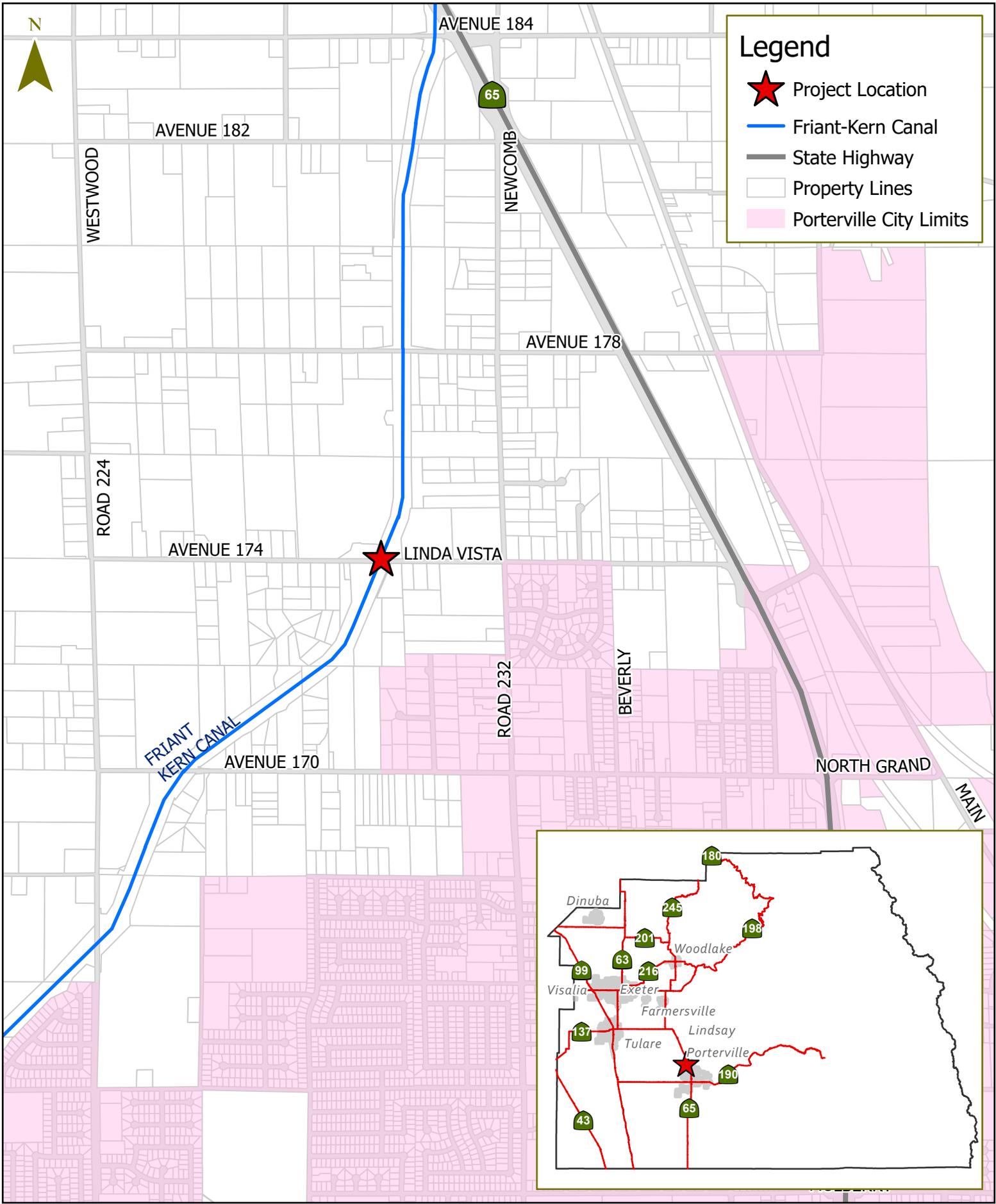


Attachment A:
Vicinity Map



Attachment C:
Tulare County Agreement No. 28406

**BEFORE THE BOARD OF SUPERVISORS
COUNTY OF TULARE, STATE OF CALIFORNIA**

IN THE MATTER OF AGREEMENT WITH)
NCM ENGINEERING CORPORATION FOR) Resolution No. 2017-0965
THE AVENUE 174 OVER FRIANT-KERN) Agreement No. 28406
CANAL BRIDGE PROJECT)

UPON MOTION OF SUPERVISOR ENNIS, SECONDED BY SUPERVISOR SHUKLIAN THE FOLLOWING WAS ADOPTED BY THE BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD NOVEMBER 14, 2017, BY THE FOLLOWING VOTE:

AYES: SUPERVISORS CROCKER, VANDER POEL, SHUKLIAN, AND ENNIS
NOES: NONE
ABSTAIN: NONE
ABSENT: SUPERVISOR WORTHLEY



ATTEST: MICHAEL C. SPATA
COUNTY ADMINISTRATIVE OFFICER/
CLERK, BOARD OF SUPERVISORS

BY: Alay Parullo
Deputy Clerk

1. Approved an Agreement with NCM Engineering Corporation for an amount not to exceed \$486,512, to provide Professional Engineering Consulting Services for the Avenue 174 Over Friant-Kern Canal Bridge Project for the period of November 14, 2017 to June 30, 2023; and
2. Authorized the Chairman of the Board of Supervisors to sign the Agreement with NCM Engineering Corporation.

AGREEMENT FOR PROFESSIONAL ENGINEERING CONSULTING SERVICES

THIS AGREEMENT, is entered into as of November 14, 2017, between the COUNTY OF TULARE, referred to as "COUNTY", and NCM ENGINEERING CORPORATION, referred to as "CONSULTANT", incorporated within the State of California, with reference to the following:

A. WHEREAS, COUNTY has requested for professional engineering services for a bridge replacement/rehabilitation project on Avenue 174 over Friant-Kern Canal. These consulting services are to include project management, preliminary engineering, plan, specifications, and estimate (PS&E), bidding, and other compliance tasks as described per Exhibit A, to the satisfaction of the COUNTY, State, Federal Highway Administration (FHWA) and other jurisdictional agencies. CONSULTANT shall document the results of the work to the satisfaction of the COUNTY, the State and FHWA. This may include preparation of progress and final reports or similar evidence of attainment of the agreement objectives and;

B. WHEREAS, CONSULTANT'S response indicates that it possesses the professional qualifications, relevant experience and demonstrated competence to provide such services. If there is any conflict between the approved Cost Proposal and this contract, this contract shall take the precedence and;

ACCORDINGLY, IT IS AGREED:

1. SERVICES. CONSULTANT will provide professional engineering services, more particularly described in Exhibit A ("Scope of Work"). All work performed and billed to the COUNTY by the CONSULTANT shall be grant eligible in accordance with the Caltrans Local Assistance Procedures Manual (LAPM), unless otherwise directed by the COUNTY, in writing.

2. TIME FOR PERFORMANCE/TERM. Time is of the essence in this Agreement. The services as described in Exhibit A, will commence within five days of receipt of a written notice to proceed issued following acceptance of this Agreement by the COUNTY. This agreement shall terminate on June 30th, 2023. Mutually acceptable changes in the scope, character, or complexity of the work if such changes become desirable or necessary as the work progresses will be accommodated by a supplemental agreement. An appropriate extension of time may be made in the form of a supplemental agreement in case of unavoidable delays. Corresponding warranted adjustments in payment will be made based upon the incorporated rate

schedule. CONSULTANT is advised that any recommendation for contract award is not binding on COUNTY until the contract is fully executed and approved by COUNTY.

3. COMPENSATION.

- a. The COUNTY shall reimburse the CONSULTANT for hours worked at the hourly rates specified in the CONSULTANT's Cost Proposal, as described in Exhibit B. The specified hourly rates shall include direct salary costs, employee benefits, overhead, and fee. These rates are not adjustable for the performance period set forth in this contract.
- b. In addition, the CONSULTANT will be reimbursed for incurred direct costs other than salary costs that are identified in the Scope of Work, Exhibit A, and the Cost Proposal, Exhibit B.
- c. No additional compensation will be paid to the CONSULTANT, unless there is a change in the scope of the work or the scope of the project. In the instance of a change in the scope of the work or the scope of the project, adjustment to the fee will be negotiated between the CONSULTANT and COUNTY. Adjustment in the fee will not be effective until authorized by supplemental agreement and approved by the COUNTY.
- d. The CONSULTANT shall not commence performance of work or services until this contract has been approved by COUNTY, and a notification to proceed has been issued. No payment will be made prior to approval or for any work performed prior to approval of this contract.
- e. The CONSULTANT will be reimbursed, as promptly as fiscal procedures will permit, upon receipt by COUNTY'S Contract Administrator of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which CONSULTANT is billing. Invoices shall detail the work performed on each milestone, on each project as applicable. Invoices shall follow the format stipulated for the Cost Proposal and shall reference this contract number and project title. Final invoice must contain the final cost and all credits due COUNTY that include any equipment purchased under the provisions of Article 26 Equipment Purchase of this contract. The final invoice should be submitted within 60-calendar days after completion of CONSULTANT's work.

Invoices shall be mailed to COUNTY'S Contract Administrator at the following address:

Jason K. Vivian
5961 S. Mooney Blvd.
Visalia, CA 93277

- f. The total amount payable by the COUNTY for services identified in Exhibit A and Exhibit B shall not exceed sum of **THREE HUNDRED EIGHTY-SEVEN THOUSAND NINE HUNDRED EIGHTY-EIGHT AND 00/100 DOLLARS (\$387,988.00)** for primary services and **NINETY-EIGHT THOUSAND FIVE HUNDRED TWENTY-FOUR AND 00/100 DOLLARS (\$98,524.00)** for optional services.

The CONSULTANT shall not commence performance of work or services until this contract has been approved by COUNTY, and a notification to proceed has been issued. The CONSULTANT shall not commence performance of optional services until a notification to proceed has been issued. No payment will be made prior to approval or for any optional services performed prior to issuance of a notice to proceed.

CONSULTANT agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the cost allowability of individual items.

CONSULTANT also agrees to comply with federal procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.

Any cost for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31 et seq., or 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, will be repaid by the CONSULTANT to the COUNTY.

Any subcontract in excess of \$25,000, entered into as a result of this contract, shall contain all the provisions of this article.

4. PAYMENT. No sooner than the 10th day of each calendar month, CONSULTANT will submit to the Resource Management Agency, Attn: Contract Administrator, a detailed invoice for services rendered under this Agreement during the previous calendar month. CONSULTANT will be deemed to have waived all rights to compensation for any services not

billed within 90 days after the month in which the services were provided. Invoices shall detail the work performed on each milestone, on each project as applicable and shall provide total contract recap of prior invoices, current invoice, and contract balance. Invoices shall reference this agreement number and the project title. CONSULTANT shall not commence performance of work or services until this agreement has been approved by the COUNTY, and a notification to proceed has been issued. No payment will be made for any work performed prior to receiving the notification to proceed.

5. COMPLIANCE WITH LAW. CONSULTANT shall provide services in accordance with applicable Federal, State, and local laws, regulations and directives. With respect to CONSULTANT'S employees, CONSULTANT shall comply with all laws and regulations pertaining to prevailing wage rates and hours, state and federal income tax, unemployment insurance, Social Security, disability insurance, workers' compensation insurance, and discrimination in employment.

CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances applicable to the work.

Any subcontract entered into as a result of this contract, if for more than \$25,000 for public works construction or more than \$15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Article, unless the awarding agency has an approved labor compliance program by the Director of Industrial Relations.

When prevailing wages apply to the services described in the scope of work, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See <http://www.dir.ca.gov>.

6. RETENTION OF RECORDS/AUDIT. For the purpose of determining compliance with Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of the contract pursuant to Government Code 8546.7; CONSULTANT, subconsultants, and COUNTY shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of the contract, including but not limited to, the costs of administering the contract. All parties shall make such materials available at their respective offices at all reasonable times during the contract period and for

three years from the date of final payment under the contract. The state, State Auditor, COUNTY, FHWA, or any duly authorized representative of the Federal Government shall have access to any books, records, and documents of CONSULTANT and its certified public accountants' (CPA) work papers that are pertinent to the contract and indirect cost rates (ICR) for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested. Subcontracts in excess of \$25,000 shall contain this provision.

7. AUDIT REVIEW PROCEDURES. Any dispute concerning a question of fact arising under an interim or post audit of this contract that is not disposed of by agreement, shall be reviewed by the COUNTY'S Auditor-Controller.

Not later than 30 days after issuance of the final audit report, CONSULTANT may request a review by COUNTY'S Chief Financial Officer of unresolved audit issues. The request for review will be submitted in writing.

