rebates kickbacks or other  
6 unlawful consideration, either promised or paid to any COUNTY employee. For breach or violation of this  
7 warranty, COUNTY shall have the right in its discretion; to terminate the contract without liability; to pay  
8 only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover  
9 the full amount of such rebate, kickback or other unlawful consideration.

10 **U. Prohibition of Expending Local Agency, State, or Federal Funds for Lobbying**

- 11 1. ENGINEER certifies to the best of his or her knowledge and belief that:
- 12 a. No state, federal or local agency appropriated funds have been paid, or will be paid by-or-on behalf of  
13 ENGINEER to any person for influencing or attempting to influence an officer or employee of any state  
14 or federal agency; a Member of the State Legislature or United States Congress; an officer or employee  
15 of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in  
16 connection with the awarding of any state or federal contract; the making of any state or federal grant;  
17 the making of any state or federal loan; the entering into of any cooperative agreement, and the  
18 extension, continuation, renewal, amendment, or modification of any state or federal contract, grant,  
19 loan, or cooperative agreement.
- 20 b. If any funds other than federal appropriated funds have been paid, or will be paid to any person for  
21 influencing or attempting to influence an officer or employee of any federal agency; a Member of  
22 Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection  
23 with this federal contract, grant, loan, or cooperative agreement; ENGINEER shall complete and submit  
24 Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- 25 2. This certification is a material representation of fact upon which reliance was placed when this transaction  
26 was made or entered into. Submission of this certification is a prerequisite for making or entering into this  
27 transaction imposed by Section 1352, Title 31, US. Code. Any person who fails to file the required  
28 certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each  
29 such failure.



- 1           3. ENGINEER also agrees by signing this document that he or she shall require that the language of this  
2           certification be included in all lower-tier subcontracts, which exceed \$100,000, and that all such sub  
3           recipients shall certify and disclose accordingly.

4           **V. Ownership of Data**

5           Ownership and title to all reports, documents, plans, calculations, and estimates produced as part of this  
6           contract will automatically be vested in COUNTY and no further agreement will be necessary to transfer  
7           ownership to COUNTY.

8           **W. Confidentiality of Data**

- 9           1. All financial, statistical, personal, technical or other data and information which is designated confidential  
10           by COUNTY or AGENCIES, and made available to ENGINEER in order to carry out this contract, shall be  
11           protected by ENGINEER from unauthorized use and disclosure.
- 12           2. Permission to disclose information on one occasion for a public hearing held by COUNTY or AGENCIES  
13           relating to this Agreement shall not authorize ENGINEER to further disclose such information or  
14           disseminate the same on any other occasion.
- 15           3. ENGINEER shall not comment publicly to the press or any other media regarding this Agreement, including  
16           COUNTY or Agencies actions regarding this contract. Communication shall be limited to COUNTY, Agency  
17           or ENGINEER's staff that are involved with the project, unless ENGINEER shall be requested by COUNTY  
18           to attend a public hearing or respond to questions from a Legislative committee.
- 19           4. Each subcontract shall contain all provisions of this article related to the confidentiality of data and  
20           nondisclosure of the same.
- 21           5. ENGINEER shall not issue any news release or public relations item of any nature whatsoever regarding  
22           work performed or to be performed under this contract without prior review of the contents thereof by  
23           COUNTY and receipt of COUNTY's written permission.

24           **X. Funding Requirements**

- 25           1. All obligations of COUNTY are subject to appropriation of resources by various Federal, State and local  
26           agencies.
- 27           2. This contract is valid and enforceable only if sufficient funds are made available to COUNTY for the purpose  
28           of this PROJECT. In addition, this contract is subject to any additional restrictions, limitations, conditions  
29           or any statute enacted by Congress, State Legislature or COUNTY that may affect the provisions, terms or

1 funding of this contract in any manner.

- 2 3. It is mutually agreed that if sufficient funds for the program are not appropriated, this contract will be  
3 amended or terminated to reflect any reduction in funds.

4 **Y. Safety**

- 5 1. ENGINEER shall comply with OSHA regulations applicable to ENGINEER regarding necessary safety  
6 equipment or procedures. ENGINEER shall comply with safety instructions issued by COUNTY Safety  
7 Officer and other COUNTY representatives. ENGINEER personnel shall wear hard hats and safety vests  
8 at all times while working on the construction project site. All obligations of COUNTY are subject to  
9 appropriation of resources by various Federal, State and local agencies.
- 10 2. Pursuant to the authority contained in Section 591 of the Vehicle Code, COUNTY has determined that such  
11 areas are within the limits of the project and are open to public traffic. ENGINEER shall comply with all of  
12 the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. ENGINEER shall take  
13 all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling  
14 public from injury and damage from such vehicles.
- 15 3. Any subcontract entered into as a result of this contract, shall contain all of the provisions of this Article.
- 16 4. ENGINEER must have a Division of Occupational Safety and Health (CAL-OSHA) permit(s), as outlined in  
17 California Labor Code Sections 6500 and 6705, prior to the initiation of any practices, work, method,  
18 operation, or process related to the construction or excavation of trenches which are five feet or deeper.

19 **Z. Claims Filed by COUNTY's Contractor**

- 20 1. If claims are filed by COUNTY'S construction contractor relating to work performed by ENGINEER'S  
21 personnel, and additional information or assistance from ENGINEER'S personnel is required in order to  
22 evaluate or defend against such claims; ENGINEER agrees to make its personnel available for consultation  
23 with COUNTY'S construction contract administration and legal staff and for testimony, if necessary, at  
24 depositions and at trial or arbitration proceedings.
- 25 2. ENGINEER'S personnel that COUNTY considers essential to assist in defending against construction  
26 contractor claims will be made available on reasonable notice from COUNTY. Consultation or testimony  
27 will be reimbursed at the same rates, including travel costs that are being paid for ENGINEER'S personnel  
28 services under this contract.
- 29 3. Services of ENGINEER'S personnel in connection with COUNTY'S construction contractor claims will be

1 performed pursuant to a written contract amendment, if necessary, extending the termination date of this  
2 contract in order to resolve the construction claims.

3 **ARTICLE V • PERFORMANCE**

4 **A. Performance Period**

- 5 1. This contract shall begin upon notification to proceed by the COUNTY PROJECT MANAGER.
- 6 2. ENGINEER is advised that any recommendation for contract award is not binding on COUNTY until the  
7 proposed contract is fully executed and approved by COUNTY.
- 8 3. ENGINEER shall perform PROJECT services in accordance with the provisions set forth in Appendix A,  
9 Scope of Services, which is attached hereto and incorporated herein by reference. COUNTY reserves the  
10 right to perform any portion of Appendix A, Scope of Services with COUNTY personnel.
- 11 4. Where ENGINEER is required to prepare and submit studies, reports, plans, etc., to COUNTY, these shall  
12 be submitted in draft as scheduled, and the opportunity provided for COUNTY to offer comments prior to  
13 final submission.
- 14 5. When COUNTY determines that ENGINEER has satisfactorily completed the PROJECT services,  
15 COUNTY may give ENGINEER a written Notice of Final Acceptance. ENGINEER shall not incur any further  
16 costs hereunder unless so specified in the Notice of Final Acceptance. ENGINEER may request a Notice  
17 of Final Acceptance determination when, in its opinion, it has satisfactorily completed all covenants as  
18 stipulated in this Agreement.
- 19 6. Time is of the essence in this Agreement.

20 **B. Time Extensions**

- 21 1. Any delay in providing PROJECT services required by this contract occasioned by causes beyond the  
22 control and not due to the fault or negligence of ENGINEER, shall be the reason for granting an extension  
23 of time for the completion of the aforesaid work. When such delay occurs, ENGINEER shall promptly notify  
24 COUNTY in writing of the cause and of the extent of the delay whereupon COUNTY shall ascertain the  
25 facts and the extent of the delay and grant an extension of time for the completion of the work when, in  
26 COUNTY's judgment, their findings of fact justify such an extension of time.
- 27 2. COUNTY's findings of fact shall be final and conclusive to the parties hereto. However, this is not intended  
28 to deny ENGINEER its civil legal remedies in the event of a dispute.

29 **C. Reporting Progress**

1. As part of the monthly invoice ENGINEER shall submit a progress report in accordance with COUNTY Engineering Services Progress Reporting Guidelines. Progress Reports shall indicate the progress achieved during the previous month in relation to the Scope of Services, Appendix A, which is attached hereto and incorporated herein by reference. Submission of such progress report by ENGINEER shall be a condition precedent to receipt of payment from COUNTY for each monthly invoice submitted.
2. To ensure understanding and performance of the contract objectives, meetings between COUNTY, AGENCIES, and ENGINEER shall be held as often as deemed necessary. All work objectives, ENGINEER's work schedule, the terms of the contract and any other related issues will be discussed and/or resolved. ENGINEER shall keep minutes of meetings and distribute copies of minutes as appropriate.

**D. Evaluation of ENGINEER**

ENGINEER's performance will be evaluated by COUNTY for future reference.

**ARTICLE VI • COMPENSATION**

**A. Work Authorization**

ENGINEER shall not commence performance of any work or project services until so directed by the COUNTY PROJECT MANAGER. No payment will be made prior to approval of this contract.

**B. Basis of Compensation**

1. The method of compensation is a specific rate of compensation Agreement for a single Task Order/PROJECT. PROJECT services as provided under this Agreement and as described in the Appendix A, Scope of Services, shall be compensated for as defined in Appendix B, Budget, which is attached hereto and incorporated herein by reference. The total amount of the Agreement is not to exceed \$5,978,381.04 and reimbursement is to be made at actual billed cost for the following contractors with not to exceed amounts as shown:

• Falcon Engineering Services, Inc.	\$3,333,161.36
• TY Lin International	\$1,205,961.92
• Z&K Consultants	\$258,143.60
• Francis Consultants	\$115,090.00
• AMEC-Foster Wheeler	\$68,508.00
• Converse Consulting	\$320,379.16
• MARRS	\$91,548.00

*Limonite Avenue Interchange at I-15*

1	• ZT Consulting	\$296,731.10
2	• DESI	\$79,943.90
3	• PSOMAS	\$208,914.00
4	<b>TOTAL</b>	<b>\$5,978,381.04</b>

5 No additional compensation for Extra Work will be paid except upon the issuance of an Extra Work Order  
6 by COUNTY.

- 7 2. Prior authorization in writing by the COUNTY PROJECT MANAGER will be required before ENGINEER  
8 enters into any non-budgeted purchase order or subcontract exceeding \$5000 for supplies, equipment or  
9 consultant services. ENGINEER shall provide an evaluation of the necessity or desirability of incurring  
10 such costs.
- 11 3. For purchase of any item, service or consulting work not covered in ENGINEER's proposal and exceeding  
12 \$500, with prior authorization by the COUNTY PROJECT MANAGER, three competitive quotations shall  
13 be submitted with the request, or the absence of bidding shall be adequately justified.
- 14 4. Any equipment purchased as a result of this contract is subjected to the following: ENGINEER shall  
15 maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful  
16 life of at least two years and an acquisition cost of \$500 or more. If the purchased equipment needs  
17 replacement and is sold or traded in, COUNTY shall receive a proper refund or credit. At the conclusion of  
18 the contract or if the contract is terminated, ENGINEER may either keep the equipment and credit COUNTY  
19 in an amount equal to its fair market value or sell such equipment at the best price obtainable at a public or  
20 private sale in accordance with established COUNTY procedures and credit COUNTY in an amount equal  
21 to the sales price. If ENGINEER elects to keep the equipment, fair market value shall be determined, at  
22 ENGINEER's expense, on the basis of a competent independent appraisal of such equipment. Appraisals  
23 shall be obtained from an appraiser mutually agreeable by COUNTY, and ENGINEER. If it is determined  
24 to sell the equipment, the terms and conditions of such sale must be approved in advance by COUNTY and  
25 AGENCIES.
- 26 5. The consideration to be paid ENGINEER, as provided herein, shall be in compensation for all of  
27 ENGINEER's expenses incurred in the performance hereof unless otherwise expressly so provided. Travel  
28 and Subsistence are explicitly excluded from the contract.
- 29 6. ENGINEER agrees that the Contract Cost Principles and Procedures, CFR 48, Federal Acquisition

1 Regulations Systems, Chapter 1, Part 31, shall be used to determine the allowability of individual items of  
2 cost.

3 7. ENGINEER also agrees to comply with Federal procedures in accordance the Code of Federal Regulations  
4 Section 49, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State  
5 and Local Governments

6 8. In the event of errors or omissions in the plans or work product for PROJECT, ENGINEER shall perform  
7 the necessary engineering services required to correct such errors and omissions without additional charge  
8 to COUNTY.

9 **C. Progress Payments**

10 1. ENGINEER shall submit monthly invoices for PROJECT Services in accordance with Appendix B, Budget,  
11 and in accordance with COUNTY Engineering Services Invoicing Procedures.

12 2. ENGINEER shall submit an invoice each month for PROJECT services performed during the preceding  
13 month. Invoices shall be submitted to the COUNTY PROJECT MANAGER and shall be included with a  
14 Progress Report covering the same period as the submitted invoice.