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

CONSULTANT and subconsultant contracts, including cost proposals and ICR, are subject to audits or reviews such as, but not limited to, a contract audit, an incurred cost audit, an ICR Audit, or a CPA ICR audit work paper review. If selected for audit or review, the contract, cost proposal and ICR and related work papers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR audit work paper review it is CONSULTANT's responsibility to ensure federal, state, or local government officials are allowed full access to the CPA's work papers including making copies as necessary. The contract, cost proposal, and ICR shall be adjusted by CONSULTANT and approved by COUNTY contract manager to conform to the audit or review recommendations. CONSULTANT agrees that individual terms of costs identified in the audit report shall be incorporated into the contract by this reference if directed by COUNTY at its sole discretion. Refusal by CONSULTANT to incorporate audit or review recommendations, or to ensure that the federal, state or local governments have access to CPA work papers, will be considered a breach of contract terms and cause for termination of the contract and disallowance of prior reimbursed costs.

8. SUBCONTRACTING. Nothing contained in this contract or otherwise, shall create any contractual relation between COUNTY and any subconsultant(s), and no subcontract shall relieve CONSULTANT of its responsibilities and obligations hereunder. CONSULTANT agrees to be fully responsible to COUNTY for the acts and omissions of its subconsultant(s) and

of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by CONSULTANT. CONSULTANT'S obligation to pay its subconsultant(s) is an independent obligation from COUNTY'S obligation to make payments to the CONSULTANT.

CONSULTANT shall perform the work contemplated with resources available within its own organization and no portion of the work pertinent to this contract shall be subcontracted without written authorization by COUNTY'S Contract Administrator, except that, which is expressly identified in the approved Cost Proposal.

CONSULTANT shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to CONSULTANT by COUNTY.

All subcontracts entered into as a result of this contract shall contain all the provisions stipulated in this contract to be applicable to subconsultants.

Any substitution of subconsultant(s) must be approved in writing by COUNTY'S Contract Administrator prior to the start of work by the subconsultant(s).

9. INDEPENDENT CONTRACTOR STATUS. CONSULTANT will perform all services required under this Agreement as an independent contractor. Nothing in this Agreement may be construed to constitute CONSULTANT or any of its agents, employees or officers as employees or officers of COUNTY. CONSULTANT agrees to advise everyone it assigns or hires to perform any duty under this agreement that they are not employees of COUNTY. CONSULTANT will be solely responsible for determining the means and methods of performing the specified services, and COUNTY will have no right to control or exercise any supervision over CONSULTANT as to how the services will be performed. COUNTY will not:

- a. Withhold FICA (Social Security) from CONSULTANT'S payments.
- b. Make state or federal unemployment insurance contributions on CONSULTANT'S behalf.
- c. Withhold state or federal income tax from payments to CONSULTANT.
- d. Make disability insurance contributions on behalf of CONSULTANT.
- e. Obtain unemployment compensation insurance on behalf of CONSULTANT.

Notwithstanding this independent contractor relationship, COUNTY reserves the right to monitor and evaluate the performance of CONSULTANT for the purpose of assuring compliance with this Agreement.

10. INSURANCE. Prior to approval of this agreement by the COUNTY, CONSULTANT shall file with the Resource Management Agency, evidence of the insurance in accordance with

Exhibit C attached, which outlines the minimum scope, specifications and limits of insurance required under this contract. Additional insured endorsements required as outlined in Exhibit C shall not be used to reduce limits available to COUNTY as an additional insured from the Contactor's full policy limits. Insurance policies shall not be used to limit liability or to limit the indemnification provisions and requirements of this contract or act in any way to reduce the policy coverage and limits available from the insurer (s). Failure to maintain or renew coverage, or to provide evidence of renewal, may be considered a material breach of this agreement.

11. INDEMNIFICATION: CONSULTANT shall hold harmless, defend and indemnify COUNTY, its agents, officers and employees from and against any liability, claims, actions, costs, damages or losses of any kind, including death or injury to any person and/or damage to property arising out of the willful misconduct, or the negligent acts or omissions, of CONSULTANT or its agents, officers and employees under this agreement. This indemnification specifically includes any claims that may be made against COUNTY by any taxing authority asserting that an employer-employee relationship exists by reason of this Agreement, any claims made against COUNTY alleging civil rights violations by CONSULTANT under Government Code sections 12920 et seq. (California Fair Employment and Housing Act). The indemnification obligation shall continue beyond the term of this Agreement as to any willful misconduct, negligent errors, acts or omissions, or negligent acts occurring under this Agreement or any extension of this Agreement.

12. TERMINATION. The right to terminate this Agreement under this provision may be exercised without prejudice to any other right or remedy to which the terminating party may be entitled at law or under this Agreement.

(a) Without Cause: COUNTY will have the right to terminate this Agreement without cause by giving thirty (30) days prior written notice of intention to terminate pursuant to this provision, specifying the date of termination and with the reasons for termination stated in the notice. COUNTY will pay to the CONSULTANT the compensation earned for work performed and not previously paid for to the date of termination. COUNTY will not pay lost anticipated profits or other economic loss. The payment of such compensation is subject to the restrictions on payment of compensation otherwise provided in this Agreement, and is conditioned upon receipt from CONSULTANT of any and all plans, specifications and estimates, and other documents prepared by CONSULTANT in accordance with this Agreement. No Sanctions will be imposed.

(b) With Cause: This Agreement may be terminated by either party should the other party:

- (1) be adjudged a bankrupt, or
- (2) become insolvent or have a receiver appointed, or
- (3) make a general assignment for the benefit of creditors, or
- (4) suffer any judgment which remains unsatisfied for 30 days, and which would substantively impair the ability of the judgment debtor to perform under this Agreement, or
- (5) materially breach this Agreement.

In addition, COUNTY may terminate this Agreement based on:

- (6) material misrepresentation, either by CONSULTANT or anyone acting on CONSULTANT'S behalf, as to any matter related in any way to COUNTY'S retention of CONSULTANT, or
- (7) other misconduct or circumstances which, in the sole discretion of the COUNTY, either impair the ability of CONSULTANT to competently provide the services under this Agreement, or expose the COUNTY to an unreasonable risk of liability.

COUNTY will pay to the CONSULTANT the compensation earned for work performed and not previously paid to the date of termination. The payment of such compensation is subject to the restrictions on payment of compensation otherwise provided in this Agreement, and is conditioned upon receipt from CONSULTANT of any and all reports and other documents prepared by CONSULTANT by the date of termination in accordance with this Agreement. COUNTY will not pay lost anticipated profits or other economic loss, nor will the COUNTY pay compensation or make reimbursement to cure a breach arising out of or resulting from such termination. If this Agreement is terminated and the expense of finishing the CONSULTANT'S scope of work exceeds the unpaid balance of the agreement, the CONSULTANT must pay the difference to the COUNTY. Sanctions taken will be possible rejection of future proposals based on specific cause of non-performance.

(c) Effects of Termination: Expiration or termination of this Agreement shall not terminate any obligations to indemnify, to maintain and make available any records pertaining to the Agreement, to cooperate with any audit, to be subject to offset, or to make any reports of pre-termination contract activities. Where CONSULTANT'S services have been terminated by the

COUNTY, said termination will not affect any rights of the COUNTY to recover damages against the CONSULTANT.

(d) Suspension of Performance: Independent of any right to terminate this Agreement, the authorized representative of COUNTY for which CONSULTANT'S services are to be performed, may immediately suspend performance by CONSULTANT, in whole or in part, in response to health, safety or financial emergency, or a failure or refusal by CONSULTANT to comply with the provisions of this Agreement, until such time as the cause for suspension is resolved, or a notice of termination becomes effective.

13. ENTIRE AGREEMENT REPRESENTED. This Agreement represents the entire agreement between CONSULTANT and COUNTY as to its subject matter and no prior oral or written understanding shall be of any force or effect. No part of this Agreement may be modified without the written consent of both parties.

14. HEADINGS. Section headings are provided for organizational purposes only and do not in any manner affect the scope, meaning or intent of the provisions under the headings.

15. NOTICE. Except as may be otherwise required by law, any notice to be given must be written and must be either personally delivered, sent by facsimile transmission or sent by first class mail, postage prepaid and addressed as follows:

COUNTY:

Tulare County Resource Management Agency
Attention: Jason K. Vivian, Contract Administrator
5961 South Mooney Boulevard
Visalia, CA 93277

Fax No.: (559) 730-2653 Confirming No.: (559) 624-7000,

Email: jvivian@co.tulare.ca.us

CONSULTANT:

NCM Engineering Corporation
Attention: Steve Mislinki, P.E.
1322 E. Shaw Ave, Suite 340
Fresno, CA 93710

Confirming No.: (559) 492-3016

Confirming Fax No.: (559) 492-3539

Email: steve@ncmcivil.com

Notice delivered personally or sent by facsimile transmission is deemed to be received upon receipt. Notice sent by first class mail will be deemed received on the fourth day after the date of mailing. Either party may change the above address by giving written notice pursuant to this paragraph. The above stated CONSULTANT address is to be the main working office location for the duration of this agreement.

16. CONSTRUCTION. This Agreement reflects the contributions of both parties and accordingly the provisions of Civil Code section 1654 will not apply to address and interpret any uncertainty.

17. NO THIRD PARTY BENEFICIARIES INTENDED. Unless specifically set forth, the parties to this Agreement do not intend to provide any other party with any benefit or enforceable legal or equitable right or remedy. The CONSULTANT warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the CONSULTANT, to solicit or secure this agreement, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or formation of this agreement. For breach or violation of this warranty, the COUNTY shall have the right to annul this agreement without liability, or at its discretion to deduct from the agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee. The COUNTY warrants that they have not required the CONSULTANT to employ or retain any company or person, or to pay or agree to pay any firm, person or organization, any fee, contribution donation or consideration of any land, contingent upon or resulting from the award or formation of this agreement.

18. JURISDICTION/VENUE. This Agreement shall be interpreted and governed under the laws of the State of California without reference to California conflicts of law principles. The parties agree that this contract is made in and shall be performed in Tulare County California. CONSULTANT waives the removal provisions of California Code of Civil Procedure Section 394.

19. WAIVERS. The failure of either party to insist on strict compliance with any provision of this Agreement will not be considered a waiver of any right to do so, whether for that breach or any subsequent breach. The acceptance by either party of either performance or payment will not be considered to be a waiver of any preceding breach of the Agreement by the other party.

20. EXHIBITS AND RECITALS. The Recitals and the Exhibits A-E to this Agreement are fully incorporated into and are integral parts of this Agreement. However, it is hereby mutually agreed and understood that, should any of the provisions of the Exhibits and Recitals attached to this Agreement be contrary to any of the paragraph provisions of this Agreement, the paragraph provisions of this Agreement shall control and supersede the provisions of the Exhibits and Recitals.

21. CONFLICT WITH LAWS OR REGULATIONS/SEVERABILITY. This Agreement is subject to all applicable laws and regulations. If any provisions of this Agreement are found by any court or other legal authority, or are agreed by the parties, to be in conflict with any code or regulation governing its subject, the conflicting provision will be considered null and void. If the effect of nullifying any conflicting provision is such that a material benefit of the Agreement to either party is lost, the Agreement may be terminated at the option of the affected party. In all other cases the remainder of the Agreement will continue in full force and effect.

22. FURTHER ASSURANCES. Each party agrees to execute any additional documents and to perform any further acts which may be reasonably required to affect the purposes of this Agreement.

23. PROFESSIONAL STANDARDS. By submitting final documents for approval by COUNTY, CONSULTANT represents that said documents are accurate. CONSULTANT will be responsible to COUNTY for the professional quality, adequacy, and completeness of the services, studies, and reports provided, and represents that such services, studies and reports will be suitable for the intended purposes.

CONSULTANT will perform the services provided in this Agreement in a manner consistent with the professional skill and care ordinarily exercised by expert members of the planning, engineering, and environmental profession practicing in the State of California under similar conditions.

Where applicable and in accordance with California law, the responsible CONSULTANT/engineer shall sign and seal reports and engineering data furnished by him/her.

24. DBE PARTICIPATION REQUIREMENTS: This contract is subject to 49 CFR, Part 26 entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs". Consultants who obtain DBE participation on this contract will assist Caltrans in meeting its federally mandated statewide overall DBE goal.

The goal for DBE participation for this contract is 18 %. Participation by DBE consultant or subconsultants shall be in accordance with information contained in the Consultant

Proposal DBE Commitment (**Exhibit D**), or in the Consultant Contract DBE Commitment (**Exhibit E**) attached hereto and incorporated as part of the Contract. If a DBE subconsultant is unable to perform, CONSULTANT must make a good faith effort to replace him/her with another DBE subconsultant, if the goal is not otherwise met.

DBEs and other small businesses, as defined in 49 CFR, Part 26 are encouraged to participate in the performance of contracts financed in whole or in part with federal funds. CONSULTANT or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. CONSULTANT shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of US DOT-assisted agreements. Failure by CONSULTANT to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as COUNTY deems appropriate.

Any subcontract entered into as a result of this contract shall contain all of the provisions of this section.

A DBE firm may be terminated only with prior written approval from COUNTY and only for the reasons specified in 49 CFR 26.53(f). Prior to requesting COUNTY consent for the termination, CONSULTANT must meet the procedural requirements specified in 49 CFR 26.53(f).

A DBE performs a Commercially Useful Function (CUF) when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a CUF, the DBE must also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a CUF, evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing, and other relevant factors.