15 3. Progress payments will be based on PROJECT services provided and actual costs incurred. Payments  
16 made prior to the completion of each phase will not exceed the amount allowed in the Agreement for the  
17 completion of that phase and prior phases, unless approved in writing by the COUNTY.

18 4. Progress payments will be made as promptly as fiscal procedures will permit upon receipt by the COUNTY  
19 PROJECT MANAGER of itemized invoices.

20 5. Payment of the post construction Services will be withheld until all documentation is submitted in an  
21 acceptable format and COUNTY issues a Notice of Final Acceptance for PROJECT. The budgeted amount  
22 will be paid to ENGINEER after COUNTY has approved ENGINEER's final documents and estimate for  
23 PROJECT.

24 **ARTICLE VII • GIS INFORMATION**

25 A. "GIS Information" shall include GIS digital files (including the information or data contained therein) and any  
26 other information, data, or documentation from County GIS (regardless of medium or format) that is provided  
27 pursuant to this contract.

28 B. ENGINEER acknowledges that the unauthorized use, transfer, assignment, sublicensing, or disclosure of the  
29 GIS information, documentation, or copies thereof will substantially diminish their value to COUNTY.

1 ENGINEER acknowledges and agrees that COUNTY GIS information is a valuable proprietary product,  
2 embodying substantial creative efforts, trade secrets, and confidential information and ideas. COUNTY GIS  
3 information is and shall remain the sole property of COUNTY; and there is no intention of COUNTY to transfer  
4 ownership of COUNTY GIS information.

5 C. COUNTY GIS information is made available to ENGINEER solely for use in the normal course of ENGINEER's  
6 business to produce reports, analysis, maps and other deliverables only for this PROJECT and as described  
7 within the Scope of Services.

8 D. ENGINEER agrees to indemnify and hold harmless COUNTY, its officers, employees and agents from any and  
9 all liabilities, claims, actions, losses or damages relating to or arising from ENGINEER's use of COUNTY GIS  
10 information.

11 E. GIS information cannot be used for all purposes; and GIS information may not be complete for all purposes.  
12 Additional investigation or research by ENGINEER into other sources will be required. GIS information is  
13 intended only as an information base and is not intended to replace any legal records. COUNTY has used and  
14 will continue to use its best efforts to correctly input into COUNTY GIS the information contained in various legal  
15 and other records; but COUNTY accepts no responsibility for any conflict with actual legal records or for  
16 information not transferred from legal records to COUNTY GIS. COUNTY has attempted to update GIS  
17 information as often as is practically feasible. However, ENGINEER should be aware that GIS information may  
18 not be current and changes or additions to the information contained in COUNTY GIS may not yet be reflected  
19 in COUNTY GIS.

20 F. COUNTY accepts no responsibility for the use of GIS information; and COUNTY provides no warranty for the  
21 use of COUNTY GIS or COUNTY GIS information by ENGINEER. THE WARRANTIES SPECIFICALLY SET  
22 FORTH IN THIS AGREEMENT ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED,  
23 INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE;  
24 AND SUCH OTHER WARRANTIES ARE HEREBY EXCLUDED.


25 G. Final plans, drawings or PROJECT work products will be provided in an electronic format suitable for inclusion  
26 within the COUNTY GIS or CADD Systems by ENGINEER and will contain the appropriate meta data and will  
27 be geographically registered using an appropriate coordinate system such as the California State Plane  
28 Coordinate System NAD 83.



ARTICLE VIII • APPROVALS

COUNTY Approvals


RECOMMENDED FOR APPROVAL:

 Dated: 3-15-2018

PATRICIA ROMO  
Director of Transportation

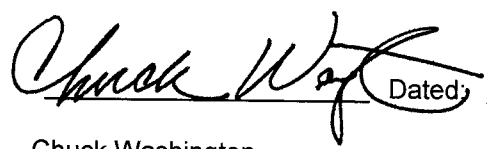
APPROVED AS TO FORM:

GREGORY P. PRIAMOS, COUNTY COUNSEL

 Dated: 3/19/18

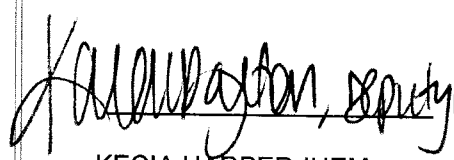
By Deputy Kristine Bell-Valdez

APPROVAL BY THE BOARD OF SUPERVISORS

 Dated: APR 10 2018

Chuck Washington  
PRINTED NAME  
Chairman, Riverside County Board of Supervisors

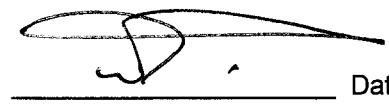
ATTEST:

 Dated: APR 10 2018

KECIA HARPER-IHEM  
Clerk of the Board (SEAL)

ENGINEER Approvals

ENGINEER:

 Dated: 1/31/18

WAEEL FAGIH  
PRINTED NAME  
V. President  
TITLE

ENGINEER:

\_\_\_\_\_ Dated: \_\_\_\_\_

PRINTED NAME

TITLE

**Appendix A**  
**County of Riverside Transportation Department**  
**Limonite Avenue/I-15 Interchange Project**  
**Construction Management Scope of Services**

<b><u>1 -- Project Description</u></b>	<b>2</b>
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## **1 - Project Description**

The COUNTY, Caltrans and the Cities of Eastvale and Jurupa Valley (Cities) propose to improve the existing freeway interchange at Interstate 15 (I-15) and Limonite Avenue, located within the cities of Eastvale and Jurupa Valley in Riverside County. Within the project limits, I-15 currently is a six lane, three mixed flow lanes in each direction, accessed controlled freeway. Along I-15, improvements are proposed from approximately 0.60 miles south to 0.60 miles north of the existing Limonite Avenue overcrossing (OC) bridge. The project extends along Limonite Avenue from Hamner Avenue to Wineville Avenue. The Limonite Avenue OC bridge currently provides two traffic lanes in each direction and two left-turn lanes at the ramp intersections. This project proposes replacing the existing Limonite Avenue OC and widening the roadway from four lanes to six lanes and reconstruct the ramps to provide a partial clover leaf (Type L-7), and constructing loop ramps in the southeast and northwest quadrants. The on and off ramp gore points will be extended providing longer acceleration and deceleration capacity.

The improvements will reduce congestion along Limonite Avenue in the vicinity of the interchange and improve traffic operations at the interchange and on the mainline. The project has been designed to accommodate the I-15 Express Lanes project which will add express lanes in the area of the existing unpaved median. Coordination between the two projects will likely be necessary due to overlap in the construction schedules.

It is expected that access for vehicles and pedestrians will be maintained throughout the project during construction. It is not anticipated that I-15 or Limonite Avenue will be closed during construction, except for limited periods identified in the construction contract documents. ADA compliant curb ramps will be provided at all applicable locations within the project limits.

Estimated construction costs are approximately \$36 million; with construction of the project anticipated to begin in mid-2018. Local and Federal funding programs may be used to fund the construction of the Limonite Avenue Interchange project.

The COUNTY shall endeavor to provide copies of applicable permits and conditions of approval to the Consultant prior to commencement of the work contemplated by the Construction Management Agreement.

## **2 – Construction Management General Services**

### **2.1 Project Controls System Development**

#### ***Purpose:***

To develop an integrated cost and schedule information system to provide up to date and accurate information regarding schedule, budgets, expenditures, and change orders to ENGINEER managers, contractors, Caltrans, COUNTY and Cities staff. .

The master schedule of the Project Controls System (PCS) will enable critical activities and interrelationships between the contractors, suppliers, the COUNTY, the COUNTY's Project Manager, design engineers, environmental monitors, CHP, utility companies, biologist and construction manager (including its subcontractors) to be monitored efficiently during the

construction phase of the project. The master schedule will identify permit constraints, work area restrictions and other known work and/or coordination constraints.

The cost-monitoring element of the PCS will enable project-wide monitoring of expenditures for comparison with the original budgets and budget updates resulting from change orders processed during the life of the project. Monthly reporting will enable accurate cost forecasting at any time.

The automation of the above information will enable timely analysis, intervention, and decision making to enable efficient control of the project.

Approach:

ENGINEER will develop the PCS using software similar to Primavera P6 and Expedition, Microsoft Word and Excel software. A master schedule will be developed summarizing all significant activities of project related entities including the contractor, equipment suppliers, the COUNTY project manager, design consultants, biologist, and the construction manager. The schedule will be structured to include the following:

- Primary contractor work activities, including major submittals required accomplishing the work.
- Principal work activities of the ENGINEER's construction manager, the COUNTY's project manager, design consultants, biologist, contractors, and suppliers.
- Activities necessary for regulatory compliance.
- Activities related to utility relocations.
- Relationships between submittals, approvals, procurement, and delivery of materials.
- Milestones associated with permitting and approvals.
- Any activity requiring coordination with the COUNTY, Cities, Caltrans oversight, and other local utility/regulatory agencies.
- Substantial and final completion dates.

The cost accounting format will use a work breakdown structure and cost categories that will be compatible with the COUNTY's cost accounting system. The work breakdown structure will be based on contractor's activities and will provide the basis for cost-loading activities in the schedule.

Assumptions:

1. The initial master project schedule will be developed based on information available before the award of contracts for construction.
2. The COUNTY will provide a description of the COUNTY invoicing requirements and guidelines for project work breakdown structure and cost reporting format.
3. COUNTY will provide copies of all consultant contracts including scope of services and budgets.

Deliverables:

1. Implementation of Project Control System.
2. Draft master project schedule.
3. Initial master project schedule following review and approval by the COUNTY.
4. Initial project cost.

## **2.2 Monthly Project Progress Meetings and Reports**

Purpose:

To apprise COUNTY management and other stakeholders of ENGINEER's activities under this contract via written report and monthly meeting.

Approach:

ENGINEER will provide a brief written report covering a summary of the status and expenditures associated with each of the tasks described in this scope of work; including highlights of any unusual contractual issues that arise during the reporting period and a listing of approved work that is beyond the boiler plate scope with a determination of who is responsible for the associated additional costs (contractor, project, etc.).

ENGINEER will schedule monthly progress meetings, which will provide for discussion of progress reports and issues related to (a) this agreement and (b) the construction agreements.

Assumptions:

1. The project monthly progress report will be provided throughout the contract period for an estimated duration of 16 months.
2. A regular monthly meeting date and time will be established. Meeting date is typically the first week of each month, the same day of the week, i.e., Monday, Tuesday, etc.
3. Written progress reports will be provided to the COUNTY at least 5 working days in advance of each progress meeting.
4. COUNTY to submit proposed changes/amendments to the monthly progress reports, in writing, to ENGINEER for its use.
5. Additional project budget expenditures determined to be the responsibility of the contractor will be addressed quarterly with adjustments being made to progress payments.

Deliverables:

1. Monthly project progress report.
2. One page summary report.
3. Monthly progress review meetings with minutes/summaries.

## **2.3 Document Management System**

Purpose:

To establish a system for the timely logging, filing, and tracking of project related correspondence to assure timely responses, and provide a record of communications to enable efficient retrieval and establish the chronology of events for use in dispute resolution.

Approach:

ENGINEER will set up a document tracking system; using software similar to Primavera Expedition to maintain project files.

Assumptions:

1. Actual logging, filing, and tracking of project information will be performed under separate tasks and subtasks.
2. The ENGINEER File Index will conform to the Caltrans filing numbering system.

Deliverables:

Implementation of a computerized document management system that includes written procedures for use of the ENGINEER project team.

## **2.4 Neighborhood Liaison Strategy**

Purpose:

To provide a strategy for dealing with issues related to the impacts of construction on the residential neighborhoods and businesses located adjacent to and within the limits of the project, to respond to public inquiries regarding the project, and to coordinate with law enforcement, emergency services providers, transit agencies, school districts and others as needed regarding construction activities that may impact public safety.

As part of the public outreach effort it is anticipated that the team will conduct public meetings before and during construction. The team will also need to attend City Council meetings to provide updates and information as requested.

Approach:

ENGINEER will develop in conjunction with the COUNTY a strategy for neighborhood and local community communication related to construction phase impacts and mitigation.

Assumptions:

ENGINEER will be responsible for development of the neighborhood liaison strategy. However, the COUNTY will provide general guidelines for community and neighborhood affairs, dictate protocol, and initiate contact with local elected officials, if required. The COUNTY will be responsible for the review and approval of the overall plan.

Deliverables:

1. ENGINEER: Draft Neighborhood Affairs Strategy memorandum.
2. COUNTY: Review and comment on draft Affairs Strategy memorandum.
3. Cities: Review and comment on draft Affairs Strategy memorandum.
4. ENGINEER: Final Neighborhood Affairs Strategy memorandum.

## **2.5 Sub-Consultant Management:**

### Purpose:

To coordinate and manage sub-consultant services contracted with ENGINEER. Sub-consultants include inspectors, surveyors, landscape architects, materials testing consultants, biologists, and /or others, to be determined at a later date and secured at reasonable rates.