A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, examine similar transactions, particularly those in which DBEs do not participate.

If a DBE does not perform or exercise responsibility for at least thirty percent (30%) of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of

the work of the contract than would be expected on the basis of normal industry practice for the type of work involved, it will be presumed that it is not performing a CUF.

CONSULTANT shall maintain records of materials purchased or supplied from all subcontracts entered into with certified DBEs. The records shall show the name and business address of each DBE or vendor and the total dollar amount actually paid each DBE or vendor, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all firms. DBE prime consultants shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.

Upon completion of the Contract, a summary of these records shall be prepared and submitted on the form entitled, "Final Report-Utilization of Disadvantaged Business Enterprise (DBE), First-Tier Subconsultants" CEM-2402F [Exhibit 17-F, of the LAPM], certified correct by CONSULTANT or CONSULTANT's authorized representative and shall be furnished to the Contract Administrator with the final invoice. Failure to provide the summary of DBE payments with the final invoice will result in twenty-five percent (25%) of the dollar value of the invoice being withheld from payment until the form is submitted. The amount will be returned to CONSULTANT when a satisfactory "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subconsultants" is submitted to the Contract Administrator.

If a DBE subconsultant is decertified during the life of the contract, the decertified subconsultant shall notify CONSULTANT in writing with the date of decertification. If a subconsultant becomes a certified DBE during the life of the Contract, the subconsultant shall notify CONSULTANT in writing with the date of certification. Any changes should be reported to COUNTY'S Contract Administrator within 30 days.

25. OWNERSHIP OF DOCUMENTS. Upon completion of all work under this contract, ownership and title to all reports, documents, plans, specifications, and estimates produce as part of this contract will automatically be vested in COUNTY; and no further agreement will be necessary to transfer ownership to COUNTY. CONSULTANT shall furnish COUNTY all necessary copies of data needed to complete the review and approval process.

It is understood and agreed that all calculations, drawings and specifications, whether in hard copy or machine-readable form, are intended for one-time use in the construction of the project for which this contract has been entered into.

CONSULTANT is not liable for claims, liabilities, or losses arising out of, or connected with the modification, or misuse by COUNTY of the machine-readable information and data provided by CONSULTANT under this contract; further, CONSULTANT is not liable for

claims, liabilities, or losses arising out of, or connected with any use by COUNTY of the project documentation on other projects for additions to this project, or for the completion of this project by others, except only such use as may be authorized in writing by CONSULTANT.

Applicable patent rights provisions regarding right to inventions shall be included in the contracts as appropriate (48 CFR 27, Subpart 27.3 – Patent Rights under Government Contracts for federal-aid contracts.

COUNTY may permit copyrighting reports or other agreement products. If copyrights are permitted; the agreement shall provide that the FHWA shall have the royalty-free nonexclusive and irrevocable right to reproduce, publish, or otherwise use; and to authorize others to use, the work for government purposes.

26. EQUIPMENT PURCHASE. Prior authorization in writing by the COUNTY'S Contract Administrator shall be required before the CONSULTANT enters into any unbudgeted purchase order, or subcontract exceeding \$5,000 for supplies, equipment, or CONSULTANT services. The CONSULTANT shall provide an evaluation of the necessity or desirability of incurring such costs.

Prior to seeking authorization by the COUNTY'S Contract Administrator for the purchase of any item, service or consulting work not covered in the CONSULTANT'S Cost Proposal and exceeding \$5,000, three competitive quotations must be submitted with the request, or the absence of bidding must be adequately justified.

Any equipment purchased as a result of this contract is subject to the following: "The CONSULTANT shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of \$5,000 or more. If the purchased equipment needs replacement and is sold or traded in, the COUNTY shall receive a proper refund or credit at the conclusion of the contract, or if the contract is terminated, the CONSULTANT may either keep the equipment and credit the COUNTY in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established COUNTY procedures; and credit the COUNTY in an amount equal to the sales price. If the COUNTY elects to keep the equipment, fair market value shall be determined at the CONSULTANT'S expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to by the COUNTY and the CONSULTANT, if it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by the

COUNTY. 49 CFR, Part 18 requires a credit to Federal funds when participating equipment with a fair market value greater than \$5000.00 is credited to the project.

All subcontracts in excess \$25,000 shall contain the above provisions.

27. DISPUTES. Any dispute, other than audit, concerning a question of fact arising under this contract that is not disposed of by agreement shall be decided by a committee consisting of the COUNTY'S Contract Administrator and the Assistant Director of Public Works, who may consider written or verbal information submitted by the CONSULTANT.

Neither the pendency of a dispute, nor its consideration by the committee will excuse CONSULTANT from full and timely performance in accordance with the terms of this contract.

Not later than 30 days after completion of all deliverables necessary to complete the plans, specifications and estimate, CONSULTANT may request review by the Tulare County Board of Supervisors for unresolved claims or disputes, other than audit. The request for review will be submitted in writing.

28. CONFIDENTIALITY OF DATA. All financial, statistical, personal, technical, or other data and information relative to the COUNTY'S operations, which are designated confidential by the COUNTY and made available to the CONSULTANT in order to carry out this contract, shall be protected by the CONSULTANT from unauthorized use and disclosure.

Permission to disclose information on one occasion or by public hearing held by the COUNTY relating to the contract, shall not authorize the CONSULTANT to further disclose such information, or disseminate the same on any other occasion.

The CONSULTANT shall not comment publicly to the press or any other media regarding the contract or the COUNTY'S actions on the contract, except to the COUNTY'S staff, CONSULTANT'S own personnel involved in the performance of this contract, at public hearings or in response to questions from Legislative committee.

The CONSULTANT shall not issue any news release or public relations item of any nature, whatsoever, regarding work performed or to be performed under this contract without prior review of the contents thereof by the COUNTY and receipt of the COUNTY'S written permission.

Any subcontract entered into as a result of this contract shall contain all of the provisions of this article.

All information related to the construction estimate is confidential, and shall not be disclosed by CONSULTANT to any entity other than COUNTY.

29. CONFLICT OF INTEREST. The CONSULTANT shall disclose any financial, business, or other relationship with the COUNTY that may have an impact upon the outcome of this contract, or any ensuing COUNTY construction project. The CONSULTANT shall also list current clients who may have a financial interest in the outcome of this contract, or any ensuing COUNTY construction project, which will follow.

The CONSULTANT hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this agreement.

Any subcontract in excess of \$25,000 entered into as a result of this contract, shall contain all of the provisions of this article.

The CONSULTANT hereby certifies that neither the CONSULTANT, its employees, nor any firm affiliated with the CONSULTANT providing services on this project will bid on any construction contract, or any contract to provide construction inspection for any construction project resulting from this agreement. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.

Except for subconsultants whose services are limited to providing surveying or materials testing information, no subconsultants who have provided design services in connection with this contract shall be eligible to bid on any construction contract, or any contract to provide construction inspection for any construction project resulting from this agreement.

30. REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION. The CONSULTANT warrants that this contract was not obtained or secured through rebates, kickbacks or other unlawful consideration, either promised or paid to any COUNTY employee. For breach or violation of this warranty, COUNTY shall have the right in its discretion to terminate the contract without liability; to pay only for the value of the work actually performed; to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

31. PROHIBITION OF EXPENDING COUNTY, STATE OR FEDERAL FUNDS FOR LOBBYING.

The CONSULTANT certifies to the best of his or her knowledge and belief that:

- a. No state, federal or COUNTY appropriated funds have been paid, or will be paid by-or-on behalf of the CONSULTANT to any person for influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or

employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress in connection with the awarding of any state or federal contract; the making of any state or federal grant; the making of any state or federal loan; the entering into of any cooperative agreement; and the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.

- b. If any funds other than federal appropriated funds have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this federal contract, grant, loan, or cooperative agreement; the CONSULTANT shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, US. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

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

32. CLAIMS FILED BY CONSTRUCTION CONTRACTOR. If claims are filed by COUNTY'S construction contractor relating to work performed by CONSULTANT'S personnel, and additional information or assistance from CONSULTANT'S personnel is required in order to evaluate or defend against such claims; CONSULTANT agrees to make its personnel available for consultation with COUNTY'S construction contract administration and legal staff and for testimony, if necessary, at depositions and at trial or arbitration proceedings.

CONSULTANT'S personnel that COUNTY considers essential to assist in defending against construction contractor claims will be made available on reasonable notice from COUNTY. Consultation or testimony will be reimbursed at the same rates, including travel costs that are being paid for CONSULTANT'S personnel services under this contract.

Services of CONSULTANT'S personnel in connection with COUNTY'S construction contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this contract in order to resolve the construction claims.

Any subcontract in excess of \$25,000 entered into as a result of this contract, shall contain all of the provisions of this Article.

33. SAFETY. CONSULTANT shall comply with OSHA regulations applicable to CONSULTANT regarding necessary safety equipment or procedures. CONSULTANT shall comply with safety instructions issued by COUNTY Safety Officer and other COUNTY representatives. CONSULTANT personnel shall wear hard hats and safety vests at all times while working on the construction project site.

Pursuant to authority contained in Section 591 of the Vehicle Code, COUNTY has determined that such areas are within the limits of the project and are open to public traffic. CONSULTANT shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. CONSULTANT shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.

Any subcontract entered into as a result of this contract, shall contain all of the provisions of this Article.

34. EVALUATION OF CONSULTANT. CONSULTANT'S performance will be evaluated by COUNTY. A copy of the evaluation will be sent to CONSULTANT for comments. The evaluation together with the comments shall be retained as part of the contract record.

35. STATEMENT OF COMPLIANCE. CONSULTANT'S signature affixed herein, and dated, shall constitute a certification under penalty of perjury under the laws of the State of California that CONSULTANT has, unless exempt, complied with, the nondiscrimination program requirements of Government Code Section 12990 and Title 2, California Administrative Code, Section 8103.

36. NONDISCRIMINATION. During the performance of this Contract, Consultant and its subconsultants shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (e.g., cancer), age (over 40), marital status, and denial of family care leave. Consultant and subconsultants shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Consultant and

subconsultants shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Contract by reference and made a part hereof as if set forth in full. Consultant and its subconsultants shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

The Consultant shall comply with regulations relative to Title VI (nondiscrimination in federally-assisted programs of the Department of Transportation – Title 49 Code of Federal Regulations, Part 21 - Effectuation of Title VI of the 1964 Civil Rights Act). Title VI provides that the recipients of federal assistance will implement and maintain a policy of nondiscrimination in which no person in the state of California shall, on the basis of race, color, national origin, religion, sex, age, disability, be excluded from participation in, denied the benefits of or subject to discrimination under any program or activity by the recipients of federal assistance or their assignees and successors in interest.

The CONSULTANT, with regard to the work performed by it during the Agreement shall act in accordance with Title VI. Specifically, the CONSULTANT shall not discriminate on the basis of race, color, national origin, religion, sex, age, or disability in the selection and retention of Subconsultants, including procurement of materials and leases of equipment. The CONSULTANT shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the U.S DOT's Regulations, including employment practices when the Agreement covers a program whose goal is employment.

37. FUNDING REQUIREMENTS. It is mutually understood between the parties that this contract may have been written before ascertaining the availability of funds or appropriation of funds, for the mutual benefit of both parties, in order to avoid program and fiscal delays that would occur if the contract were executed after that determination was made.

This contract is valid and enforceable only, if sufficient funds are made available to COUNTY for the purpose of this contract. In addition, this contract is subject to any additional restrictions, limitations, conditions, or any statute enacted by the Congress, State Legislature, or COUNTY governing board that may affect the provisions, terms, or funding of this contract in any manner.

It is mutually agreed that if sufficient funds are not appropriated, this contract may be amended to reflect any reduction in funds.

COUNTY has the option to void the contract under the 30-day termination clause pursuant to Article 12 of this agreement, or by mutual agreement to amend the contract to reflect any reduction in funds.

38. INSPECTION OF WORK. CONSULTANT and any subconsultant shall permit COUNTY, the state, and the FHWA if federal participating funds are used in this contract, to review and inspect the project activities and files at all reasonable times during the performance period of this contract including review and inspection on a daily basis.

39. RETENTION OF FUNDS. No retainage will be withheld by the Resource Management Agency from progress payments due to the CONSULTANT. Retainage by the prime CONSULTANT or subconsultants is prohibited, and no retainage will be held by the prime CONSULTANT from progress due subconsultants. Any violation of this provision shall subject the violating prime CONSULTANT or subconsultants to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the prime CONSULTANT or subconsultant in the event of a dispute involving late payment or nonpayment by the prime CONSULTANT or deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime CONSULTANTS and subconsultants.

Any subcontract in excess of \$25,000 entered into as a result of this contract, shall contain all of the provisions of this Article.