### Approach:

ENGINEER will coordinate and manage the utilization of sub-consultants for the COUNTY in order to comply with the terms of the contract documents and the requirements of regulatory agencies.

At the COUNTY's direction, ENGINEER will negotiate and enter into sub-consultant agreements with select sub-consultants.

ENGINEER will work with consultants contracted directly with the COUNTY. ENGINEER will review and approve invoices provided by COUNTY consultants and forward said invoices to the COUNTY for processing and payment.

### Assumptions:

1. The COUNTY will retain final approval rights over invoices for COUNTY contracted consultants.
2. All costs associated with ENGINEER's sub-consultant services will be billed to the COUNTY in conjunction with ENGINEER's services on a monthly basis.

### Deliverables:

1. Copies of all sub consultant reports. Original reports will remain with ENGINEER until project closeout, at which time all originals will be forwarded to the COUNTY with the project documentation.
2. Copies of all sub-consultant invoices billed through ENGINEER.
3. Original invoices reviewed and approved by ENGINEER for COUNTY contracted consultants.

## **3 – Pre-Construction Phase Services**

ENGINEER shall provide specialized services during the project Pre-Construction phase, including the bidding periods of the project. These services are intended to involve the construction manager early in the project and to provide advanced planning for construction phase activities.

### **3.1 Constructability Review**

#### Purpose:

To provide the COUNTY and ENGINEER with reasonable assurance that project can be adequately constructed as indicated on the Design Plans and to endeavor to minimize contract change orders and reduce the project schedule to the extent possible. To enable changes to be made to the Project Documents by the Design Engineer before the construction contract bids are due.



Approach:

ENGINEER will perform a constructability review of the project, analyzing the phasing and staging of project construction for conflicts and to minimize the disruption to traffic. Review of the Project Plans (including construction notes), the Project Specifications, Estimates, and applicable permits technical reports for the Project is required for a thorough understanding of the project. The ENGINEER will also perform an Independent Quantity Take-off of the major items of work on the Project.

Assumptions:

The Project Plans and Project Specifications are essentially complete and ready for advertisement.

Deliverables:

1. Constructability comments and report for review by the COUNTY and Design Engineer. ENGINEER will provide two (2) copies of the comments and report.
  2. The Independent Quantity Take-off with comments and supporting calculations, wet stamped and signed by the ENGINEER's Engineer in Responsible Charge.
- After COUNTY and Design Engineer have reviewed and/or made changes, log changes made and changes not made in the project records.

### **3.2 Accelerated Schedule**

Purpose:

The community is expecting that construction will only impact one holiday season. This results in a construction period of approximately 16 months.

Approach:

The ENGINEER will be working closely with the Design Team in developing strategies to accelerate the construction schedule. Specialized construction techniques, improved staging and longer work hours are some possible options to be considered. Incentives/disincentives, A + B contracts, and other contractual strategies are to be considered as part of accelerating construction.

Deliverables:

1. A comprehensive evaluation of the current plans/specifications and contract documents to develop strategies to accelerate project construction. A scope, budget and schedule will need to be part of the planned strategy.
2. An implementation plan to incorporate the acceleration strategies.

Assumptions:

The Design Team will be working closely with the ENGINEER to develop comprehensive strategies. The County, Caltrans and Cities will review the recommendations and implement those strategies that best fit the scope, budget and schedule for the project.

### 3.3 Pre-Construction Coordination

Purpose:

In order to accelerate project construction there will be a need to have a concentrated effort to do as much work in advance of the contractor moving on site and to coordinate with other projects in the vicinity.

Approach:

The ENGINEER will coordinate with other agencies, companies, local residents and the contractor to ensure that there are no delays to the start of construction. This will involve close coordination with utility companies to ensure that any relocation work done prior to construction is properly managed. Also, the ENGINEER needs to assist the utility companies to plan any relocation work scheduled during construction. Once the low bid contractor is selected the ENGINEER is to work closely with the construction team to ensure that they obtain all necessary approvals, permits, supplies, etc.

ENGINEER will need to be aware of other public and private construction projects in the vicinity and ensure that there is close coordination between the projects. Eg. I-15 Express Lanes project.

### 3.4 Construction Management Plan

Purpose:

To provide the COUNTY and ENGINEER with uniform procedures and standards for the administration of the construction contract.

Approach:

ENGINEER will develop a procedures manual that is usable for the construction project utilizing the **Caltrans Construction Management Manual** and portions of the **Local Assistance Manual**. The Manual will be a compilation of both manuals, using various parts from both manuals as appropriate and incorporating a section concerning emergencies. The COUNTY approved manual will be used by the COUNTY, as it deems appropriate.

Assumptions:

The final project manual will be bound in a three ring binder to facilitate future revisions.

Deliverables:

1. Draft project manual for review by the COUNTY. ENGINEER will provide two (2) copies of the draft.
2. After review and comments, provide two (2) copies of final project manual to the COUNTY.

### 3.5 Contract Bidding Support

Purpose:

To provide support to the COUNTY during the Bidding Phase of the project to insure bid documents are satisfactory and complete, and selection of the contractor follows proper standards and procedures.

Assumptions:

ENGINEER will be available as needed to coordinate activities, review documents, provide recommendations and attend meetings during the Bid document preparation and Contract Bidding phase.

Deliverables:

ENGINEER will:

1. Assist the COUNTY to pre-qualify bidders and major sub-bidders, and develop bidder's interest in the project. Assist the COUNTY in issuing bidding documents.
2. Attend pre-bid conferences and provide information to bidders regarding County expectations of them throughout the project duration and familiarize bidders with the bidding documents, proposed management techniques and with any special systems, materials or methods.
3. Assist the COUNTY and Design Engineers with the receipt of questions and timely responses to bidders.
4. Assist in the review and preparation of Addenda to be issued to the Bidders.
5. Assist in the bid analysis including accuracy of bids, identifying the lowest responsive bidder, checking references and other bid forms and make recommendations to the COUNTY for the award of contracts and/or rejection of bids.
6. Conduct a pre-construction "kick-off meeting" that includes all agencies, utilities, and contractors that will be participating in the Project. Attend any other pre-construction meetings that may be required.

### **3.6 Local Assistance Documentation / Federal Contract Management Requirements**

Purpose:

To assist the COUNTY in field observation, testing and preparation of documentation required for compliance with FHWA Contract Management Requirements as detailed in the Caltrans's Local Assistance Procedures Manual.

Approach:

ENGINEER in conjunction with the COUNTY will review the Local Assistance Procedures Manual to insure that all contract administration procedures, documentations, and filing systems are in accordance with the Local assistance Procedures Manual. Subsections included in various chapters have been discussed in detail throughout the sections of the Scope of Services for this project:

- Chapter 1, Introduction and Overview
- Chapter 5, Invoicing
- Chapter 7, Field Review
- Chapter 12, Plans, Specifications & Estimate
- Chapter 14, Utility Facility
- Chapter 15, Advertise and Award Project; including the following sections:
  - Approval for Local Agency to Administer Projects.
  - Project Advertisement,
  - Contract Bid Opening
  - Contract Award
  - Award Package

- Chapter 16, Administer Construction Contracts, including the following:
  - Project Supervision and Inspection
  - Pre-Construction Conference and Partnering
  - Contract Time
  - Subcontractors
  - Engineer's Daily Reports
  - Project Files
  - Construction Records and Accounting Procedures
  - Safety Provisions
  - Labor Compliance
  - Equal Employment Opportunity
  - Contract Change Orders
  - Quality Assurance Program
  - Contract Claims
  - Traffic Safety in Highway and Street Work Zones
  - Construction Engineering Review by the State.
- Chapter 17, Project Completion includes the following:
  - Final Inspection Procedures for Federal-Aid Projects
  - "As-Built" plans
  - Report of Expenditures
  - Consequences for Non-Compliance
- Chapter 19, Oversight and Process Reviews
- Chapter 20, Deficiencies and Sanctions

All the above Chapters and sections have specific formats, checklists, and procedures that must be implemented as required by the Local Assistance Procedures Manual and Contract Provisions.

The COUNTY and ENGINEER will incorporate specific deliverables within the ENGINEERs scope of services and designate the party or parties responsible.

Assumptions:

The COUNTY will review the ENGINEER's Contract scope of services and deliverables to ensure that all tasks required are identified and an individual party is assigned responsibility for that task.

Deliverables:

Individual tasks required for compliance with the Local Assistance Procedures Manual are identified as specific tasks including all required checklists, forms, filing system, procedures for progress payments, change orders, claims, correspondence, as-builts, reporting, permit compliance, permit renewals, final invoicing and claims mitigations and resolutions.

Compliance with the Caltrans Construction Manual, Traffic Manual, MUTCD, ADA Guidelines, CAL OSHA Safety Orders, SWPPP & PMP preparation Handbook, and all Bridge Manuals is also required, as applicable.

### **3.7 Pre-construction Walk Through**

Purpose:

To review, document and agree to the existing conditions of the project site and neighboring area conditions prior to the start of construction.

Approach:

Prior to the issuance of a Notice to Proceed, ENGINEER, the Contractor, Caltrans, utility company representatives, biologist, COUNTY and the Cities representatives will walk the entire project and record existing conditions via a written log, still photographs, and videotape where required. ENGINEER will provide copies of all documentation to the Contractor and the COUNTY. ENGINEER will keep documentation originals in the project files until project completion.

Assumptions:

Project walk will not take longer than two days with approximately the same amount of time to log, file and copy the information.

Deliverables:

A written log, still photographs and any videotape depicting existing site conditions, as recorded prior to the start of construction.

## **4 – Construction Management Services**

ENGINEER, on behalf of the COUNTY, will provide construction management services for administration of the construction contract in conformance with the requirements set forth in the State's Construction Manual, State's Local Programs and Procedures Manual, State's Encroachment Permit and the County's requirements. Construction Management services will encompass the Quality Assurance and enforcement of all construction contract requirements. It can be expected that the contractor will be working on site 24 hours per day. CM services are to be provided to enforce construction contract requirements.

### **4.1 Pre-construction Conferences**

Purpose:

To provide a forum for all essential project participants to meet prior to the start of work. This meeting will outline the COUNTY's administration of the contract, introduction of the participants, and record all comments and questions submitted by the contractor. Provides an understanding of the procedures to be used on the project and what the Contractor can expect from the COUNTY and its consultants.

Approach:

ENGINEER will schedule, prepare the agenda, chair and take minutes of the pre-construction meeting. The meeting will outline project specifics and inform the Contractor of project administration procedures.

Assumptions:

1. The COUNTY will provide the meeting venue.
2. The COUNTY will assist ENGINEER in developing the attendee list.

3. ENGINEER will prepare a draft agenda for COUNTY approval prior to the meeting.

Deliverables:

1. Written agenda and minutes of pre-construction conference.
2. Electronic copies of pre-construction meeting minutes to the attendees.
3. Review and comment on contractor's base-line schedule.
4. Establish ground rules of coordination & communications with contractor and designer concerning the processing and reviewing of submittals and RFI's.
5. Maintain construction documents per federal requirements and as detailed in Chapters 15, 16, 17 and other relevant Chapters of the Local Assistance procedures Manual.
6. Enforcement of DBE requirements.
7. Enforcement of Labor Compliance Requirements, including completion federal Labor Compliance Pre-job Checklist.
8. Enforcement of Quality Assurance Program
9. Completion of the Federal Resident Bridge Engineer's Construction Contract Administration Checklist, including all necessary attachments as detailed in Local Assistance Procedures Manual.
10. Discussion of environmental permits requirements.
11. Discussion of utility company requirements.
12. Preparation of invoices for federal reimbursement.

#### **4.2 Communications and Correspondence**

Purpose:

To provide for and/or facilitate effective communication, on behalf of the COUNTY and Cities, and among all stakeholders in the administration of the construction contract.

Approach:

ENGINEER will obtain all pertinent information as required to develop a project directory of all key personnel and stakeholders working on the project. ENGINEER will develop a graphic chart indicating the proper flow of correspondence. ENGINEER will log all information received from the Contractor and others, in *Expedition*. Lastly, ENGINEER will prepare and/or forward appropriate responses, obtaining COUNTY approval when required.

Assumptions:

1. The ENGINEER Correspondence Log will be used for all correspondence received from the COUNTY, the Contractor and others.
2. All original correspondence will remain with the ENGINEER project files. Only copies will be distributed, with the exception of shop drawing submittals.
3. The ENGINEER project files will be turned over to the COUNTY upon the conclusion of the project.

Deliverables:

1. Communication flow chart.
2. Written logs of information received from the COUNTY, the Contractor, design consultants, biologist, testing firm, citizens and/or others.

### 4.3 Project Changes and Construction Change Order Management

#### Purpose:

To reviewing proposed changes to the project and determine if the change is necessary and/or beneficial to the project, and if such changes constitute a change order.

To provide a system for logging and tracking all changes on the project.

To provide the COUNTY with assurance that the Contractor is not presenting requests to be paid for additional work included in the original contract.