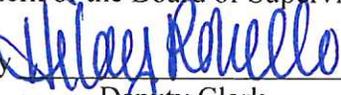
40. DEBARMENT AND SUSPENSION. CONSULTANTS signature affixed herein, shall constitute a certification under penalty of perjury under the laws of the State of California, that CONSULTANT has complied with Title 2 CFR Part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (nonprocurement)", which certifies that he/she or any person associated therewith in the capacity of owner, partner, director, officer, or manager, is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded, or determined ineligible by any federal agency within the past three (3) years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official

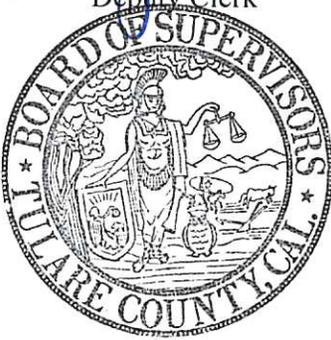
// THE PARTIES, having read and considered the above provisions, indicate their agreement by their authorized signatures below.

COUNTY OF TULARE

By 
Chairman, Board of Supervisors

ATTEST: Michael C. Spata
County Administrative Officer/
Clerk of the Board of Supervisors

By 
Deputy Clerk



CONSULTANT

By 

Title PRESIDENT

By 

Title CEO

[Corporations Code Section 313 requires that contracts with a Corporation be signed by both (1) the chairman of the Board of Directors, the president or any vice-president (or another officer having general, operational responsibilities), and (2) the secretary, any assistant secretary, the chief financial officer, or any assistant treasurer (or another officer having recordkeeping or financial responsibilities), unless the contract is also accompanied by a certified copy of the corporation's Board of Directors' resolution authorizing the execution of the contract. California Corporations Code section 17703.01 requires that contracts with a Limited Liability Company be signed by at least two managers, unless the contract is accompanied by a certified copy of the articles of organization stating that the LLC is managed by only one manager.]

Approved as to Form
County Counsel

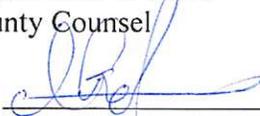
By 
Deputy

EXHIBIT A

Scope of Work



Scope of Work

Task 1: Project Management

Task 1.1 – Project Management

This task includes communication and coordination with Tulare County (County), subconsultants and other stakeholders, preparation of invoices and status reports and development and maintenance of a project delivery schedule. The objective of this task is to provide overall management of the Engineering Services.

All project communication will be coordinated between the County Project Manager and the NCM Project Manager. No communication between any Consultant team members (prime consultant or sub-consultant) will take place with County Staff, County Leadership, Local Media, or outside agencies without the express permission of the County Project Manager.

Project management activities will also include preparation and submittal of invoices and progress reports. NCM proposes to prepare and submit monthly invoices and project progress reports for all work completed during the previous month, including labor costs and direct expenses, and percent completion of work during that reporting period.

A project delivery schedule will be developed in coordination with the County. The schedule will identify major milestones, including the completion of the environmental studies and clearance, bridge study report and PS&E phases. The schedule will be in the critical path method format using Microsoft Project. Progress for each of the milestones will be discussed in reference to the project schedule at each team meeting. A plan will be developed to deal with issues that arise, which could delay the schedule.

Task Deliverables: Work Plan, Invoices, Progress Reports and Schedule

Task 1.2 – PDT Meetings / Coordination Meetings

Meetings between key project team members to discuss and resolve project challenges are a key to keeping the project on schedule, avoiding pitfalls, and keeping the lines of communication open with the County so surprises do not occur during the final

stages of the project. The NCM Team will coordinate and attend "as-needed" project meetings, beginning with a project kick-off meeting with the County to review the project requirements for environmental clearance and design, and discuss project schedule and key milestones. The NCM Team Project Manager will attend other meetings as required to facilitate the project development process.

The NCM Project Manager will prepare meeting agendas to be provided to the County Project Manager at least one week in advance of each meeting. In addition, meeting minutes will be prepared for each meeting by the NCM Project Manager and will be submitted to the County Project manager within one week after each meeting.

Task Deliverables: Meeting Agendas and Minutes

Task 2 – Surveys and Mapping (OPTIONAL TASK)

Task 2.1 – Project Survey Control

The NCM team will establish survey control for the project based on the NAD 83 horizontal datum and the NAVD 88 vertical datum. Coordinate values will be provided for 3 control points for the bridge site.

Task 2.2 – Access Coordination

The NCM team will coordinate access with adjoining landowners and waterway operators as necessary for site access. The NCM team will also coordinate with County staff to satisfy Permission to Enter requirements.

Task 2.3 – Topographic Surveys

The NCM team will perform topographic survey on a 50-foot grid including hardscape, turf areas and grade breaks. Topography shall generally include visible USA markings, structures, utility vaults, manholes, inlets, standpipes, outfalls, valve covers, and other surface-visible features. Trees over 6" in diameter will be located. Invert elevations of gravity storm drains and sewers shall be obtained at manholes and accessible structures. Where access is not practical, it will be indicated by notation on the mapping deliverable.

The NCM team will also send utility research/as-built plans request letter to local utility companies that may have facilities on or near the project area. A map (AutoCAD only) of approximate utility locations



will be prepared based on data provided by the utility companies. When existing data allows, the drawing will indicate utility type, diameter, material, approximate depth of utility below surface and the approximate horizontal location of the utility.

The NCM team will perform and locate utility potholes and reference marks if necessary, and will perform cross-section surveys of waterways at intervals and distances recommended by team hydraulics engineer. For all survey work, the NCM team will provide traffic control within the right-of-way pending review and approval of a traffic control plan by the Tulare County Road Maintenance Division.

Task Deliverables: Digital copies of the topographic survey in AutoCAD 2016 format in accordance with Tulare County CAD standards

Task 2.4 – Property Surveys and Resolution

The NCM team will research available public records covering the project area and all impacted parcels, and will locate and identify existing property corners.

Task 2.5 – Base Map Preparation

The NCM team will prepare a base map depicting the location of property boundaries, road right of ways, and easements as defined by analysis of available record maps, title reports, and physical evidence. The completion of this task is conditional and is based on finding sufficient corners set by previous surveys. If the "existing" monuments have been destroyed, were not set, or do not fit, or if certain land title issues are discovered, pursuant to the Land Surveyors Act, additional surveying and mapping may be necessary. If additional surveying is necessary a meeting with the County will be arranged, and work will proceed only after authorization from the County.

Task Deliverables: Version 2016 AutoCAD DWG CAD files of the boundary linework in AutoCAD 2016 format in accordance with Tulare County CAD standards

Task 2.6 – Right of Way Acquisition Support

The NCM team will prepare a right of way property appraisal map, written legal descriptions, a closure report and a plat (exhibit) for each acquisition parcel identified. It is assumed that the County will provide

preliminary title reports and will pay filing and permit fees.

Task 3 – Preliminary Engineering (35% PS&E)

It is understood that preliminary engineering work will include development of up to three conceptual bridge alternatives. The preliminary design will be used to update project budgeting and funding and to support environmental studies. The NCM team will obtain and review relevant project background information, such as right of way data, as-built plans, bridge inspection reports, utility data, hydrologic information, maintenance records, etc.

Task 3.1 – Preliminary Roadway Design

The 35% roadway design will show the preliminary design concept and will depict the roadway horizontal and vertical geometrics with alignment data, proposed lane and shoulder widths, begin and end bridge, approach railing treatments, proposed roadway structural sections, etc. The proposed pavement structural section will be based on pavement design methods outlined in the Caltrans Highway Design Manual and input from the geotechnical engineer. The proposed sections will be based on a 20-year ADT, a truck percentage within the ADT as agreed to by the project team and native R-values from the geotechnical investigation.

Plans will be developed in conformance with County and AASHTO standards. The design information will be shown on plans that depict typical sections, plans, profiles and existing utilities. Utilities will be shown on utility sheets, and those that conflict with the improvements will be identified as such. Those that do not conflict will be noted as "protect in place".

Task Deliverables: 35% roadway drawings, utility location plans, right of way requirements and 35% roadway estimate

Task 3.2 – Prepare Preliminary Bridge Design

The NCM team will develop up to three bridge concepts for evaluation. The concepts are assumed to include the following replacement options:

1. Single span PC/PS concrete girder bridge
2. Two-span PC/PS concrete girder bridge
3. Two-span steel girder bridge



Planning study drawings will show sufficient information and detail needed for the project team to evaluate the advantages and disadvantages and potential for impacts to key features, project elements and right of way. The drawings will be prepared for each concept and will show a plan, elevation and typical section as outlined in Caltrans Bridge Design Details, Section 3. Details will show controlling dimensions, such as span lengths, deck width, lane configuration and lane and shoulder dimensions. In addition, superstructure and substructure types will be clearly identified. All known utilities will be identified on the typical section and in plan.

Planning estimates will be developed for each of the concepts to approximate probable construction cost. The estimates will be developed in general conformance with Caltrans Bridge Design Aids Chapter 11 and will use the format prescribed by Caltrans Division of Structure Local Assistance. Costs for each alternative will be based on estimated quantity take-offs from the planning study drawings and will include a contingency factor of 25%.

Task Deliverables: Bridge planning study drawings and estimates

Task 3.3 – Project Memorandum

NCM will produce a Project Memorandum to document the information and decisions that will assist in selecting the recommended design concept. The memorandum will summarize cost and description of each alternative developed as part of Task 3.1 and 3.2 and will include discussion for each alternative with respect to construction footprint with anticipated access, laydown and staging areas; anticipated construction schedule; utility relocation requirements and accommodation; design exceptions; long-term maintenance; bridge configurations/elements, such as superstructure type and depth, and substructure and foundation type with particular attention to anticipated scour depths and comparison of foundation alternatives; passage of flood debris, seismicity and seismic performance expectations for each alternative, hydraulics and a discussion of the advantages and disadvantages of each alternative.

The memorandum will outline recommendations for the alternative to be advanced to final design and implementation and will include specific design decisions needed from the County and a list of

identified issues that will need to be resolved during final design.

Task Deliverables: Project Memorandum, Draft and Final

Task 4 – Field Exploration and Geotechnical Engineering

The NCM team will perform field exploration, laboratory testing and documentation to support the preliminary and final design efforts, including the following tasks.

Task 4.1 – Research and Data Collection

The NCM team will review the readily available geologic and soil literature in the vicinity of the project site, including as-built drawings and existing Log of Test Borings.

Task 4.2 – Field Exploration

The NCM team will perform field exploration to obtain soils data and samples for laboratory testing. Exploration will include the following:

- Visit the site to mark in white paint the proposed boring locations and call USA North 811 a minimum of 72 hours prior to the start of field exploration
- Secure a traffic control contractor to provide traffic control during field exploration
- Drill 2 borings within the County right of way behind each existing abutment to depths of fifty feet below the channel invert to obtain soil samples for laboratory testing
- Backfill the borings with lean cement grout in accordance with the State Water Resources Control Board requirements and dispose of drill cuttings at a proper waste receiving facility

Task 4.3 – Laboratory Testing

Representative soil and rock samples obtained during field exploration will be tested in a laboratory to better determine their engineering parameters. Laboratory testing will generally consist of moisture/density testing, gradation determination, plasticity, corrosive potential, R-value testing, and strength testing. Actual testing will be determined when the representative soil samples are recovered during the field investigation.



The descriptions of the encountered soils, summary of laboratory testing, and locations of the borings will be provided on a LOTB prepared in accordance with Caltrans requirements.

Task Deliverables: Log of Test Borings

Task 4.4 – Soils Analysis/Evaluation

The NCM team will perform analyses to evaluate shallow and deep foundations with respect to the soils parameters obtained from the laboratory testing. Based on the analysis, recommendations will be made for the proposed bridge foundations.

Task 4.5 – Draft and Final Foundation Report

The NCM team will prepare a Draft and Final Bridge Foundation Report in accordance with the 2009 Caltrans Foundation Report Preparation for Bridges to outline design and construction recommendations for the bridge projects. Information from the field exploration, laboratory testing will be used to develop the report which will include the following information:

- A Project summary and description of the geotechnical work performed
- A discussion of the regional and local geology as it pertains to the Project
- A summary of the identified site soils, summary of the laboratory testing results, and a LOTB with the borings presented
- A discussion of the regional seismology and seismic design parameters for the proposed Project site in accordance with the Caltrans 2009 ARS Online Design Tool and the Caltrans Seismic Design Criteria, Version 1.7, November 2013
- A liquefaction evaluation of the identified site soils. Based upon the published geology and observations made during the site visit, the potential of liquefaction occurring at the site is low to moderate as the site is underlain by competent alluvial and basin deposit soils
- An engineering soil profile of the Project site that will be used to aid in the design of the proposed foundations
- At this time, it is anticipated the foundations will consist of either shallow spread foundations or drilled Cast-In-Drilled-Hole (CIDH) piles
- Slope stability analyses will be performed for the new bridge slopes
- Approach grading recommendations to aid in the

temporary construction staging and any profile correction work

- New flexible structural pavement section recommendations for the reconstructed roadway approaches
- Contract Standard Special Provision (SSP) language for inclusion in the Contract Documents to better identify and quantify the foundation construction risk during bidding and construction

Task Deliverables: Draft and Final Foundation Report

Task 5 – Hydrology and Hydraulics

Task 5.1 – Obtain and Review Project Documentation

The NCM team will obtain bridge as-built drawings and inspection reports from the County, including downstream and upstream crossings. The NCM team will perform a field review to discuss the existing conditions, proposed improvements and modeling aspects.