To assure the COUNTY that the associated extra work costs and time extension requests are fair and reasonable to both the COUNTY and the Contractor.

#### Approach:

ENGINEER will review potential changes to the project for contractual and technical merit, prepare independent cost estimates and schedule analysis of work, discuss proposed changes with COUNTY, and negotiate change order costs with the Contractor. ENGINEER will prepare change orders with all required support documentation for execution by the COUNTY. ENGINEER will keep the COUNTY apprised of cumulative changes in project cost and project duration.

ENGINEER will negotiate change orders on behalf of the COUNTY and will use the following approach in assisting & coordinating the process with the COUNTY:

#### Requests for Changes by the COUNTY

1. ENGINEER will forward a Request for Quote (RFQ) to the Contractor for pricing and stipulation of proposed time extension, if requested work can be shown to impact the project's critical path. The RFQ shall contain a description of the extra work (normally provided by the Designer) to fairly price the work.
2. ENGINEER will prepare an independent cost estimate of the extra work.
3. ENGINEER will review the cost quote from the Contractor for completeness, negotiate cost and time extension requests as required and, obtaining COUNTY concurrence throughout the process. Obtain COUNTY authorization for proceeding with the change, based on definitive cost and time extension values.
4. Should ENGINEER and the Contractor be unable to negotiate a reasonable price, the COUNTY will be consulted prior to directing the work via alternative contract change options such as proceeding on a time and material basis or proceeding by force account.

#### Requests for Changes by Contractor

1. ENGINEER will review requests of proposed cost and/or time impacts for merit. If ENGINEER determines the request fails on merit, the Contractor will be informed of the reasons why the request is denied. Should ENGINEER determine the request has merit; ENGINEER will proceed with steps 2 and 3.
2. ENGINEER will prepare an independent cost estimate and schedule analysis of the work.
3. ENGINEER will negotiate extra work cost and time extensions with the Contractor.
4. ENGINEER will prepare change order documents for approval and execution by the COUNTY.

#### Assumptions:

1. ENGINEER will have authority to make minor changes to work that it determines to have no cost or time impacts to the construction project.

2. ENGINEER will be allowed to use their own judgment regarding how best to handle cost negotiations with the Contractor, but will keep the COUNTY informed throughout the process.
3. ENGINEER will prepare official change order documentation to be processed with the Contractor's regular application for payment.
4. ENGINEER will transmit electronic copies (MS Word \*.docx files) of change order documentation to the COUNTY's capital project construction group.
5. ENGINEER will obtain final approval of all project cost and/or project time changes from the COUNTY, and Caltrans prior to authorizing the Contractor to proceed with changes.

Deliverables:

1. Perform quantity and cost analysis as required for negotiation of change orders
2. Analyze additional compensation claims that are submitted during the construction period and prepare responses.
3. Perform claims administration including coordinating and monitoring claim responses, logging claims and tracking claim status.
4. Change order documentation ready for approval and execution by the COUNTY.

#### **4.4 Monthly Construction Progress Reports**

Purpose:

To keep the COUNTY apprised of the project status during the prescribed construction period.

Approach:

ENGINEER will prepare a monthly report that provides construction status to the COUNTY and other involved parties. The monthly report shall contain the following:

1. Status of contractor's schedule and what the contractor is doing to maintain or catch up if the schedule has slipped. While the focus will be on critical path items, other items that might become critical will be discussed in the report.
2. Construction and construction manager's costs incurred for the month.
3. Cash flow projections for both the contractor and Construction manager.
4. Identify actual and potential problems associated with the construction project and consult with the Project Manager and design engineer.
5. Evaluate Cost Reduction Incentive Proposals (CRIP) and provide recommendations to the Engineer for acceptance or denial.
6. Potential Issues, pending change orders and executed change orders.
7. Photographs to show construction activities and for clarity regarding special issues.
8. Other information deemed necessary for the COUNTY to have a concise understanding of the construction Projects.

Assumptions:

The COUNTY will assist ENGINEER in the initial formatting of the first report.

Deliverables:

1. Monthly progress report.
2. One page summary report for distribution to Senior COUNTY staff or elected officials.

#### **4.5 Schedule Monitoring**

Purpose:



To monitor and review the Contractor's schedule, after acceptance of the baseline schedule, to ensure that the project is not being delayed over issues within the control of the Contractor.

Approach:

ENGINEER will develop procedures, using available software, to review the Contractor's monthly schedule updates for logic, duration, and resource changes. ENGINEER will notify the Contractor of discovered changes and document the Contractor's response, for the record. ENGINEER will keep the COUNTY apprised of the Contractor's current construction schedule.

Assumptions:

Contract specifications will require the Contractor to use Critical Path Method (CPM) scheduling tools/software. The preferred scheduling software is P6 or Suretrak by Primavera. Gant charts will be strictly forbidden.

Deliverables:

1. ENGINEER will prepare and transmit to the Contractor schedule review comments.
2. Monthly review of contractor's schedule updates and provide a summary to COUNTY on schedule status and impact of changes to completion date.
3. Monitor and facilitate utility coordination with various utility companies and the Contractor. Incorporate relocations in the schedule and report any delays and impacts to the completion date.

#### **4.6 Cost Monitoring**

Purpose:

To provide the COUNTY with a system that is easy to understand and provides up-to-date cost information for making timely decisions.

Approach:

Using a combination of software like *Expedition* and *Excel*, ENGINEER will generate spreadsheets and graphs for the purpose of monitoring anticipated and actual cost outlays.

Assumptions:

The COUNTY will provide direction regarding desired cost monitoring information and report formats.

Deliverables:

1. Monthly cost monitoring reports in a format to be determined.
2. Monthly progress report for the COUNTY describing key issues, cost vs. budget status, and schedule status.

#### **4.7 Progress / Coordination Meetings**

Purpose:

To provide a forum for the review of the project status, the look-ahead schedule including activity sequence and duration, schedule for delivery of long lead items, outstanding RFIs, submittals, and other project issues.

Approach:

ENGINEER will conduct weekly progress/coordination meetings, to be attended by the COUNTY, the Contractor, ENGINEER and other invitees. ENGINEER will request the COUNTY, City of Eastvale, City of Jurupa Valley and the Contractor to submit agenda items for the meetings. Using the proposed agenda items and agenda items developed in house, ENGINEER will prepare a comprehensive agenda for the meeting and distribute the agenda to all parties scheduled to attend. Following the meeting, ENGINEER will distribute meeting minutes, requesting either the concurrence of those who attended, or suggested corrections to the minutes. Minutes will be filed as either approved or amended.

Assumptions:

1. The COUNTY's and Contractor's staffs will be able to meet on a regular basis with minimal absences.
2. The meeting room will be able to seat a minimum of 15 people.
3. Meetings will not take place more than once a week and will not last longer than one hour.
4. The Contractor will submit a look-ahead schedule (2 or 3 week) at each meeting.

Deliverables:

1. Agenda with status of open items from previous meetings.
2. Meeting minutes, for review, with action items noted.
3. Amended meeting minutes, if required.
4. Submittal, Issues log, Change Order log and RFI and RFQ working logs.

#### **4.8 Payment Recommendations**

Purpose:

To verify that the Contractor's request for payment does not represent more than an amount that is reasonable for the work done on a monthly basis. To prepare progress payment recommendations on behalf of the COUNTY for work completed and materials stored on hand (if allowed).

Approach:

ENGINEER will review and approve the Contractor's monthly progress based on the percentage of work activities complete. The Contractor will submit a certified application for payment to ENGINEER for final review. Once approved, COUNTY will prepare a payment application certificate, using software similar to *Excel*, for approval and execution by the COUNTY.

Assumptions:

1. The COUNTY will make payments in accordance with the contract stipulations and State Law to the Contractor once each month.
2. The ENGINEER will use software that is acceptable to the COUNTY for use preparing progress payment application certificates.

Deliverables:

1. Contractor's certified application for payment.
2. Progress payment request documents suitable for approval and execution by the COUNTY.

#### **4.9 Safety**

Purpose:

To review the Contractor's work site safety and notify the Contractor of unsafe conditions, as observed. Implement the CAL OSHA Safety Orders requirements for providing safe work site conditions.

Approach:

ENGINEER will observe contractors' work area. Contractor is to be informed if unsafe work conditions and/or areas are observed. Immediate shutdown of contractors' work may be required if conditions endanger property and/or life. Random attendance of contractor's tailgate meeting. ENGINEER will conduct its own bi-weekly staff safety meeting to discuss specific safety procedures and issues relating to current or upcoming construction activities requiring unique safety procedures.

Assumptions:

1. Contract document requires Contractor to submit its safety program and safety officer prior to the start of work
2. Contract documents or Contractor's safety program requires contractor to submit accident reports.
3. ENGINEER assumes no responsibility for safety of Contractor's work areas.
4. ENGINEER assumes no responsibility for implementation of Contractor safety program or its construction means and methods.

Deliverables:

1. Accident reports from Contractor.
2. Bi-weekly safety meeting minutes
3. Copies of safety issues discussed during contractors tailgate meetings.

#### **4.10 Environmental Coordination & Biological Monitoring**

Purpose:

To verify the contractor has copies of applicable permits and that the work activities abide by the requirements of the permits granted by regulatory agencies. All permits shall be kept current and renewed prior to expiration throughout the project duration.

Approach:

ENGINEER will review and enforce requirements stipulated in permits issued by regulatory agencies. ENGINEER will mobilize the services of its sub-consultant for Biological Monitoring who will provide a certified Biologist (Monitor).

Assumptions:

1. All permits will be provided to ENGINEER for review.
2. All permits will be included in the contract documents.

3. A certified Biologist will be provided by ENGINEER's sub-consultant.
4. The USFWS must approve the Biological Monitor. Biological Monitor will be responsible for oversight of Programmatic Biological Opinion for any listed or protected species within or adjacent to the PROJECT site.

Deliverables:

The ENGINEER's sub-consultant Biological Monitor will:

1. Develop an employee education program. Each employee (including temporary, contractors, and subcontractors) will receive a training/awareness program within two weeks of working on the proposed project. They will be advised of the potential impact to the listed species and the potential penalties for taking such species. At a minimum, the program will include the following topics: occurrence of the listed and sensitive species in the area, their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violation of Federal and State laws, reporting requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project area environs. Included in this program will be color photos of the listed species, which will be shown to the employees. Following the education program, the photos will be posted in the resident engineer's office and contractor's office, where they will remain throughout the duration of the project. The RESIDENT ENGINEER, CONTRACTOR, and USFWS-approved biological monitor will be responsible for ensuring that employees are aware of the listed species.
2. Ensure that ESAs will be designated by erecting protective fencing delineating the project impact boundary and sensitive habitats and that this barrier fencing will be constructed in such a way as to restrict the movement of fauna into impacted areas. Be present for all ESA fence construction. Inform all parties associated with this project to strictly avoid these areas and that no construction activities, materials, or equipment will be permitted in the ESAs. . Minimum monitoring frequency after the fence is constructed: Weekly
3. Relocate any specified animal using traps or other methods acceptable to the USFWS if necessary. Relocation sites must be identified by the USFWS.
4. Be present at all pre-construction and pre-grade meetings and on site during vegetation removal.
5. Will have the authority to halt all associated project activities that may be in violation of any biological opinion. In such an event, the biologist will contact the Service within 24 hours.
6. Monitor that the construction work areas are delineated and marked clearly in the field prior to any habitat removal, and the marked boundaries maintained and clearly visible to personnel on foot and be heavy equipment operators. Shall strictly limit their personal as well as the contractor personal from activities and vehicles to the proposed project areas, staging areas, and routes of travel. The biological monitor will work with the COUNTY to contact the USFWS to verify that the limits of construction have been properly staked and are readily identifiable.
7. Monitor construction to ensure that vegetation removal, Best Management Practices (BMPs), ESA fencing, and all avoidance and minimization measures are properly constructed and followed.

8. Monitor that all equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities, will occur in designated upland areas. The designated upland areas will be located in such a manner as to prevent any runoff from entering waters of the United States, including wetlands.
9. Monitor that the typical erosion control measures, BMPs, in the vicinity of streams will be employed in accordance with the conditions in the 401 Water Quality Certification requirements of the Regional Water Quality Control Board.
10. Monitor the restriction of the use of invasive exotic plant species in landscaped areas adjacent to or near sensitive vegetation communities. In compliance with Executive Order 13112, impacted areas will be revegetated with plant species native to the area.
11. Monitor that all construction equipment will be inspected and cleaned prior to use in the proposed project footprint to minimize the importation of non-native plant material. Also monitor/verify that all mulch, topsoil and seed mixes used during post construction landscaping activities and erosion control BMPs will be free of invasive plant species propagules. Ensure that a weed abatement program will be implemented should invasive plant species colonize the area within the project footprint post-construction.
12. Monitor that no off-road vehicle activity from construction personnel or other persons affiliated with the project will occur outside of the project footprint.
13. Monitor that the all trash will be placed in raven-proof containers and promptly removed from the site to reduce the attraction of ravens and crows, which may eat protected species.
14. Monitor that no pets or firearms will be permitted inside the project's construction boundaries or other associated work areas.
15. Monitor that all soil/rock removal and storage activities will be restricted to the project footprint and that no maintenance activities will be authorized that extend beyond the boundaries of the project footprint.
16. Monitor that proper signage be implemented to advise motorists that the vehicle speeds on unpaved construction access roads will be restricted to a maximum of 25 MPH.
17. Monitor that all culverts, bridges, and associated water passage structures will be maintained such that water and sediment may pass between upstream and downstream locations and so as not to block the passage of wildlife.
18. Monitor is to insure compliance with any U.S. Army Corps of Engineers 404 permit authorization and the California Regional Water Quality Control.
19. Monitor shall wear Class II or Class III safety vests and hard hats at all times on the job site and shall be aware of the location of all heavy equipment in the vicinity as they may not be visible to the equipment operator.
20. All materials submitted will become the property of the COUNTY.