Task 5.2 – Estimate Hydrology

The NCM team will obtain Friant-Kern Canal discharge water surface elevation and velocity data from the Friant Water Authority and/or the Bureau of Reclamation for use in the hydraulic analysis.

Task 5.3 – Hydraulic Analysis

The NCM team will set up an existing condition HEC model and a proposed condition HEC model for the design discharge to verify that the proposed project will have negligible impact on the canal water surface elevation.

Task 5.4 – Prepare Draft Memo

The NCM team will prepare a draft Design Hydraulic Study Memo to document the hydraulic analysis of the existing and proposed configurations.

Task Deliverables: Draft Design Hydraulic Study Memo

Task 5.5 – Prepare Final Memo

The NCM team will update and finalize the Design Hydraulic Memo based on comments from the County and other reviewers.



Task Deliverables: Final Design Hydraulic Study Report

Task 6 – Right of Way Acquisition Services

It is understood that the County will be responsible for all right of way engineering, appraisal and acquisition services. The NCM team will provide engineering support/assistance as needed. The engineering support would include development and updates to right of way requirements, utility conflicts, and relocation requirements.

Task 7 – Environmental Studies and Regulatory Agency Permits

Task 7.1 – Project Initiation and Preliminary Environmental Study

The NCM team will prepare a detailed project description, including project components, purpose and need, environmental study limits (ESL), and timing of construction. A field review will be held with the project team, as required by Caltrans, to review existing conditions, information and analysis related to the project.

After all project information is gathered, the NCM team will prepare the Draft PES. The PES will be completed pursuant to Caltrans' SER and LAPM, and will include a reasoned explanation for all checklist answers. The NCM team will submit the Draft PES to the County for review and approval. Once the Draft PES has been approved by the County, the NCM team will finalize the revisions, submit the PES to Caltrans, and coordinate as needed for review and approval of the document.

Task Deliverables: Project Description, ESL Map and PES

Task 7.2 – Environmental Studies and Consultation with Regulatory Agencies

Task 7.2.1 – Farmland Impacts, AD 1006 Form

The Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982. The goal of the FMMP is to provide consistent and impartial data to decision makers for use in assessing present status and planning for the future of California's agricultural land resources. One

of the primary responsibilities of the FMMP is to produce Important Farmland Maps and statistical data for California's agricultural resources. Important Farmland Maps identify the location and quality of agricultural land across the state. The project site has adjacent lands identified by the DOC as agricultural resources; due to the fact that right of way acquisition needs are not known at this point, it is assumed that right of way will be needed and the project would result in the conversion of farmlands to other uses. Therefore, Parts I, III, and VI of Form AD 1006 must be completed to calculate the Total Site Assessment value of the farmland. The NCM team will prepare the AD 1006 Form and submit it to the County for review. Once approved by the County, the NCM team will submit the AD 1006 Form to Caltrans for review and approval of the document. It is assumed that the Total Site Assessment value would be under the 160-point threshold; therefore, the form would not require analysis by the National Resource Conservation Service (NRCS) local field office.

Task Deliverables: AD 1006 Form

Task 7.2.2 – Biological Resources, Natural Environment Study (Minimal Impacts)

To describe the existing biological resources in the project area, identify potential project impacts, and develop appropriate impact avoidance, minimization, and mitigation measures, a Natural Environment Study (NES) or Natural Environment Study (Minimal Impacts) (NES(MI)) will be prepared. It is anticipated that a NES(MI) would be the appropriate level of documentation required; however, pending Caltrans review, a NES may be required.

Background Research and Biological Study Area Delineation – The NCM team will review available data on biological resources recorded on and within the vicinity of the project area, including all plant and wildlife species with the potential to be in the area. This review will include conducting searches in databases such as the California Natural Diversity Database (CNDDDB). Additionally, a list of threatened and endangered species with the potential to be within the project area will be requested from the United States Fish and Wildlife Service (USFWS). The NCM team will also work with the County to delineate an appropriate Biological Study Area (BSA) that will cover the direct and indirect impact area for the project, including temporary construction areas, and create a BSA map to be used for the biological analysis.



Field Surveys – The NCM team will systematically survey the BSA for plant and wildlife species, their signs, and/or potential habitat. The goal is to limit the size of the survey area to the extent feasible, based on proposed construction areas. The NCM team will inventory botanical and wildlife resources observed in the BSA, and will identify and record all existing vegetation communities in this area. Botanical surveys will be conducted during the appropriate blooming period for species with the potential to be in the project area, where feasible. The limits of potentially jurisdictional areas, including waters of the United States (U.S.) and waters of the state, will be identified based on the ordinary high water mark (OHWM) and edge of canal banks. The canal is concrete-lined and from aerial images does not support wetland vegetation; therefore, wetlands are not expected to be in the BSA.

Because the project is located in a rural area, there may be habitat for special-status species within the project area. The NCM team will confirm the existing habitat and potential for special-status species to be in the BSA during field surveys. Focused wildlife surveys to determine presence/absence of federally or state threatened and endangered species, if required, are not included in this scope of work. If it is determined that the project could result in impacts on any federally or state listed threatened or endangered species, consultation with the USFWS and/or CDFW would be conducted under an optional task (Task 7.2.8).

Natural Environment Study (Minimal Impacts) – Following completion of the background research, site investigations, and field surveys, the NCM team will summarize the results of these studies into a Natural Environment Study (Minimal Impacts) (NES(MI)). The NES(MI) will include a discussion of the existing biological resources in the BSA, applicable regulations, potential project impacts, and proposed avoidance, minimization, and mitigation measures to minimize and/or mitigate these impacts to the extent feasible. If present, jurisdictional areas will be discussed in the NES(MI). The NES(MI) will also discuss any consultation required with other agencies to obtain project approvals and environmental permits, if necessary.

Task Deliverables: NES(MI)

Task 7.2.3 – Water Quality Technical Memorandum

The NCM team will prepare a Water Quality Technical Memorandum (WQ Memo) for the project. Background information for the project vicinity, including other studies completed, will be reviewed. The Location Hydraulic Study and Storm Water Data Report will be used for supporting data. Existing waterways and watersheds will be identified and described, as will specific water quality concerns in the area. The NCM team will identify and describe existing waterways and watersheds, identify specific water quality concerns in the area, evaluate the potential for project impacts, and identify appropriate measures to minimize these impacts. Construction-related impacts and long-term impacts to water quality will be qualitatively evaluated, and both direct and cumulative impacts related to the project will be described. The WQ Memo will address regulatory compliance, including conformance with the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES), and identify applicable best management practices included in the project design. If mitigation is required for the project, mitigation measures will be outlined in the WQ Memo.

Task Deliverables: Water Quality Memorandum

Task 7.2.4 – Construction Noise Memorandum

The NCM team will prepare a technical noise memorandum (Noise Memo) to evaluate short-term construction impacts associated with the project. The Noise Memo will include a description of the existing noise environment, based on existing environmental documentation and a review of site reconnaissance data. The site reconnaissance will be conducted for identification of nearby noise-sensitive land uses and existing ambient noise levels in the project vicinity. Up to five short-term (i.e., 10-15 minute) noise measurement surveys will be conducted. Relevant background information, including noise fundamentals, descriptors, and applicable federal, state, and local regulatory framework will be described.

Noise and ground-borne vibration impacts associated with the project are anticipated to be primarily associated with short-term construction-related activities. To assess potential construction noise impacts, sensitive receptors and their relative exposure to the proposed project areas (considering



topographic barriers and distance) will be identified. Predicted construction-generated noise levels will be quantified for the preferred project using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (version 1.0). Construction-generated noise levels at the nearest land uses will be identified and summarized in tabular format within the Noise Memo.

Construction-generated groundborne vibration levels typically associated with construction equipment and commonly applied thresholds for structural damage and human annoyance will be identified based on existing FHWA/California Department of Transportation documentation. Predicted groundborne vibration levels the nearest existing structures will be quantified and summarized in tabular format within the Noise Memo.

The project is not anticipated to have a quantifiable effect on long-term traffic noise levels and is not anticipated to be considered a Type I project. For these reasons, evaluation of long-term noise impacts is not anticipated to be required. The significance of noise and groundborne vibration impacts will be assessed in comparison to applicable standards and recommended thresholds. Mitigation measures will be identified for significant and potentially significant impacts. The effectiveness of proposed mitigation measures will be assessed.

Task Deliverables: Noise Memo

Task 7.2.5 – Cultural Resources, HPSR/ASR

Records Search and Background Research –

Once the project alternative has been defined and the Area of Potential Effects (APE) is confirmed, the NCM team will review historic topographic maps, atlas, and aerials to identify changes in the landscape and identify areas of extant and nonextant built environment resources. Data collected from modern and historical aerial images and historical maps will be combined with soils and geologic data to better understand the past conditions of the Holocene landscape and assess the potential for buried sites. Concurrent with the desktop review, a formal records search will be requested at the Southern San Joaquin Valley Information Center at California State University, Bakersfield to identify all known cultural resources (archaeological and historical built environment) and previous investigations within the APE as well as within 0.5 mile of the APE. The record searches will include a

review of the National Register of Historic Places, the California Register of Historical Resources, the California Inventory of Historic Resources, the California Historical Landmarks, the California Points of Historical Interest listing, the Historic Property Data File, the Caltrans State and Local Bridge Survey, the Survey of Surveys, GLO Plat maps, and other pertinent historic data.

Native American Outreach and AB 52

Consultation – Native American Consultation is an integral part of the Section 106 process. In addition, pursuant to the State Public Resources Code §5097.9, state and local agencies cooperate with and assist the Native American Heritage Commission (NAHC) in its efforts to preserve and protect locations of sacred or special cultural and spiritual significance to Native Americans. The NCM team, in coordination with Tulare County Planning Staff, will contact the NAHC to determine whether it has information on sacred or special sites in the study area and to obtain the names and contact information of Native American representatives who may have such information. Those included on the list will be contacted by letter and telephone to request information about the study area.

The NCM team will also assist the County in satisfying the statutory requirements of Assembly Bill (AB) 52, which amends Section 5097.94 of CEQA. AB 52 invokes the involvement of California Native American Tribes in the identification and mitigation of Tribal Cultural Resources (TCR) (PRC 21074). This assistance may include drafting and/or reviewing notification letters, participating in site visits, providing guidance to County personnel on the procedures associated with AB 52, and helping to identify measures to avoid or mitigate the effect on a TCR.

Archaeological Pedestrian Survey – The NCM team Archaeologist will survey the APE for archaeological resources. Any previously recorded and newly discovered archaeological resources will be documented using current Department of Parks and Recreation forms (DPR-523). All resources will be photographed using digital pictures, and their locations will be plotted using a Global Positioning System (GPS) unit.

Preparation of Technical Documents – The NCM team will prepare an ASR that will include the results of the background research, records search, Native American outreach and AB 52 consultation, and



pedestrian survey, as well as detailed methodology and environmental and cultural overview sections. Additionally, a HPSR will be developed to summarize the archaeological investigations. The HPSR is the primary document to demonstrate compliance with Section 106. An essential feature of the HPSR is the delineation of the APE, defined as the area within which an undertaking may directly or indirectly affect historic properties (36 CFR 800.16 [d]). The NCM team will coordinate with Caltrans' cultural resources staff to determine the final APE for the project.

Task Deliverables: APE Map, HPSR and ASR

Task 7.2.6 – Cultural Resources, HRER and FOE

Historical Resource Evaluation Report – The project will impact Bridge No. 46C0263, constructed in 1949 at the same time as the Friant-Kern Canal. The bridge has not been previously evaluated as a potential historic property, and therefore requires evaluation to determine if it is a historic property as defined by Section 106 of the National Historic Preservation Act. The evaluation will be incorporated into a Historical Resource Evaluation Report (HRER) and will determine if the bridge is a contributing element of the Friant-Kern Canal property and/or an individually eligible property. Pending the results of the HRER and Finding of Effect (FOE), a Memorandum of Agreement (MOA) may also be required. Activities related to the MOA would be conducted under Optional Task 7.2.10. The proposed scope of work for the HRER includes the following tasks:

- **Site Visit/Photography** – The Area of Potential Effect (APE) Map will be prepared and a field survey will be conducted to identify potential and known historic properties within the project's APE. Potential historic properties are those with buildings or structures over 45 years of age. Known historic properties are those that are designated or have been determined eligible under the local, state, or federal designation programs. Digital photographs will be taken during the field survey. All photographs will be taken from the public ROW, unless property access is granted in advance. The deck and railings of the 1949 bridge are visible from the public ROW, but it may be necessary to walk along the canal access roads to get a view of the structure below the deck. "No Trespassing" signs are posted adjacent to the canal; therefore, it is assumed that authorization to access the canal

right of way will be obtained from the Friant Water Authority.

- **Research/Review Existing Information** – The NCM team will review all existing information on the project site provided by the County, as well as the results of the records search. Property-specific and general research will be conducted to develop relevant historic contexts. Research may include general historical information, building permits, county tax assessor records, Sanborn maps, etc.
- **Public Consultation** – The NCM team will conduct outreach to potentially interested members of the public in accordance with established Section 106 procedures.
- **Evaluations/DPR 523 Inventory Forms** – The NCM team will evaluate all properties greater than 45 years of age within the project APE that have not been previously evaluated or that require re-evaluation. For the purpose of this scope, we assume that no more than one property (the bridge) will be evaluated. The results of the evaluation will be recorded on DPR 523 inventory forms and included in the HRER.

Following completion of these activities, a draft HRER will be prepared according to established Caltrans procedures and submitted for County review. Once the HRER has been approved by the County, the NCM team will submit the document for Caltrans review and coordinate for approval of the document.

Task Deliverables – HRER

Finding of Effect: Following completion of the HRER, a draft FOE will be prepared according to established Caltrans procedures and submitted for County review. Once the FOE has been approved by the County, GPA will submit the document for Caltrans review and coordinate for approval of the document.

Task Deliverables: FOE

ENVIRONMENTAL TECHNICAL STUDY OPTIONAL TASKS

Task 7.2.7 – Visual Impact Assessment Memorandum (OPTIONAL TASK)

As part of the preparation of the PES Form, the NCM team will complete the Questionnaire to Determine Visual Impact Assessment Level. If the Project Score is above 10, a brief memorandum addressing visual issues and rational why a technical study is not



required would be appropriate for the project. We will prepare the Visual Impact Assessment Memorandum, the Memorandum will be stamped and approved by a Landscape Architect, and then submitted to the County for review.

Once approved by the County, the NCM team will submit the Memorandum to Caltrans for review and approval of the document. Based on guidance provided in the Caltrans' Standard Environmental Reference, it is assumed that no visual simulations would be required for the Memorandum.

Task Deliverables: Visual Impact Assessment Memorandum

Task 7.2.8 – Endangered Species Consultation (OPTIONAL TASK)

Under the Federal Endangered Species Act (FESA), if the project may affect a listed species or designated critical habitat, Section 7 consultation with the USFWS is required. The San Joaquin kit fox is listed as endangered under the FESA. If required, the NCM team will prepare the Section 7 Consultation initiation package, including the Biological Assessment, and will coordinate as needed for review and submittal of the Section 7 consultation initiation package to USFWS. If requested, the NCM team will attend internal meetings and/or agency meetings held as part of the consultation process.

The San Joaquin kit fox is also state-listed species, and subject to consultation under the California Endangered Species Act (CESA). If it is determined that the project may result in a take of these or another state-listed species, consultation with the CDFW would be required. If required, the NCM team will prepare the request for a Consistency Determination or Incidental Take Permit, and will coordinate as needed for review and submittal of the consultation initiation package to CDFW. The NCM team will also coordinate to complete the CESA consultation process, and if requested, the NCM team will attend internal meetings and/or agency meetings held as part of the consultation process.

The NCM team will provide ongoing support to the County to streamline the FESA and CESA consultation processes, including preparation of supplemental information requested by any of the agencies. The NCM team will also provide technical assistance to the design engineers and County to refine impact avoidance, minimization, and mitigation measures, as required by resource agencies to

reduce project impacts on listed species to the maximum extent feasible.

Task Deliverables: FESA/CESA consultation packages

Task 7.2.9 – Section 4(f) Report (OPTIONAL TASK)

If it is determined that the existing bridge is a historic resource, Section 4(f) of the Department of Transportation Act of 1966 would apply, and the project would likely require the use of a historic resource. Therefore, a Section 4(f) Evaluation will be required to analyze potential impacts to this 4(f) resource. The NCM team will reference all existing documentation and perform any outstanding research related to attributes of the bridge, and will prepare a Programmatic Section 4(f) Evaluation that will describe the Section 4(f) property, potential project impacts, avoidance alternatives, findings, and measures to minimize project impacts. The NCM team will also perform any necessary public outreach efforts and coordinate, as appropriate, with the agency with jurisdiction over the 4(f) property (the County) to obtain the appropriate concurrence on the 4(f) determination.

Task Deliverables: Programmatic Section 4(f) Evaluation

Task 7.2.10 – Memorandum of Agreement (OPTIONAL TASK)

An MOA will only be required if the FOE finds that the project would cause an adverse effect on historic properties within the APE. If required, an MOA will be prepared according to established Caltrans procedures and submitted for County review. The NCM team will consult with all signatory and concurring parties during the MOA process. The draft agreement will be revised based on client comments, and the MOA will be finalized.

Task Deliverables: Memorandum of Agreement

Task 7.3 – Phase I Initial Site Assessment (ISA)

The NCM team will prepare a Phase I ISA for the projects for approval of the Environmental Document. The scope of work for this ISA will be consistent with the Caltrans ISA Guidance Document and associated templates (Geomatrix, 2006), which are based on the United States EPA Standards and Practice for Standards and Practice for All



Appropriate Inquiry (40 Code of Federal Regulations, Part 312), and with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments (Designation E1527-13).

The purpose of the ISA is to document, to the extent feasible, Recognized Environmental Conditions (RECs), which are defined by the American Society for Testing and Materials (ASTM) Standard Practice E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

Potential RECs will be documented during this assessment and will be evaluated as to whether they would be considered evidence of a REC or a de minimis environmental condition, which is defined by ASTM E1527-13 as a condition that generally does not "present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

Taking into account observations made during our site visit and historic land uses along the project alignment, we identified the following list of RECs which could be present within the project alignment:

- Agricultural chemicals and pesticides
- Poly chlorinated biphenyls (PCBs) in transformer oil on the power poles
- Lead in yellow roadway thermostripping and painted metal
- Aerially deposited lead (ADL) in soils along the road
- CAM 17 metals and total petroleum hydrocarbons from previous land use activities
- Illegally dumped hazardous wastes in open areas

Task 7.3.1 – Database and Site Review

As part of the study, the following documents (based upon availability) will be reviewed for the purpose of determining the potential for RECs within the project limits that may impact the proposed improvements:

- Historic aerial photographs
- Sanborne insurance maps
- Land use and zoning maps

- Title reports

The NCM team will review and use these available documents to determine the potential for the presence of RECs by previous land use and any historic operations that have had a high probability of RECs. This research will also be used to help support the lack of presence of RECs as well.

A site review will be performed to visually observe any indications of RECs within the Project limits. Items to look for will be stained ground, both paved and unpaved, unlabeled drummed materials, wastes and garbage piles in direct contact with the ground, transformers, painted metal, treated lumber such as utility poles, monitoring wells, and other indications of potential RECs. The visual observations will be compared to the historic data and EDR database findings for multiple confirmation data points to make a determination of the potential presence of RECs.

Once the determination is made that there is the potential presence of RECs at the project site, the NCM team will provide screening level field sampling and testing program recommendations to confirm or deny the presence of the suspected RECs.

Task 7.3.2 – EDR Report Analysis and Reduction

The NCM team will order an Environmental Data Resources (EDR) Database search for the project, which is a database search of all regulated underground storage tanks (USTs), active and closed case files of cleanup operations, and regulated sites. The EDR Search Map meets and exceeds the search requirements laid out in ASTM E1527-13 and EPA's All Appropriate Inquiry Rule. The results of the search will be summarized and presented to better determine the potential for RECs at the project site.

Task 7.3.3 – Initial Site Assessment Report

The NCM team will develop an ISA report to document the findings of the database and site reviews and the EDR report analysis and reduction. A draft will be furnished for review by the County, Caltrans and the project team. Comments from the review will be incorporated into the report and a final report will be submitted.

Task Deliverables – Draft and Final ISA Report



Task 7.4 – Environmental Document (CEQA) (OPTIONAL TASK)

It is assumed that the level of environmental document will be a Categorical Exclusion (CE) with technical studies under NEPA and an Initial Study (IS) with Mitigated Negative Declaration (MND) under CEQA. We understand that the County may perform CEQA documentation tasks, and Caltrans will execute the NEPA CE based on technical studies completed by the NCM team. Based on this understanding, the following tasks are Optional Scope for CEQA documentation.

Task 7.4.1 – Administrative Draft IS

Following completion of the appropriate technical analysis, the NCM team will reference the results of these studies, as well as other background research, to prepare an Administrative Draft IS, consistent with CEQA Guidelines Appendix G and in a format acceptable to the County. The document will include all of the required sections for an IS and will address on-site and off-site impacts of the project. The Administrative Draft IS will be submitted to the County for review and the NCM team will coordinate, as needed, for review and approval of the document.

Task Deliverables – Administrative Draft IS

Task 7.4.2 – Draft IS and NOI

Once the Administrative Draft IS has been approved by the County, the NCM team will prepare the Draft IS (with anticipated MND) and circulate the document to the public for the 30-day public review period. The NCM team will also prepare a Notice of Intent (NOI). Hard copies of the document will be delivered to area libraries by U.S. Mail, and a file of any comments received during the circulation period will be maintained for use in preparing the final document. It is assumed that the County will be responsible for any additional local postings.

Task Deliverables – Draft IS and NOI

Task 7.4.3 – Final IS and NOD

Following circulation of the Draft IS (with anticipated MND), the NCM team will coordinate with the County to prepare responses to any public comments received (as appropriate) and incorporate the responses and any required revisions into the document. A Final IS will then be prepared and submitted to the County for review. The NCM team will coordinate as needed to make further revisions

and obtain approval to finalize the document. Upon completion of the Final IS, the NCM team will coordinate with the County to obtain a Notice of Determination (NOD) for the project from the County within five days of approval.

Task Deliverables – Final IS and NOD

Task 7.5 – Prepare State and Federal Permit Applications (OPTIONAL TASK)

Task 7.5.1 – Section 404 of the Clean Water Act Nationwide Permit

Section 404 of the Clean Water Act regulates, and authorizes the United States Army Corps of Engineers (USACE) to issue permits for the discharge of dredged or fill materials into waters of the United States (U.S.). The Friant Kern Canal has a regular flow of water, and connectivity to natural waterways upstream and downstream; therefore, the canal is expected to fall under the jurisdiction of the USACE as waters of the U.S. Because the project is expected to require work within the canal, the need for a Section 404 Permit is anticipated. It is expected that the project will fall within the scope of the USACE Nationwide Permit 14 for "Linear Transportation Facilities." To qualify for this permit, the project must meet 27 general conditions and not result in greater than 0.5 acre of permanent impacts (e.g., loss) on jurisdictional waters of the U.S.

A pre-construction notification (PCN) would be required for the project if more than 0.10 acre of permanent impacts on waters of the U.S. would result, or if the project would impact wetlands. If a PCN is required, the NCM team will prepare the PCN package for submittal to the USACE. The application will include a brief description of the project, potential impacts, measures to minimize impacts, and other pertinent project information, as required by the USACE. The NCM team will coordinate with the County and USACE as needed to obtain the 404 authorization. If warranted, a site visit will be coordinated with the USACE and other regulatory agencies to facilitate the process.

Task 7.5.2 – Section 401 of the Clean Water Act Certification

The Clean Water Act provides the Regional Water Quality Control Board (RWQCB) with jurisdiction over waters of the state. Section 401 of the Clean Water Act requires applicants acquiring permits from



the USACE under Section 404 obtain a Water Quality Certification from the RWQCB for the state in which the discharge originates. The RWQCB typically takes jurisdiction over the same areas as the USACE; therefore, the canal is also considered waters of the state. If required, the NCM team will prepare an application for a Section 401 Water Quality Certification for submittal to the RWQCB. The application will include a brief description of the project, potential impacts, measures to minimize impacts, and other pertinent project information, as required by the RWQCB. The NCM team will coordinate with the County and RWQCB as needed to obtain the 401 Certification. If warranted, a site visit will be coordinated with the RWQCB and other regulatory agencies to facilitate the process.

Task 7.5.3 – 1602 Streambed Alteration Agreement

Section 1602 of the Fish and Game Code requires submittal of a Streambed Alteration Notification to the CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Streambed Alteration Agreement.

Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water; therefore, the canal is expected to fall under the jurisdiction of the CDFW. The NCM team will prepare a Streambed Alteration Notification package for each project for submittal to the CDFW. The notification will include a brief description of the project, potential impacts, measures to minimize impacts, and other pertinent project information, as required by the CDFW. If warranted, a site visit will be coordinated with the CDFW and other regulatory agencies to facilitate the process.

Task Deliverables – 404, 401, and 1602 notification/application packages

Task 7.6 – Landscape Plans and Specifications

The NCM team will prepare landscape plans and specifications for repair of areas disturbed during construction within the County right of way and any temporary construction easements. Repair planting

will be based on a site survey performed during the design phase by the NCM team landscape architect to catalogue the existing native plants that may be disturbed during construction. In addition, the NCM team landscape architect will coordinate with the drainage engineer for incorporation of storm water filtration requirements and with the CDFW for approval if required. This task includes development of landscape quantities and probable construction cost for inclusion in the project PS&E.