#### **4.11 Neighborhood Communication /Public Information**

Purpose:

To provide an efficient means for keeping traveling public, adjacent residents and businesses apprised of the work activities they will encounter during construction. To provide a local contact telephone number that residents and businesses may contact to pose questions and discuss concerns.

Approach:

Using the Neighborhood affairs strategy memorandum, developed per Section 2 of this scope, ENGINEER will prepare "Dear Neighbor" letters and door hangers as a means to communicate with adjacent residents and businesses. Attending and facilitating public meetings, responding to citizens and business owner's inquiries. Working with the COUNTY's, Caltrans and the Cities public information offices.

Assumptions:

All information for public use is to be reviewed for concurrence by the COUNTY, Caltrans, City of Eastvale and City of Jurupa Valley and provided to them as requested.

Deliverables:

1. Attend ENGINEER's weekly Neighborhood/Business meetings on an as needed basis.
2. Minutes of any meetings listing questions posed by residents and business owners.
3. Work progress flyers (Dear Neighbor letters).
4. Door hangers if not provided by the Contractor.
5. Local contact number for ENGINEER.
6. 24-hour hot line
7. Installation of a construction site video camera
8. Project web page maintenance and updates including current schedule, progress updates, costs, public meeting information, camera feed, and project exhibits
9. Provide Draft "Friday" report items to the COUNTY and cities of Eastvale and Jurupa Valley and draft news releases as needed.
10. Coordinate with CHP, law enforcement, emergency services, transit, schools, etc. regarding construction activities that may impact public safety.

#### **4.12 Traffic Control and Signal Timing**

Purpose:

To provide an efficient means for keeping traffic flowing through the site to adjacent residents and businesses during construction.

Approach:

Using a Traffic Engineer, ENGINEER will provide the necessary expertise to evaluate and modify permanent and temporary traffic controls, including signal timing as necessary to ensure the safe and efficient handling of traffic through the project site. Work with the COUNTY's, Caltrans and City's traffic engineering offices.

Assumptions:

Any COUNTY, Caltrans and city desired changes to the traffic handling will be communicated to ENGINEER in a timely manner.

Any Contractor desired changes to the traffic handling plans will be handled per Section 4.3 of this scope and require COUNTY concurrence prior to implementation.

Deliverables:

1. Monitor, review and provide recommendations for modifications to traffic handling during the course of construction.
2. Prepare signal timing charts for traffic signals within and adjacent to project site as necessary to promote improved traffic flow for the various phases of construction and maintain coordinated timing to the extent possible (i.e. time based coordination/gps or wireless communication).
3. Work with the County, Caltrans and the City to implement those signal timing charts.
4. Provide a recommended signal timing chart for implementation at project completion based on the ultimate configuration.

#### **4.13 Submittal Management and Review**

Purpose:

To provide an efficient means of processing and reviewing submittals, including working drawings, shop drawings, product data, sample and other items furnished in accordance with Sections 5-1.02 and 5-1.02A of the State Standard Specifications, from the Contractor and forwarding applicable submittals to the Project Designer as may be appropriate.

Approach:

Using software similar to *Expedition*, ENGINEER will develop a comprehensive submittal list for distribution to the Contractor and the Designer. ENGINEER will update and submit status submittal logs for review at each coordination meeting. ENGINEER will work with the Contractor and Designer (where applicable) to encourage timely submission, review and approval of submittals as outlined in the Contract Documents, prior to inclusion of submitted materials in the progress of the work. In addition, ENGINEER will perform the engineering reviews and approvals for working drawings and calculations provided by the Contractor in accordance with Sections 5-1.02 and 5-1.02A of the State Standard Specifications and within the review timeframes as specified in the applicable sections of the contract documents and specifications. The following steps will be taken in reviewing the Contractor's submittals:

1. Log all submittals by Specification Section.
2. Ensure that the Contractor has provided a complete submittal, coordinated with the work of other trades, and that all deviations have been noted. Submittal is returned to the contractor if it is not complete.
3. Construction Manager reviews submittal for general compliance with the specification.
4. Applicable Submittals are forwarded to Designer for formal review. Submittal status is logged.
5. Submittals sent to Designer are returned to ENGINEER. Submittal status is logged.
6. ENGINEER to perform engineering review of submittals consisting of working drawings and calculations furnished in accordance with Sections 5-1.02 and 5-1.02A of the State Standard Specifications. Such submittals shall be reviewed and approved by ENGINEER's Resident Engineer in accordance the above sections, other applicable sections of the State Standard Specifications and the Caltrans Inspection Manuals for the associated work (i.e. Falsework, Prestressing, Trenching and Shoring, etc.).

7. Approved submittals are returned to the Contractor for use in work. Submittal status is logged.
8. ENGINEER to inform Contractor if a re-submittal is required.

Assumptions:

1. ENGINEER will not be responsible for errors or omissions in submittal lists.
2. Coordination and submission of submittals in accordance with requirements of the contract is the responsibility of the Contractor.
3. COUNTY will provide a listing of submittals to be reviewed by the Designer or others including COUNTY staff.
4. ENGINEER will not make an exhaustive review of Contractor's submittals except as noted above.
5. ENGINEER will forward to the Designer all submittals designated by the COUNTY to be reviewed and approved by Designer. These submittals are typically for pre-manufactured materials and assemblies specified in the Contract.

Deliverables:

1. Submittal status log.
2. Check Calculations, where required.
3. Copy of all approval letters, approved working drawings, submittals and final submittal log.
4. Request for Information (RFI) Management

#### **4.14 Request for Information (RFI) Management and Review**

Purpose:

To provide an efficient means of processing Requests for Information (RFIs) submitted by the Contractor. The efficient management of RFIs permits timely communication between the Designer and the Contractor.

Approach:

ENGINEER will receive, log and review all RFIs for completeness and verify the question is reasonable and understandable. ENGINEER will provide a short technical review of the RFI to determine if the issue is addressed adequately in the contract documents. ENGINEER will return the RFI if the question is unclear or, in the opinion of ENGINEER staff, the answer is contained in the contract documents, noting where the requested information can be found in the contract documents. ENGINEER will track RFIs, using the software similar to Expedition, and facilitate the timely response from the Designer.

Assumptions:

The Designer will respond with an answer to all RFIs within the contract stipulated time period for response. Facsimile or e-mail will be used to forward RFIs to the Designer and return responses to the Contractor, with original documents to follow.

Deliverables:

1. Comprehensive log of all outstanding RFIs and their status.
2. Prepare responses to RFI's related construction issues
3. Transmit design related RFI's to design engineer and copy COUNTY Project Manager.
4. Conduct meetings with the Contractor and other parties as needed to discuss and resolve RFI's.



#### **4.15 Document Management**

Purpose:

To provide the COUNTY with an electronic means of tracking all documents exchanged between the parties involved in the construction of the project.

Approach:

ENGINEER will use software similar to Primavera *Expedition* and the ENGINEER File Index modified to conform to the Caltrans filing system to log all documents in the project field office. Documents will be scanned into the document control system and attached to the file index categories. All documents will be filed as an electronic file and hardcopy.

Assumptions:

1. ENGINEER will use software similar to Primavera *Expedition*.
2. The COUNTY may not use the chosen software.

Deliverables:

1. Comprehensive logs of all documents in the project files (electronic and hardcopy). Electronic files shall not require special software to read or access.
2. All hardcopy project documents exchanged on the project between the various parties.
3. Establish and process project control documents to include:
  - Daily inspection and Resident Engineer's diaries
  - Weekly News Letter and Weekly Statement of Working Days
  - Monthly progress report and monthly progress pay estimate
  - RFI's, Submittals
  - Correspondences with Contractor, Caltrans, Permitting Agencies, Utility Companies, Regulatory Agencies, and other stake holders
  - Survey requests and survey notes
  - Materials receipts, materials testing results, and certificate of compliance
  - Mix designs for PCC, CTPB, AC, AB

#### **4.16 Review Certified Payrolls**

Purpose:

To verify the Contractor provides certified payroll reports in conformance with the provisions of the contract and applicable State and Federal Law. To verify the certified payroll reports contain information required by the Labor Code.

Approach:

ENGINEER will receive and review certified payrolls from the Contractor and each of its subcontractors. ENGINEER will check for the "Statement of Compliance" from the Contractor and/or subcontractors, and spot-check wages for each classification of laborer or craftsman. ENGINEER will notify the COUNTY and the Contractor of all discrepancies and/or errors and request a corrected Certified Payroll.

Assumptions:

1. ENGINEER will conduct employee interviews, for the purpose of verifying payment of prevailing wages. ENGINEER will perform a minimum of one interview per trade, per contractor per month.
2. ENGINEER will not be held responsible for enforcement of the Labor Code.
3. ENGINEER will maintain a weekly list of subcontractors working on the project.
4. ENGINEER will not be responsible for identifying every worker on site.

Deliverables:

Hardcopies of the Contractor's certified payrolls maintained in the project files.

**4.17 Storm Water Pollution Prevention Plan (SWPPP)**

Purpose:

To protect the COUNTY from potential fines from regulatory agencies by monitoring contractors' activities regarding pollution prevention controls and/or activities for general compliance with the contractor's SWPPP Best Management Practices (BMP).

Approach:

ENGINEER will observe the contractor's work area for general compliance with the SWPPP Best Management Practices (BMP) and notify the contractor if the pollution prevention controls are not in accordance with the SWPPP. Failure to revise and correct conditions will be cause to have the COUNTY take corrective action. Immediate shutdown of the contractor's work may be required, if conditions are in non-compliance with the SWPPP or other permit conditions.

Assumptions:

5. ENGINEER will not provide full time inspections of contractor's work areas for compliance with the contractor(s) SWPPP and BMP.
6. ENGINEER will not be responsible for contractor(s) means and methods for complying with the BMP listed in the SWPPP.
7. ENGINEER will not be responsible for costs incurred by the contractor(s) for its failure to comply with its SWPPP.
8. ENGINEER will document site conditions with respect to SWPPP and BMP weekly and maintain a separate file for said reports.

Deliverables:

Contractor(s)' SWPPP monitoring reports and ENGINEER documentation of site conditions kept in project file for the record.

**5 – Construction Inspection Services**

**5.1 Inspection and Documentation**

Purpose:

To provide the COUNTY with documentation of construction activities, duration of activities, manpower and equipment allocation, inspections, and work conditions.

Approach:

ENGINEER will provide experienced and qualified inspectors (qualified by the state of California Department of Transportation) acceptable to the COUNTY, Caltrans and cities. Inspectors will document the Contractors' daily activities, manpower loading, on-site equipment and items considered pertinent to the project. Construction contractor may be working on site 24 hours per day. CM services are to be provided to enforce the construction contract requirements.

ENGINEER will coordinate and manage the utilization of ENGINEER's inspectors for the purpose of providing daily inspections and/or special inspections as deemed necessary and beneficial for proper completion of the project, or, at the COUNTY's direction, ENGINEER will negotiate and enter into sub-consultant agreements with qualified inspectors including special inspectors, as needed and defined in Task 2.5.

Assumptions:

1. ENGINEER shall provide inspectors who are experienced and qualified for the inspection required.
2. All inspections will be within the project limits.