Task 8 – Final Design (Plans, Specifications & Estimates)

After approval of the 35% design and environmental clearance, the NCM team will proceed with final design and development of Plans, Specifications and Estimates. The final design phase will follow a multiple submittal schedule with 65%, 90%, 100% and Final PS&E with the following tasks and activities.

Task 8.1 – Final Design (65% PS&E)

Task 8.1.1 – Bridge Design

Bridge design will be in accordance with current Caltrans procedures and practices using Caltrans manuals: Bridge Design Aids, Bridge Design Details and Bridge Design Memos. AASHTO LRFD Bridge Design Specifications with 2006 interims and Addenda by Caltrans will serve as the bridge design criteria. The design shall meet County, Caltrans and FHWA standards that are in effect on the date of Notice to Proceed. Seismic design will follow the latest Caltrans Seismic Design Criteria.

Detailing of plans will be in accordance with County CAD Drafting Standards and Caltrans Bridge Design and Details manual and will use the current Caltrans Standard Plans and XS sheets where applicable. All plans shall be checked by the designer and will be revised based on comments from the independent check, the County, Caltrans and other team members.

Task 8.1.2 – Approach Roadway Design

NCM will perform final roadway design with development of plans, specifications and estimates to fully define the roadway improvements. The roadway PS&E components will be incorporated into the bridge PS&E. It is expected that roadway work will be limited to the bridge approaches with approach lengths of up to 400 feet (or logical



terminus) measured from each bridge abutment. Roadway work within these limits is expected to include guardrails, minor grading for bio-swales and shoulder work, pavement rehabilitation/overlay and associated details and tie-ins to the existing roadway and adjacent driveways and access points. It is assumed that Caltrans Standard Plan Details will be used for guardrails and other standard details as appropriate and the roadway design criteria will be based on County Standards, AASHTO "A Policy on Geometric Design of Highways and Streets" and the Caltrans Highway Design Manual.

Task 8.1.3 – Engineer's Estimate of Probable Construction Cost

NCM will prepare quantity calculations and develop unit costs for items that are applicable to each project for development of the bridge cost estimate. Quantities will be prepared in accordance with Caltrans Standard Specifications and Payment Items. Unit prices will be based on the latest cost data from the County and Caltrans. Quantities for all contract items, including the cost of lump sum items, will be substantiated by calculations. Quantity calculations will be neat, orderly, and will include all sketches, diagrams and dimensions necessary to allow them to be independently used by field engineers. The Engineer's Estimate will be presented using the Caltrans Structural Quantity and Marginal Estimate form DS-D 0019 using standard Caltrans pay items and codes with the "Check" column blank.

Task 8.1.4 – Contract Specifications / Special Provisions

NCM will prepare project specific Special Provisions, in accordance with Caltrans' Plans, Specification and Estimates Guide, using Caltrans Standard Special Provisions (SSP) format with imperial units based on the 2015 Caltrans Standards. The SSP's will bear the State of California Professional Engineer registration seal with the signature, license number and registration certificate expiration date of the Engineer who prepared the special provisions, or the Engineer under whose direction they were prepared. A list of contract items, with item descriptions, item numbers, units of pay, and item pay codes, but without quantities or estimated unit costs, will be included in the front of the SSP's. It is assumed that the County will be responsible for preparation of and updates to the "boiler plate" special provisions.

Task Deliverables:

- Five half-size set of plans (11x17)
- Three sets of annotated Special Provisions
- Three Copies of Cost Estimate/Marginal Estimate
- One set of draft (unchecked) Design Calculations
- Electronic submittal of all deliverables in PDF format

Task 8.2 – 90% PS&E

Task 8.2.1 – Bridge Independent Check

The unchecked plans and special provisions will be independently checked by a registered engineer who was not involved with the planning level or final design that led to the 65% unchecked details. The plans will be checked with regard to bridge layout geometry and structural integrity and the special provisions will be checked for consistency with the plans and completeness. A set of engineering calculations will be developed as part of the independent check to document the structural analysis performed, the results obtained and any design change recommendations made. The independent check calculations will be neatly organized with a table of contents and will be signed by the professional engineer registered in the State of California responsible for performing and/or overseeing the independent check. Comments on the plans made by the independent check engineer will be made in red to indicate items to be discussed or yellow for approval. The independent check and design engineers will work together to discuss and resolve discrepancies. The bridge design and independent check calculations will be updated to reflect the final design resolution.

Task 8.2.2 – Response to Comments

NCM will catalogue comments from the County review of the 65% PS&E and the bridge independent check in a spreadsheet format approved by the County. Each comment will be tabulated in the spreadsheet along with the plan sheet name and number, specification section and page number or estimate documentation page number. A written response from the designer will be input for each comment, and a preliminary disposition will be noted. Upon County review of the comment/response matrix, NCM will coordinate with the County to revise responses if necessary and assign a final disposition.



Task 8.2.3 – Update Bridge and Roadway PS&E

The bridge and roadway plans will be updated as necessary to incorporate comments from the County and other team members, as well as to reflect comment resolution from the bridge independent design check.

Task Deliverables:

- Comment/response matrix
- Five half-size set of plans (11x17)
- Three sets of annotated Special Provisions
- Three Copies of Cost Estimate/Marginal Estimate
- One set of Final (Checked) Design Calculations
- Three sets of Foundation Report with Log of Test Borings
- Three sets of Hydraulic Design Report
- Electronic submittal of all deliverables in PDF format

Task 8.3 – 100% PS&E

After receipt of County review comments on the 90% PS&E, NCM will update the comment/response matrix to reflect final resolution of previous comments and incorporation of new comments. The plans, specifications and estimate will be updated accordingly to incorporate project updates and County comments.

Task Deliverables:

- Updated comment/response matrix
- One full-size set of plans (22x34)
- Three sets of 100% Bidding Documents
- Three Copies of Cost Estimate/Marginal Estimate
- Copies of all updated Design Calculations

Task 8.4 – Final PS&E

After receipt of final approval from the County, NCM will compile an original set of stamped and signed plans and an engineer's estimate for submittal to the County. Quantity calculations will also be provided to the County for use by the resident engineer during construction.

Task Deliverables:

- One set of Mylar Final plans (22x34)
- Final Plans on compact disk in AutoCAD 2012 format with CAD files prepared using County CAD standards
- Bidding Documents on compact disk in MS word

format

- Engineer's Estimate/Marginal Estimate on compact disk in MS Excel format
- Three full-size sets of plans (22x34)
- Two sets of Independent Bridge Design Calculations
- Two sets of Independent Quantity Calculations
- Electronic submittal of all deliverables in PDF format

Task 9 – Assistance During Bidding (OPTIONAL TASK)

It is understood that the County will advertise the project for bids, distribute plans to prospective bidders, analyze bids received and award a construction contract. NCM will assist the County during the bidding phase with requests for information, interpretation of the bid documents and preparation of addenda. The NCM Project Manager or Engineer of Record will attend the pre-bid, preconstruction or bid opening if requested by the County.

Task Deliverables – Responses to RFI's and Addenda to Bid Documents

Task 10 – Design Support During Construction (OPTIONAL TASK)

NCM will provide general design support and environmental monitoring to the County during construction of the project. The NCM Project Manager or Engineer of Record and environmental monitoring lead will attend the pre-construction meeting in addition to site meetings if necessary. Submittals of shop drawings, quotes, materials, etc. will be reviewed by NCM and clarifications to construction documents will be made as necessary. NCM will also review and respond to contractor RFI's. NCM will review and approve all submittals and shop plan drawings submitted by the construction contractor for consistency with the bid documents.

It is understood that budget for this task will be developed, reviewed and approved by the County after completion of the PS&E when the full scope of the project is known.

Task Deliverables – Responses to RFI's and contractor submittals

EXHIBIT B

Cost Proposal

TULARE COUNTY
AVENUE 174 FRIANT-KERN CANAL BRIDGE (BR. NO. 46C0263)
COST PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES

Contract No. _____ Date: 10/23/2017
 Consultant NCM ENGINEERING CORPORATION

DIRECT LABOR

Classification	Name	Range	Hours	Initial Hourly Rate	Total
Project Manager	S. Misilnski		148	@ \$95.00	\$ 14,060
Project Engineer	M. Stiller		244	@ \$58.00	\$ 14,152
Senior Bridge Engineer	D. Kim		120	@ \$51.40	\$ 6,168
Senior Civil Engineer	M. Gonzalez		154	@ \$65.00	\$ 10,010
Staff Bridge Engineer	K. Gee		398	@ \$44.60	\$ 17,751
Staff Civil Engineer	S. Cadena		356	@ \$29.00	\$ 10,324
Staff CADD	R. Andrasek		542	@ \$47.60	\$ 25,799
Staff Administration	R. Char		40	@ \$24.00	\$ 960
QA/QC	M. Char		30	@ \$95.00	\$ 2,850

Subtotal Direct Labor Costs \$ 102,074
 Anticipated Salary Increases * \$ 0
Total Direct Labor Costs \$ 102,074

FRINGE BENEFITS

Rate	Total
%	\$ 0
Total Fringe Benefits	\$ 0

INDIRECT COSTS

Rate	Total
Overhead %	\$
General and Administrative %	\$
Total 126.79 %	\$
Total Indirect Costs	\$ 129,420

FEE (Profit on Direct Labor + Fringe Benefits + Indirect)

Rate	Total
9.00 %	\$
Fee (DC+FB+I)	\$ 20,834

OTHER COSTS

1. Reproduction	\$ 3,100
2. Copying	\$
3. Plotting	\$
4. Transportation / Travel & Per Diem	\$ 3,500
5. Special Deliveries	\$ 550
6. Miscellaneous	\$
Subtotal Other Costs	\$ 7,150

FEE (Other Costs)

Rate	Total
%	\$
Fee (OC)	\$ 0

SUBCONTRACTOR COSTS WITH NO OPTIONAL TASKS (attach detailed cost estimate for each subcontractor)

GPA Consulting	\$ 72,853
Avila & Associates	\$ 12,813
WRECO	\$ 37,988
O'Dell Engineering	\$ 4,856

COST WITH NO OPTIONAL TASKS	\$ 387,988
OPTIONAL TASKS	\$ 98,524
TOTAL COST WITH OPTIONAL TASKS	\$ 486,512

TULARE COUNTY
AVENUE 174 FRIANT-KERN CANAL BRIDGE (BR. NO. 46C0263)
COST PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES

Contract No. _____ Date: 10/23/2017
 Subconsultant GPA CONSULTING

DIRECT LABOR

Classification	Name	Range	Hours	Initial Hourly Rate	Total
Principal-in-charge	Richard Galvin		0 @	\$78.84	\$ 0
Project Manager	Erinn Silva		42 @	\$52.89	\$ 2,221
Senior Associate Biologist	Marieka Schrader		18 @	\$56.25	\$ 1,013
Associate Biologist	Sheri Mayta		135 @	\$39.90	\$ 5,387
Associate Biologist	Katherine Warner		140 @	\$32.65	\$ 4,571
Senior GIS Analyst	Martin Rose		12 @	\$45.67	\$ 548
Senior Environmental Planner	Jeanne Ogar		4 @	\$42.31	\$ 169
Environmental Planner	Nicole Greenfield		42 @	\$27.00	\$ 1,134
Principal Arch. Historian	Andrea Galvin		8 @	\$79.92	\$ 639
Senior Architectural Historian	Laura O'Neill		84 @	\$47.25	\$ 3,969
Assoc. Architectural Historian	Amanda Duane		84 @	\$35.00	\$ 2,940

Subtotal Direct Labor Costs \$ 22,591
 Anticipated Salary Increases * \$ 0
Total Direct Labor Costs \$ 22,591

FRINGE BENEFITS

Rate	Total
44.64 %	\$ 10,085
Total Fringe Benefits	\$ 10,085

INDIRECT COSTS

Rate	Total
Overhead 40.78 %	\$ _____
General and Administrative 44.33 %	\$ _____
Total 85.11 %	\$ _____
Total Indirect Costs	\$ 19,227

FEE (Profit on Direct Labor + Fringe Benefits + Indirect)

Rate	Total
8.00 %	\$ _____
Fee (DC+FB+I)	\$ 4,152

OTHER COSTS

1. Reproduction	\$ 225
2. Copying	\$ 530
3. Plotting	\$ _____
4. Transportation / Travel	\$ 1,614
5. Special Deliveries	\$ 96
6. Outside Specialist Services	\$ 14,333
Subtotal Other Costs	\$ 16,798

FEE (Other Costs)

Rate	Total
0.00 %	\$ _____
Fee (OC)	\$ 0

SUBCONTRACTOR COSTS (attach detailed cost estimate for each subcontractor)