Deliverables:

1. The Inspectors will ensure compliance with all aspects of this construction contract by continuously monitoring, evaluating, approving or rejecting the contractor's work in accordance with the approved construction contract and Caltrans requirements.
2. ENGINEER Inspector's daily and/or special inspection reports maintained in the ENGINEER project files and turned over to the COUNTY at the completion of the project. Copies of these daily reports will be submitted on a weekly basis or upon request.
3. Take and maintain digital photographs and videos as necessary to provide documentation of construction activities. All photos will be logged, dated and kept at the field office in a bound folder (hard copies and CD copy).
4. Verify field measurements for compliance with contract plans and specifications and provide quantity calculations for progress payments.
5. Continue to update an As-Built set of plans and review contractor's marked set.
6. Conduct weekly project meetings, prepare and distribute to all designated parties.
7. Review the updated construction schedule and maintain record.
8. Review laboratory, shop and mill test reports of materials and equipment, and coordinate with design engineers as required, to ensure compliance with contract and Caltrans requirements to guard against defects and deficiencies in the project work.
9. As appropriate, require special inspection or testing, or make recommendations to the COUNTY regarding special inspections or testing of work not in accordance with the provisions of the contract documents whether or not such work is fabricated, installed or completed. Subject to review by Caltrans, COUNTY and cities, Inspector may reject work which does not conform to the provisions of the contract and approving agencies.
10. Establish and process job control documents including:
  - Daily inspection diaries
  - Weekly Resident Engineers News Letter
  - Monthly construction progress payment
  - Request for information
  - Survey requests
  - Materials receipts
  - Weigh master certificates

- Materials submittals
- Weekly statements of working days
- Construction change orders
- Review of certified payrolls

## **5.2 Materials Testing, Construction Testing & Quality Assurance Program (QAP)**

### Purpose:

To provide project site and laboratory testing of construction materials used in the project for the purpose of determining quality and acceptability of materials and workmanship incorporated into the project and in compliance with the contract documents.

### Approach:

ENGINEER will coordinate and manage the utilization of the materials and testing laboratory for the purpose of providing laboratory and field-testing of materials in accordance with test methods and frequencies specified in the contract documents, as required by the California Test Methods, and Caltrans' Quality Assurance Manual.

### Assumptions:

1. It is assumed that the COUNTY will not provide the Materials Testing services on this contract under the direction of the CM.
2. ENGINEER shall provide material testers and laboratory technicians who are experienced and qualified for the inspection required.
3. ENGINEER will insure the implementation of the Quality Assurance Program for source inspections, materials acceptance, and special inspections as required by the contract.
4. All material testing, materials acceptance and special inspections will be within the project limits or as required by the contract.
5. Contractor must formally request testing in writing. If no formal request is made (at what time), the CM will ensure the contractor will stop the effected work until testing is complete and materials are deemed acceptable.

Note: COUNTY may, if they choose, perform part or all of the materials testing.

### Deliverables:

1. Laboratory test reports maintained in the ENGINEER project files and turned over to the COUNTY at the completion of the project.
2. Summary sheet of all test reports submitted by others to substantiate compliance with contract documents.
3. Summary sheets of all Certificates of Compliance or source release tags furnished by the Contractor along with the applicable delivered materials at the job site.
4. Testing summary sheets.
5. Coordinate source inspections and special inspections as required by the contract document and the Quality Assurance Program.

## **5.3 Surveying**

### Purpose:

To provide construction survey staking services for the construction of storm drains, curb & gutters, other utilities, street sections, sub-grades, bridges, walls and for monitoring settlement and

other appurtenances as may be required for completion of the I-15/Limonite Avenue Interchange project.

Approach:

ENGINEER will manage and provide all survey staking services necessary for the construction of this project. Resident Engineer will review contractor's survey staking request for completeness and adherence to the boiler plate of approved survey activities (including interval spacing) and schedule survey staking in a timely manner.

The survey staking services shall conform to Section 11 "Engineering Surveys" and Section 12 "Construction Surveys", both of the Caltrans Survey Manual, the Land Surveyors Act and the following requirements:

1. Responsible Charge for the work shall reside with a Registered Civil Engineer possessing a license issued prior to January 1, 1982, or a licensed Land Surveyor, issued by the State of California.
2. Construction staking shall begin no later than two working days after the initial request is made through the ENGINEER's Resident Engineer and received by the Land Surveyor; working days will be determined by the Land Surveyor's standard work week.
3. ENGINEER will insure that all survey-staking services are coordinated to meet the contractor's operations schedule; staking requests are submitted and reviewed in a timely manner. Any penalties associated with time delays that are a result of a failure to provide approved staking requests to the Land Surveyor in a timely manner will be borne by the ENGINEER.
4. ENGINEER will provide field office support and office space to the survey crews and check field staking notes after staking.
5. ENGINEER survey staking sub-consultant, if required and approved by the COUNTY, shall provide all labor, tools, equipment and other miscellaneous items necessary to perform their work, and providing one set of construction stakes as required by the construction contract.
6. Where conflicts between Caltrans guidance and County guidance occurs, County guidance will be followed. For example, the County does not support Automated Machine Guidance (AMG) activities.

Assumptions:

1. It is assumed that the COUNTY will not provide the Survey services on this contract under the direction of the CM.
2. A minimum standard of survey quality shall be that of similar surveys performed by COUNTY and Caltrans.

Note: COUNTY may, if they choose, perform part or all of the surveying tasks.

Deliverables:

1. Maintain log of construction staking requests.
2. Maintain a construction-staking plan set in the field office for review, reference, and document any as-built changes.
3. Maintain files of all field notes for review and reference.
4. Limits of clearing and grubbing will be flagged at 100-foot intervals.
5. Slope Stakes will be placed at 50-foot intervals. Rough grade will be staked at all grade breaks and at 50-foot intervals. Slope stakes will be provided for roadway.

6. Finished grading stakes will be provided at all grade breaks and points of curvature (BC, EC, PRC, PCC, etc.) with curb and gutter stakes placed at 25-foot intervals, and edge pavement stakes placed at 50-foot intervals. Additional stakes at intermittent intervals can be provided where project conditions require, such as tight radius curves, etc.
7. Utilities will generally be controlled by adjacent construction staking or adjacent facilities with the Land Surveyor providing staking of project features and/or project right-of-way in the vicinity of the utility in question. Storm drains will be staked at 50-foot intervals. Water and sewer lines, when required, will be staked at grade breaks, angle points, appurtenances (valves, crosses, ends, etc.) and at 50-foot intervals; 25-foot interval spacing will be used when the grade is less than 0.3 percent. Stakes will be provided at the ends of pipes (with a corresponding "Line Only Point" stake) and at appurtenances, Drop inlets shall be staked with two 5-foot offset stakes parallel to curb, showing offset to curb line; the local depression is the contractor's responsibility.
8. Retaining walls, bridge abutments and bents: one set of stakes will be provided for bridge construction as follows: At each abutment, pier or bent the corners of each footing will be staked, and three stakes will be provided: One stake will be provided at the intersection of the control line and abutment/bent/pier centerline. The other two stakes will be placed on the centerline of the abutment/pier/bent, one on either side of the structure, offset as requested by the Contractor. Approach slabs will be established at limits of slabs, with one set of stakes to offset requested by the Contractor. Retaining wall staking will be provided at not less than 20-foot intervals, or exceed 50-foot intervals. The Contractor shall provide retaining wall intermediate staking and additional survey controls as required to construct the structure to the grades and tolerances required by the Standard Specifications and Special provisions.
9. Other improvements such as permanent delineation, signs, lighting, signals, traffic detector loops, guard rails, etc., will be staked by the Construction Engineer.
10. Monuments established by the ENGINEER shall be marked by the ENGINEER with State furnished disks, plugs, or tags. In addition, the ENGINEER shall identify ENGINEER established monuments by tagging or stamping the monuments with the license or registration number of the ENGINEER's surveyor who is in "responsible charge" of the work. Replacement of Survey monuments shall be the responsibility of the ENGINEER. All new monuments shall be set in accordance with current Caltrans, COUNTY and Land Surveyors Act requirements.

#### **5.4 Review and maintain "As Constructed Schedule"**

Purpose:

To track contractor's progress during construction of the project.

Approach:

ENGINEER will use the daily inspection reports prepared by ENGINEER inspectors, the contractors' schedule, site observations, and other sources of information, to track and document the contractor's actual progress. The contractor's baseline critical path schedule or most recent accepted update will be used as a basis for comparing planned versus actual progress. The CPM software described in Section 3 will be used to track the contractor's progress and build a schedule based on the contractor's activities.

Assumptions:

Monitoring will be on a continuous basis and the "as constructed" schedule will be updated monthly.

Deliverables:

An "As Constructed Schedule" with one electronic file (readable by software used by the COUNTY) and one hardcopy.

### **5.5 Maintain Photographic and Video Records of Construction Progress**

Purpose:

To provide the COUNTY with a photographic record of the project, before, during and after construction.

Approach:

Using 35mm and/or digital photography, and construction video recording cameras, ENGINEER will record the Contractor's progress during construction on a daily basis or otherwise as approved by the COUNTY. Care will be taken to record all items and/or conditions that have or may have a bearing on claimed extra work. Still photographs will be labeled with captions indicating subject matter, date taken, and any description required to further clarify the item/issue being photographed.

Assumptions:

All photographs will remain at the ENGINEER office until the end of the project. Video will be recorded and saved as part of the project records. Video will also be made available to the public via the Project web site.

Deliverables:

1. A detailed photographic history of all phases of the project will be maintained in an album and the photographs will be indexed for ease of retrieval. Each photograph will be labeled as to location, direction of view, date, time, and description of work. Photos will include, but not be limited to, the following:
  - Showing existing conditions prior to construction
  - When opening or changing a detour
  - Barricade placement
  - Disputed work item
  - Work that has to be duplicated, replaced or removed
  - Completed work
  - Extra work
2. Construction video cameras, with pan, zoom, tilt capabilities are to be installed prior to construction start and maintained throughout the project. One camera in each quadrant of the interchange shall be placed so as to capture the widest range of activity and clearest views of the project to the extent possible. Cameras may be required to be relocated as project phase's change. Coordination with COUNTY to provide live video feed via the COUNTY web site is required. ENGINEER is for an appropriate power source for the cameras. Solar power may be considered.

### **5.6 Review and Maintain "As Built" Drawings**

Purpose:

To provide the COUNTY with accurate record drawings for the project.

Approach:

ENGINEER will monitor the contractor's required record drawings on a monthly basis. In addition to monitoring the contractor's drawings, ENGINEER will maintain a copy of the contract plans for the project. ENGINEER will ensure that items that may not normally be shown on the contractor's set of record drawings, but are of importance to the COUNTY, cities and Caltrans, are included in the as-built drawings. This information is not necessarily construction related, but is project related and may be important in future maintenance and/or construction projects.

Assumptions:

1. Contract documents will require contractor to prepare redline as-built drawings to reflect as-built conditions during the course of construction.
2. The ENGINEER will be responsible for ensuring the contractor maintains red line changes and will be responsible for making redline changes to one complete set of plans.
3. ENGINEER will assist in answering questions regarding the red line drawings, providing sketches or other clarifications to the design engineers for preparation of final as built record drawings.

Deliverables:

One set of marked up contract drawings. This set will be in addition to the contractor's marked up set of contract drawings.

## **5.7 Final Inspection and Punch-list**

Purpose:

To identify elements of construction requiring correction prior to final acceptance by the COUNTY.

Approach:

ENGINEER will perform a project inspection of the completed construction following substantial completion. During the inspection, the ENGINEER will develop a list of contract work requiring correction or rework. The written list of deficient work (punch-list) will be delivered to the COUNTY and CONTRACTOR within three (3) working days of the final inspection. The final punch-list will include items to be corrected that were identified previously during the course of construction.

Assumptions:

1. The COUNTY will identify any key COUNTY or other permitting agency (Caltrans, City) personnel to be included in the final inspection.
2. ENGINEER will contact and schedule all required final inspection personnel 48 hour prior to the final inspection.
3. ENGINEER will prepare the final punch-list.

Deliverables:

Final punch-list

## **5.8 Final Acceptance – Punch List Assistance**

Purpose:



To provide the COUNTY with reasonable assurance that the work of the project has been completed in compliance with the general intent of the contract documents.

Approach:

ENGINEER will coordinate a walk-through with the COUNTY, the Designer, Caltrans, the City, and the Contractor. ENGINEER, with assistance from the COUNTY, the Designer and Caltrans will prepare a punch list indicating all deficiencies and/or omissions noted in the walk-through. ENGINEER will then forward the punch list to the Contractor for correction of the work in accordance with timelines defined in the contract. ENGINEER, in conjunction with the COUNTY, the City and Caltrans as necessary, will inspect items on the punch list once the Contractor has notified the ENGINEER that the work is complete. Completed items on the punch list will be signed off by the ENGINEER. Upon completion of the punch list work the ENGINEER will notify the COUNTY that the work is complete and forward a copy of the completed punch list.

Assumptions:

ENGINEER will provide a preliminary punch list of outstanding work items to the Contractor. Cm will ensure all punch list items are completed prior to requesting a final walk-through from the COUNTY, the City, the Designer and Caltrans.

Deliverables:

Completed and signed-off punch-list submitted to the COUNTY with the closeout documents.

## **6 – Construction Closeout Activities**

### **6.1 Contract Closeout**

Purpose:

To provide the COUNTY with final closeout documentation, including any permit completion documentation.

Approach:

ENGINEER will turn over all project files, contract correspondence and documents including final logs at time of project completion.

Assumptions:

COUNTY will file final Notice of Completion and Acceptance of Work.

Deliverables:

1. Notice of Completion form for COUNTY.
2. Notices of Completion for any Permits, including “duplicate” permits for project and documentation showing the NOT has been recorded.
3. Copy of the Contractor’s performance bond, good for the warranty period.
4. Final project documentation in accordance with the requirements of the Caltrans local assistance manual and FHWA requirements.

### **6.2 Project As-Built Drawings**

Purpose:

To provide the COUNTY and Caltrans with accurate record drawings indicating all changes and as-built conditions.

Approach: In addition to monitoring the Contractor’s record drawings, ENGINEER will maintain a copy of up-to-date contract plans for the purpose of aiding the Designer in final review of the record drawings.

Assumptions:

1. The Contractor will be responsible for preparing the record drawings in both reproducible and electronic formats.
2. ENGINEER will assist the Designer in review and final approval of the as-built record drawings.

Deliverables:

One set of contract drawings indicating recorded changes to the contract, as maintained by ENGINEER. This set will be in addition to the Contractor’s marked up set of contract drawings. Provide one copy of the revised Mylar drawings. The design consultant will prepare the record drawings for the project.

### **6.3 Final Project Report**

Purpose:

To provide the COUNTY with a written history of the construction contract. The contents of the final report are to fulfill federal requirements for federal financial participation.

Approach:

ENGINEER will review the project documents and prepare a written report for the COUNTY. As a minimum, the report will include the following:

1. Names of all organizations involved with the Projects, i.e., COUNTY managers, Caltrans, construction manager, contractor and any other parties that may have a significant part in the construction of the projects.
2. Chronological history of the construction effort, to include all significant dates.
3. Contract amounts at bid time with all other bids in tabular form.
4. Change order history, to include summary statement about each change, negotiated cost of each change and other information deemed necessary by ENGINEER and the COUNTY's Project Manager.
5. Summary of Requests for Information, in tabular or matrix form.
6. Summary of outstanding claims not resolved when the notice of completion is filed.
7. Summary of final contract amount.
8. Final DBE Report.
9. Project photographs.
10. "Lessons learned"

Assumptions:

COUNTY will provide input to ENGINEER regarding the form of the final report and federal required documents to be included in the report.

Deliverables:

One hard copy and one electronic file will be provided.

### **6.4 Final Payment, Final Report of Expenditure Checklist**

Purpose:

To provide the COUNTY with the final contract cost and final balance due the Contractor. Also prepare Report of Expenditure Checklist for federal reimbursement including all necessary attachments.

Approach:

Following completion of the contract work, ENGINEER will, in accordance with the Designer, determine the final quantities and cost of all outstanding unit price work and all outstanding approved change order work. ENGINEER will prepare for the COUNTY and the Contractor, a final balancing change order quantifying the final contract amount. Contractor will include amount of final balancing change order in submission of last certified application for payment, submitted to ENGINEER. Once approved, ENGINEER will forward application for payment to the COUNTY for final approval and processing.

Assumptions:

1. There are no outstanding issues or claims.
2. The COUNTY is responsible for filing Notice of Completion and addressing all subcontractor claims prior to release of final payment. The COUNTY will file the Report of Expenditure Checklist for federal reimbursement.

Deliverables:

1. Final Pay Estimate including finalized bid items, claims, change orders, punch-list items, and corrected shop drawings.
2. Contractor's last certified application for payment with application certificate.
3. Report of Expenditure Checklist with attachments
4. Federal final report including all attachments.

## **6.5 Audit Support**

Purpose:

To assist COUNTY during any future audits of the project.

Assumptions:

County may be audited one or more times following project close-out. The County will issue a future task order to pay for support services during any such audits, should they request these services.

Deliverables:

ENGINEER will participate in the audit process at the COUNTY offices and provide any and all documentation from the project as requested by the auditors, and attend meetings as needed.

## **7 – Field Office and Employee Equipment**

The Construction Contractor will provide a construction trailer/office facility with sanitary facility, water supply, and air conditioning for the use of CM staff and provide venue for weekly construction progress meetings, coordination meetings with local agencies, utility companies, local businesses, residents and other stake holders. Supplies to be provided by the contractor include furniture, phones, computers, fax machine, Internet services, copying/reproduction machine, file cabinets, and site safety equipment required for field staff to perform their work.

**I-15/Limonite Avenue Interchange Project**

**Proposed Budget for Construction Management & Inspection Services**

Construction Manager	Pre-Construction			Construction			Post Construction			Total	
	Hours	Billing Rate	Total Cost	Hours	Billing Rate	Total Cost	Hours	Billing Rate	Total Cost	Hours	Total Cost
<b>Construction Manager</b>											
<b>Wael Faqih</b>											
Project Manager											
Wael Faqih, PE	450.0	\$ 250.00	\$ 112,500.00	2,656	\$ 250.00	\$ 664,000.00	80	\$ 250.00	\$ 20,000.00	3,186	\$ 796,500.00
Scott Walker, PE	500	\$ 232.00	\$ 116,000.00	2,656	\$ 232.00	\$ 616,192.00	80	\$ 232.00	\$ 18,560.00	3,236	\$ 750,752.00
Mohammad Khalilallah, PE	80	\$ 184.84	\$ 14,787.20	2,736	\$ 184.84	\$ 505,722.24	-	\$ 184.84	\$ -	2,816	\$ 520,509.44
Zaid Afanan, EIT	240	\$ 154.84	\$ 37,161.60	2,816	\$ 154.84	\$ 436,029.44	-	\$ 154.84	\$ -	3,056	\$ 473,191.04
Ahmad Faqih, EIT		\$ 184.84	\$ -	2,240	\$ 184.84	\$ 414,041.60		\$ 184.84	\$ -	2,240	\$ 414,041.60
Dion Castro	176	\$ 171.64	\$ 30,208.64	584	\$ 171.64	\$ 100,237.76		\$ 171.64	\$ -	760	\$ 130,446.40
D. Green/D. McNaboe	384	\$ 184.84	\$ 70,978.56	848	\$ 184.84	\$ 156,744.32		\$ 184.84	\$ -	1,232	\$ 227,722.88
Tariq Malik, PE		\$ 221.81	\$ -		\$ 221.81	\$ -		\$ 221.81	\$ -		\$ -
ODC (Earth/Spec CIDH Piling)						\$ 19,998.00					\$ 19,998.00
<b>SUBTOTAL</b>	<b>1,830</b>		<b>\$ 381,636.00</b>	<b>14,536</b>		<b>\$ 2,912,965.36</b>	<b>160</b>		<b>\$ 38,560.00</b>	<b>16,526</b>	<b>\$ 3,333,161.36</b>
<b>Inspection Subconsultants</b>											
<b>Structural</b>											
John Buckley, PE	192	\$ 202.07	\$ 38,797.44	2,656	\$ 202.07	\$ 536,897.92	80	\$ 202.07	\$ 16,165.60	2,928	\$ 591,860.96
Ashly Montgomery		\$ 121.78	\$ -	2,736	\$ 121.78	\$ 333,190.08		\$ 121.78	\$ -	2,736	\$ 333,190.08
Steve Kestly		\$ 142.44	\$ -	1,020	\$ 142.44	\$ 145,288.80		\$ 142.44	\$ -	1,020	\$ 145,288.80
Dan Pavela	120	\$ 153.56	\$ 18,427.20	424	\$ 153.56	\$ 65,109.44	24	\$ 153.56	\$ 3,685.44	568	\$ 87,222.08
Peter Smith		\$ 166.91	\$ -		\$ 166.91	\$ -		\$ 166.91	\$ -		\$ -
ODC (Vehicle)						\$ 48,600.00					\$ 48,600.00
<b>SUBTOTAL</b>	<b>312</b>		<b>\$ 57,224.64</b>	<b>6,836</b>		<b>\$ 1,128,886.24</b>	<b>104</b>		<b>\$ 19,851.04</b>	<b>7,252</b>	<b>\$ 1,205,961.92</b>
<b>Inspection Subconsultants</b>											
<b>Inspector</b>											
Raymond Frangle		\$ 150.15	\$ -	1,624	\$ 150.15	\$ 243,843.60		\$ 150.15	\$ -	1,624	\$ 243,843.60
Zack Faqih, PE		\$ 184.80	\$ -		\$ 184.80	\$ -		\$ 184.80	\$ -		\$ -
ODC (Vehicle)						\$ 14,300.00					\$ 14,300.00
<b>SUBTOTAL</b>				<b>1,624</b>		<b>\$ 258,143.60</b>				<b>1,624</b>	<b>\$ 258,143.60</b>
<b>Inspection Subconsultants</b>											
<b>Inspector</b>											
Charles Lamb, LSA		\$ 165.00	\$ -	656	\$ 165.00	\$ 108,240.00		\$ 165.00	\$ -	656	\$ 108,240.00
ODC (Vehicle)						\$ 6,850.00					\$ 6,850.00
<b>SUBTOTAL</b>				<b>656</b>		<b>\$ 115,090.00</b>				<b>656</b>	<b>\$ 115,090.00</b>
<b>Inspection Subconsultants</b>											
<b>Environmental</b>											
Michael Wilcox		\$ 111.03	\$ -	560	\$ 113.05	\$ 63,308.00		\$ 113.05	\$ -	560	\$ 63,308.00
Nathan Moorhatch		\$ 109.99	\$ -		\$ 111.99	\$ -		\$ 111.99	\$ -		\$ -
Robert Williams		\$ 54.47	\$ -		\$ 55.46	\$ -		\$ 55.46	\$ -		\$ -
Scott Crawford		\$ 165.38	\$ -		\$ 168.38	\$ -		\$ 168.38	\$ -		\$ -
Mindy Boehm		\$ 52.94	\$ -		\$ 53.90	\$ -		\$ 53.90	\$ -		\$ -
ODC (Vehicle)						\$ 5,200.00					\$ 5,200.00
<b>SUBTOTAL</b>				<b>560</b>		<b>\$ 68,508.00</b>				<b>560</b>	<b>\$ 68,508.00</b>
<b>Materials Testing</b>											
Scott Mathis		\$ 91.69	\$ -	314	\$ 91.69	\$ 28,790.66		\$ 91.69	\$ -	314	\$ 28,790.66
Filed Technician & Plant Inspection		\$ 147.27	\$ -	1,350	\$ 147.27	\$ 198,814.50		\$ 147.27	\$ -	1,350	\$ 198,814.50
Office/Admin		\$ 93.14	\$ -	100	\$ 93.14	\$ 9,314.00		\$ 93.14	\$ -	100	\$ 9,314.00
ODC (Testing)						\$ 83,460.00					\$ 83,460.00
<b>SUBTOTAL</b>				<b>1,764</b>		<b>\$ 320,379.16</b>				<b>1,764</b>	<b>\$ 320,379.16</b>
<b>Utility Reclamation</b>											
Delvin Zafra		\$ 152.57	\$ -	600	\$ 152.58	\$ 91,548.00		\$ 152.57	\$ -	600	\$ 91,548.00
Utility Inspector						\$ 91,548.00					\$ 91,548.00
<b>SUBTOTAL</b>				<b>600</b>		<b>\$ 91,548.00</b>				<b>600</b>	<b>\$ 91,548.00</b>
<b>Source Inspector</b>											
Farzad Tasbigo	160	\$ 161.70	\$ 25,872.00	1223	\$ 161.70	\$ 197,759.10		\$ 161.70	\$ -	1383	\$ 223,631.10
Source Inspection						\$ 73,100.00					\$ 73,100.00
ODC (Testing)						\$ -					\$ -
<b>SUBTOTAL</b>	<b>160</b>		<b>\$ 25,872.00</b>	<b>1223</b>		<b>\$ 270,859.10</b>				<b>1383</b>	<b>\$ 296,731.10</b>
<b>Labor Compliance &amp; Electrical</b>											
Chia-Chi Wang, PE		\$ 162.14	\$ -	160	\$ 162.14	\$ 25,942.40		\$ 162.14	\$ -	160	\$ 25,942.40
John Kannor		\$ 154.29	\$ -	350	\$ 154.29	\$ 54,001.50		\$ 154.29	\$ -	350	\$ 54,001.50
Victor Moore		\$ 177.83	\$ -		\$ 177.83	\$ -		\$ 177.83	\$ -		\$ -
Electrical Inspection (As Needed)						\$ -					\$ -
<b>SUBTOTAL</b>				<b>510</b>		<b>\$ 79,943.90</b>				<b>510</b>	<b>\$ 79,943.90</b>
<b>Construction Surveying</b>											
Cliff Seminalth		\$ 276.61	\$ -		\$ 276.61	\$ -		\$ 276.61	\$ -		\$ -
Tim Garcia, PLS		\$ 153.18	\$ -		\$ 153.18	\$ -		\$ 153.18	\$ -		\$ -
Jorge Arellanes, PLS		\$ 148.23	\$ -	600	\$ 148.23	\$ 88,938.00		\$ 148.23	\$ -	600	\$ 88,938.00
Stephen Armstrong		\$ 142.27	\$ -		\$ 142.27	\$ -		\$ 142.27	\$ -		\$ -
Sean Grainger		\$ 133.30	\$ -	600	\$ 133.30	\$ 79,980.00		\$ 133.30	\$ -	600	\$ 79,980.00
Johnathan Johnson		\$ 99.99	\$ -	400	\$ 99.99	\$ 39,996.00		\$ 99.99	\$ -	400	\$ 39,996.00
Apprentice Chainman						\$ -					\$ -
<b>SUBTOTAL</b>				<b>1,600</b>		<b>\$ 208,914.00</b>				<b>1,600</b>	<b>\$ 208,914.00</b>
<b>TOTAL PROJECT COST</b>	<b>2,302</b>		<b>\$ 464,732.64</b>	<b>28,909</b>		<b>\$ 5,455,237.36</b>	<b>264</b>		<b>\$ 58,411.04</b>	<b>32,475</b>	<b>\$ 5,978,381.04</b>

Appendix B

- 1) Cost Proposal is based on Average 160hrs/month for the entire project duration of a 325WD construction contract with consultant NTP on 12/15/2017. Holidays include New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving (2 days), Christmas, and a Floating Holiday
- 2) Costs for job-site construction management office, office equipment, and office furniture are included in this estimate. Other Direct Costs are estimates, based on project duration. Invoicing will be based on submitted hourly rates with Overhead and Fee multipliers included.
- 3) Overtime, weather, holidays and potential time extensions or delays may result in additional construction management services. Surveying costs are an estimate. Salary escalations during the term of this contract will reflect County of Riverside.
- 4) Prevailing Wage - Wages for inspection subject to Calif. Labor Code Section 1772. Overtime will be paid in accordance with applicable labor laws.

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant: Falcon Engineering Services Contract No. 10/30/2017 Date 10/30/2017

Fringe Benefit %          + Overhead %          + General Administration % 140.05% = Combined Indirect Cost Rate (ICR) %           
(= 0% if included in OH) (= 0% if included in OH)

FEE % = 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>			OT(2x)	Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)	OT(2x)		From	To		
Wael Faquih, PE Project Manager/Resident Engineer	\$ 290.46	\$ 290.46	\$ 290.46	290.46	12/1/2017	12/31/2020	\$110.00	Not Applicable
Scott Walker, PE Assistant Resident Engineer/Principal	\$ 277.26	\$ 277.26	\$ 277.26	277.26	12/1/2017	12/31/2020	\$ 105.00	Not Applicable
Mohammad Khalafieh, PE Lead Inspector	\$ 184.84	\$ 277.26	\$ 369.68	369.68	12/1/2017	12/31/2020	\$ 70.00	
Zaid Afanan, EIT Office Engineer/Inspector	\$ 154.84	\$ 232.26	\$ 309.68	309.68	12/1/2017	12/31/2020	\$ 58.64	
Ahmad Faqih, EIT Roadway/Bridge Inspector	\$ 184.84	\$ 277.26	\$ 369.68	369.68	12/1/2017	12/31/2020	\$ 70.00	

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant Falcon Engineering Services Contract No. \_\_\_\_\_ Date 10/30/2017

Fringe Benefit % \_\_\_\_\_ + Overhead % \_\_\_\_\_ + General Administration % \_\_\_\_\_ = 140.05%  
(= 0% if Included in OH) (= 0% if Included in OH)

Combined Indirect Cost Rate (ICR) % \_\_\_\_\_  
FEE % = 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>		OT(2x)	Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)		From	To		
Dion Castro SWPPP Coordinator	\$ 171.64	\$ 257.46	\$ 343.28	12/1/2017	12/31/2020	\$ 65.00	
Dennis Green Darcy McNaboe Public Relations/Outreach	\$ 184.84	\$ 277.26	\$ 369.68	12/1/2017	12/31/2020	\$ 70.00	
Tariq Malik, PE Technical Support	\$ 221.81	\$ 221.81	\$ 221.81	12/1/2017	12/31/2020	\$ 84.00	Not Applicable

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant T.Y. Lin International Contract No. \_\_\_\_\_ Date 10/30/2017

Fringe Benefit % \_\_\_\_\_ + Overhead % \_\_\_\_\_ = General Administration % 115.56% Combined Indirect Cost Rate (ICR) % \_\_\_\_\_  
(= 0% if Included in OH) (= 0% if Included in OH)

FEE % = \_\_\_\_\_ 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>			Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To		
John Buckley, PE Structures Representative	\$ 202.07	\$ 202.07	\$ 202.07	12/1/2017	12/31/2020	\$ 85.22	Not Applicable
Ashly Montgomery Structures Inspector	\$ 121.78	\$ 182.67	\$ 243.56	12/1/2017	12/31/2020	\$ 51.36	
Steve Kestly Electrical/Signal Inspector	\$ 142.44	\$ 213.66	\$ 284.88	12/1/2017	12/31/2020	\$ 60.07	
Dan Pavela Scheduler Review/Claim Support	\$ 153.56	\$ 230.34	\$ 307.12	12/1/2017	12/31/2020	\$ 64.76	
Peter Smith Design Support	\$ 166.91	\$ 250.37	\$ 333.82	12/1/2017	12/31/2020	\$ 70.39	

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit



**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant Z&K Consultants Contract No. \_\_\_\_\_ Date 10/30/2017

Fringe Benefit % \_\_\_\_\_ + Overhead % \_\_\_\_\_ = General Administration % \_\_\_\_\_ = 110.00% Combined Indirect Cost Rate (ICR) % \_\_\_\_\_  
(= 0% if included in OH) (= 0% if included in OH)

FEE % = \_\_\_\_\_ 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>		OT(2x)	Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)		From	To		
Ramond Frangie Structures/Roadway Inspection	\$ 150.15	\$ 225.23	\$ 300.30	12/1/2017	12/31/2020	\$ 65.00	Not Applicable
Zack Faqih, PE Structures/Roadway Inspection	\$ 184.80	\$ 184.80	\$ 184.80	12/1/2017	12/31/2020	\$ 80.00	Not Applicable

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant Francis Consultants Contract No. \_\_\_\_\_ Date 10/30/2017

Fringe Benefit % \_\_\_\_\_ + Overhead % \_\_\_\_\_ + General Administration % \_\_\_\_\_ = \_\_\_\_\_ Combined Indirect Cost Rate (ICR) % \_\_\_\_\_  
 (= 0% if included in OH) (= 0% if included in OH) 110.00%  
 FBE % = \_\_\_\_\_ 10.00%

BILLING INFORMATION			CALCULATION INFORMATION			
Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>	Effective date of hourly rate	Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only		
	Straight OT(1.5x) OT(2x)	From To				
Charles Lamb, LSA Landscaping Inspection	\$ 161.70 \$ 242.55 \$ 323.40	12/1/2017 12/31/2020	\$ 70.00	Not Applicable		

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**  
Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant AMEC - Foster Wheeler Contract No. 10/30/2017 Date 10/30/2017

Fringe Benefit % + Overhead % + General Administration % = 147.57% Combined Indirect Cost Rate (ICR) % 10.00%  
(= 0% if included in OH) (= 0% if included in OH)

FEE % = 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>		OT(2x)	Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)		From	To		
Michael Wilcox Senior Biologist	\$ 111.03	\$ 166.55	\$ 222.06	12/1/2017	12/31/2020	\$ 40.77	Not Applicable
Nathan Moorhatch Senior Biologist	\$ 109.99	\$ 164.99	\$ 219.98	12/1/2017	12/31/2020	\$ 40.39	Not Applicable
Robert Williams Biological Monitor	\$ 54.47	\$ 81.71	\$ 108.94	12/1/2017	12/31/2020	\$ 20.00	
Scott Crawford Project Manager	\$ 165.38	\$ 248.07	\$ 330.76	12/1/2017	12/31/2020	\$ 60.73	
Mindy Boehm GIS Analyst	\$ 52.94	\$ 79.41	\$ 105.88	12/1/2017	12/31/2020	\$ 19.44	

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant Converse Consulting Contract No. 10/30/2017 Date 10/30/2017

Fringe Benefit % + Overhead % + General Administration % = 198.97% Combined Indirect Cost Rate (ICR) %

(= 0% if Included in OH) (= 0% if Included in OH)

FEE % = 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>			Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To		
Project Coordinator	\$ 91.69	\$ 137.54	\$ 183.38	12/1/2017	12/31/2020	\$ 27.88	
TBD Plant Inspector	\$ 147.27	\$ 220.91	\$ 294.54	12/1/2017	12/31/2020	\$ 44.78	
TBD Filed Technician	\$ 147.27	\$ 220.91	\$ 294.54	12/1/2017	12/31/2020	\$ 44.78	
TBD Office Administration	\$ 93.14	\$ 139.71	\$ 186.28	12/1/2017	12/31/2020	\$ 28.32	

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fec). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant MARRS Contract No. 10/30/2017 Date 10/30/2017

Fringe Benefit % + Overhead % + General Administration % = 121.00% Combined Indirect Cost Rate (ICR) % 10.00%  
 (= 0% if Included in OH) (= 0% if Included in OH)

FEE % = 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>			Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To		
Delfin Zafra Utility Inspector	\$ 152.57	\$ 228.86	\$ 228.86	12/1/2017	12/31/2020	\$ 62.76	

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant ZT Consulting Group, Inc. Contract No. \_\_\_\_\_ Date 10/30/2017

Fringe Benefit % \_\_\_\_\_ + Overhead % \_\_\_\_\_ + General Administration % \_\_\_\_\_ = 110.00% Combined Indirect Cost Rate (ICR) %  
(= 0% if included in OH) (= 0% if included in OH)

FEE % = 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>		Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)	From	To		
Farzad Tasbiho Source Inspection	\$ 161.70	NA	6/1/2014	12/31/2018	\$ 70.00	Not Applicable
Zaid Afanan, EIT Office Engineer/Inspector						
Ahmad Faqih, EIT Roadway/Bridge Inspector						

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant Dynamic Engineering Services, Inc. Contract No. \_\_\_\_\_ Date 10/30/2017

Fringe Benefit % + Overhead % = General Administration % = 137.74%  
(= 0% if included in OH) (= 0% if included in OH)

Combined Indirect Cost Rate (ICR) %  
FEE % = 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>			Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To		
Chia-Chi Wang, PE Labor Compliance	\$ 162.14	\$ 162.14	\$ 162.14	12/1/2017	12/31/2020	\$ 62.00	Not Applicable
John Kannon Electrical Inspector	\$ 154.29	\$ 231.44	\$ 462.87	12/1/2017	12/31/2020	\$ 59.00	
Victor Moore Electrical Inspector	\$ 177.83	\$ 266.75	\$ 533.49	12/1/2017	12/31/2020	\$ 68.00	

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

- Denote all employees subject to prevailing wage with an asterisks (\*)
- For "Other Direct Costs" listing, see page 2 of this Exhibit

**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant PSOMAS Contract No. 10/30/2017 Date 10/30/2017

Fringe Benefit %          + Overhead %          + General Administration %          = Combined Indirect Cost Rate (ICR) %           
 (= 0% if Included in OH) (= 0% if Included in OH)          164.70%         

FEE % =          10.00%         

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>			Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To		
Cliff Seminalth Project Manager	\$ 276.61	\$ 276.61	\$ 276.61	12/1/2017	12/31/2020	\$ 95.00	Not Applicable
Tim Garcia, PLS Licensed Party Chief	\$ 153.18			12/1/2017	12/31/2020	\$ 52.61	
Jorge Arellanes, PLS Licensed Party Chief	\$ 148.23			12/1/2017	12/31/2020	\$ 50.91	
Stephen Armstrong Party Chief	\$ 142.27			12/1/2017	12/31/2020	\$ 48.86	
Sean Grainger Chairman	\$ 133.30			12/1/2017	12/31/2020	\$ 45.78	

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
- Billing rate = actual hourly rate \* (1 + ICR) \* (1 + Fee). Agreed upon billing rates are not adjustable for the term of the contract.
- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

Note:

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- For "Other Direct Costs" listing, see page 2 of this Exhibit



**EXHIBIT 10-H COST PROPOSAL**

Specific Rate of Compensation (use for on-call or as-needed contracts)  
(Construction Engineering and Inspection Contracts)

Consultant or Subconsultant PSOMAS Contract No. \_\_\_\_\_ Date 10/30/2017

Fringe Benefit % \_\_\_\_\_ + Overhead % \_\_\_\_\_ + General Administration % \_\_\_\_\_ = 164.70% Combined Indirect Cost Rate (ICR) % \_\_\_\_\_  
(= 0% if included in OH) (= 0% if included in OH)

FEE % = 10.00%

**BILLING INFORMATION**

Name/Job Title/Classification <sup>1</sup>	Hourly Billing Rates <sup>2</sup>			Effective date of hourly rate		Actual or Avg. hourly rate <sup>3</sup>	Hourly range - for classifications only
	Straight	OT(1.5x)	OT(2x)	From	To		
Jonathan Johnson Apprentice Chairman	\$ 99.99	\$ 149.99	\$ 199.98	12/1/2017	12/31/2020	\$ 34.34	Not Applicable

**CALCULATION INFORMATION**

- Names and classifications of consultant (key staff) team members must be listed. Provide sheets for prime and all subconsultant firms.
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- For named employees enter the actual hourly rate. For classifications only, enter the average hourly rate for that classification.

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