\$ _____
 \$ _____
 \$ _____
 \$ _____

COST WITH NO OPTIONAL TASKS	\$ 72,853
OPTIONAL TASKS	\$ 67,709
TOTAL COST WITH OPTIONAL TASKS	\$ 140,562

CLIENT: TULARE COUNTY		Date: 10/23/17																										
ELEMENT: PROFESSIONAL ENGINEERING SERVICES		Proj:																										
Task	No of Sheets	1 PIC \$195.63	2 2M \$131.24	3 SA \$139.37	4 Assoc Biologists \$99.00	5 Assoc Biologists \$81.01	6 GIS Analysts \$113.32	7 SEP \$104.98	8 EP \$67.00	9 PAH \$199.31	10 SAH \$117.24	11 AAH \$68.85	Subtotal															
														CONSULTANT STAFF	CONSULTANT RATE													
TASKS / SUBTASKS																												
Task 7	Environmental Studies and Regulatory Agency Permits																											
7.1																												
7.2																												
7.2.1																												
7.2.2																												
7.2.3																												
7.2.4																												
7.2.5																												
7.2.6																												
7.2.7																												
7.2.8																												
7.2.9																												
7.2.10																												
7.4																												
7.4.1																												
7.4.2																												
7.4.3																												
7.5																												
7.5.1																												
7.5.2																												
7.5.3																												
TOTAL WITH NO OPTIONAL TASKS													94	32	16	135	140	12	4	42	8	84	84		\$16,780	569		
OPTIONAL TASKS																												
TOTAL													94	32	16	135	140	12	4	42	8	84	84		\$16,780	569	\$72,865	
OPTIONAL TASKS																												
TOTAL													94	32	16	135	140	12	4	42	8	84	84		\$16,780	569	\$87,709	

TULARE COUNTY
AVENUE 174 FRIANT-KERN CANAL BRIDGE (BR. NO. 46C0263)
COST PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES

Contract No. _____ Date: 10/23/2017
 Subconsultant AVILA & ASSOCIATES

DIRECT LABOR

Classification	Name	Range	Hours	Initial Hourly Rate	Total
Project Manager	C. Avila	_____	32 @	\$82.50	\$ 2,640
Project Engineer	T. Remington	_____	52 @	\$61.50	\$ 3,198
Technical Editor	R. Spadafore	_____	4 @	\$58.76	\$ 235
		_____	0 @	\$30.00	\$ 0
		_____	0 @	\$32.00	\$ 0
		_____	0 @	\$33.00	\$ 0
		_____	0 @	\$34.00	\$ 0
		_____	0 @	\$35.00	\$ 0
		_____	0 @	\$36.00	\$ 0
Subtotal Direct Labor Costs					\$ 6,073
Anticipated Salary Increases *					\$ 0
Total Direct Labor Costs					\$ 6,073

FRINGE BENEFITS

Rate	Total
29.76 %	\$ 1,807
Total Fringe Benefits	\$ 1,807

INDIRECT COSTS

Overhead	Rate	Total
	23.62 %	\$ _____
General and Administrative	36.93 %	\$ _____
Total	60.55 %	\$ _____
Total Indirect Costs		\$ 3,677

FEE (Profit on Direct Labor + Fringe Benefits + Indirect)

Rate	
8.00 %	
Fee (DC+FB+I)	\$ 925

OTHER COSTS

1. Reproduction	\$ 100
2. Copying	\$ _____
3. Plotting	\$ _____
4. Transportation / Travel & Per Diem	\$ 231
5. Special Deliveries	\$ _____
6. Miscellaneous	\$ _____
Subtotal Other Costs	\$ 331

FEE (Other Costs)

Rate	
0.00 %	
Fee (OC)	\$ 0

SUBCONTRACTOR COSTS (attach detailed cost estimate for each subcontractor)

\$ _____
 \$ _____
 \$ _____
 \$ _____

TOTAL COST (NO OPTIONAL TASKS)

\$ 12,813

TULARE COUNTY
AVENUE 174 FRIANT-KERN CANAL BRIDGE (BR. NO. 46C0263)
COST PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES

Contract No. _____ Date: 10/23/2017
 Subconsultant WRECO

DIRECT LABOR

Classification	Name	Range	Hours	Initial Hourly Rate	Total
Principal Engineer			0.0 @	\$91.68	\$ 0
Supervising Engineer			0.0 @	\$67.30	\$ 0
Sr Geotechnical Engineer			10.0 @	\$67.06	\$ 671
Senior Geologist			24.0 @	\$60.35	\$ 1,448
Senior Engineer			40.0 @	\$62.08	\$ 2,483
Associate Engineer			40.0 @	\$44.47	\$ 1,779
Staff Engineer			0.0 @	\$32.77	\$ 0
Staff Geologist			72.0 @	\$32.81	\$ 2,362
Senior Technician			0.0 @	\$28.56	\$ 0
Clerical/Tech Editor			0.0 @	\$24.17	\$ 0

Subtotal Direct Labor Costs \$ 8,743
 Anticipated Salary Increases * \$ 0
Total Direct Labor Costs \$ 8,743

FRINGE BENEFITS

Rate	Total
71.47 %	\$ 6,249
Total Fringe Benefits	\$ <u>6,249</u>

INDIRECT COSTS

Rate	Total
Overhead 27.74 %	\$ 2,425
General and Administrative 35.76 %	\$ 0
Total 63.50 %	\$ <u>2,425</u>
Total Indirect Costs	\$ <u>5,552</u>

FEE (Profit on Direct Labor + Fringe Benefits + Indirect)

Rate	Total
8.00 %	\$ 1,644
Fee (DC+FB+I)	\$ <u>1,644</u>

OTHER COSTS

1. Reproduction	\$ 200
2. Copying	\$ 75
3. Laboratory Testing	\$ 3,500
4. Transportation / Travel & Per Diem	\$ 950
5. EDR Database	\$ 650
6. Traffic Control & Driller	\$ 10,425
Subtotal Other Costs	\$ <u>15,800</u>

FEE (Other Costs)

Rate	Total
0.00 %	\$ 0
Fee (OC)	\$ <u>0</u>

SUBCONTRACTOR COSTS (attach detailed cost estimate for each subcontractor)

\$ _____
 \$ _____
 \$ _____
 \$ _____

TOTAL COST (NO OPTIONAL TASKS)

\$ 37,988

TULARE COUNTY
AVENUE 174 FRIANT-KERN CANAL BRIDGE (BR. NO. 46C0263)
COST PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES

Contract No. _____ Date: 10/23/2017
 Subconsultant O'DELL ENGINEERING

DIRECT LABOR

Classification	Name	Range	Hours	Initial Hourly Rate	Total
Principal	Dylan Crawford		0	@ \$105.77	\$ 0
Surveyor 2	Scott Roberts		0	@ \$37.00	\$ 0
Surveyor 2	Ben Garcia		0	@ \$30.00	\$ 0
2-Man Crew PW	Ryan Renfro/Blake de Luca		0	@ \$102.71	\$ 0
Administration	Maria Ramos		0	@ \$36.00	\$ 0
Principal Landscape	Chad Kennedy		2	@ \$105.77	\$ 212
Landscape Architect 1	Michael Rosales		10	@ \$38.46	\$ 385
Landscape Architect 1	Jesse Grafton		10	@ \$31.00	\$ 310
Landscape Designer 2	Richard Joaquin		20	@ \$29.83	\$ 597
Landscape Architect 1	Victoria Ringleb		15	@ \$30.00	\$ 450
Landscape Designer 1	Rao Fu		4	@ \$23.00	\$ 92
Landscape Designer 2	Leo Li		4	@ \$26.00	\$ 104

Subtotal Direct Labor Costs \$ 2,149
 Anticipated Salary Increases * \$ 0
Total Direct Labor Costs \$ 2,149

FRINGE BENEFITS

Rate	Total
33.49 %	\$ 720
Total Fringe Benefits	\$ 720

INDIRECT COSTS

Rate	Total
Overhead 75.76 %	\$
General and Administrative 0.00 %	\$
Total 75.76 %	\$
Total Indirect Costs	\$ 1,628

FEE (Profit on Direct Labor + Fringe Benefits + Indirect)

Rate	Total
8.00 %	\$
Fee (DC+FB+I)	\$ 360

OTHER COSTS

- 1. BW Print (\$3.00 per sheet) \$
- 2. Color Print (\$20.00 per sheet) \$
- 3. Mylar (\$30.00 per sheet) \$
- 4. Mileage (\$.535 cents per mile) \$
- \$
- \$
- \$
- Subtotal Other Costs \$ \$ -

FEE (Other Costs)

Rate	Total
0.00 %	\$
Fee (OC)	\$ 0

SUBCONTRACTOR COSTS (attach detailed cost estimate for each subcontractor)

\$ _____
 \$ _____
 \$ _____
 \$ _____

COST WITH NO OPTIONAL TASKS \$ 4,856
 OPTIONAL TASKS \$ 19,656
TOTAL COST WITH OPTIONAL TASKS \$ 24,512

EXHIBIT C

Insurance Requirements

PROFESSIONAL SERVICES CONTRACTS
INSURANCE REQUIREMENTS

CONSULTANT shall provide and maintain insurance for the duration of this Agreement against claims for injuries to persons and damage to property which may arise from, or in connection with, performance under the Agreement by the CONSULTANT, his agents, representatives, employees and subcontractors, if applicable.

A. **Minimum Scope & Limits of Insurance**

1. Insurance Services Office Commercial General Liability coverage of \$1,000,000 combined single Limit per occurrence (occurrence Form CG 00 01). If an annual aggregate applies it must be no less than \$2,000,000.
2. Insurance Services Office Form Number CA 00 01 covering Automobile Liability, (any auto) of \$1,000,000 per occurrence. If an annual aggregate applies it must be no less than \$2,000,000.
3. Workers' Compensation insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. Professional Liability (Errors and Omissions) Insurance appropriate to the CONSULTANT's profession, with limit no less than \$3,000,000 per occurrence or claim, \$4,000,000 aggregate.

B. **Specific Provisions of the Certificate**

1. If the required insurance is written on a claims made form, the retroactive date must be before the date of the contract or the beginning of the contract work and must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract work.
2. CONSULTANT must submit endorsements to the General Liability and Auto Liability reflecting the following provisions:
 - a. *The COUNTY, its officers, agents, officials, employees and volunteers are to be covered as additional insureds as respects: liability arising out of work or operations performed by or on behalf of the CONSULTANT; or automobiles owned, leased, hired or borrowed by the CONSULTANT.*
 - b. *For any claims related to this project, the CONSULTANT's insurance coverage shall be primary insurance as respects the COUNTY, its officers, agents, officials, employees and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, agents, officials, employees or volunteers shall be excess of the CONSULTANT's insurance and shall not contribute with it.*
 - c. *Each insurance policy required by this agreement shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days prior written notice has been provided to the County.*
3. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the COUNTY for all work performed by the CONSULTANT, its employees, agents and subcontractors.

a. *Waiver of Subrogation. The workers' compensation policy shall be endorsed with a waiver of subrogation in favor of the COUNTY for all work performed by the CONSULTANT, its employees, agents and subcontractors. CONSULTANT waives all rights against the County and its officers, agents, official, employees and volunteers for recovery of damages to the extent these damages are covered by the workers compensation and employers liability.*

C. Deductibles and Self-Insured Retentions

The COUNTY Risk Manager must approve any deductible or self-insured retention that exceeds \$100,000.

D. Acceptability of Insurance

Insurance must be placed with insurers with a current rating given by A.M. Best and Company of no less than A-:VII and a Standard & Poor's Rating (if rated) of at least BBB and from a company approved by the Department of Insurance to conduct business in California. Any waiver of these standards is subject to approval by the County Risk Manager.

E. Verification of Coverage

Prior to approval of this Agreement by the COUNTY, the CONSULTANT shall file with the submitting department, certificates of insurance with original endorsements effecting coverage and a copy of the declarations page from the policy in effect in a form acceptable to the COUNTY. Endorsements must be signed by persons authorized to bind coverage on behalf of the insurer. The COUNTY reserves the right to require certified copies of all required insurance policies at any time.

EXHIBIT D

Consultant Contract DBE Commitment (CALTRANS EXHIBIT 10-01)

EXHIBIT 10-O1 CONSULTANT PROPOSAL DBE COMMITMENT

1. Local Agency: _____ 2. Contract DBE Goal: _____
 3. Project Description: _____
 4. Project Location: _____
 5. Consultant's Name: _____ 6. Prime Certified DBE:

7. Description of Work, Service, or Materials Supplied	8. DBE Certification Number	9. DBE Contact Information	10. DBE %
Local Agency to Complete this Section		11. TOTAL CLAIMED DBE PARTICIPATION	%
17. Local Agency Contract Number: _____ 18. Federal-Aid Project Number: _____ 19. Proposed Contract Execution Date: _____	IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required. _____ 12. Preparer's Signature 13. Date _____ 14. Preparer's Name 15. Phone _____ 16. Preparer's Title		
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.			
_____ 20. Local Agency Representative's Signature 21. Date			
_____ 22. Local Agency Representative's Name 23. Phone			
_____ 24. Local Agency Representative's Title	_____ 16. Preparer's Title		

DISTRIBUTION: Original – Included with consultant's proposal to local agency.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

INSTRUCTIONS – CONSULTANT PROPOSAL DBE COMMITMENT

CONSULTANT SECTION

1. **Local Agency** - Enter the name of the local or regional agency that is funding the contract.
2. **Contract DBE Goal** - Enter the contract DBE goal percentage as it appears on the project advertisement.
3. **Project Description** - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc.).
4. **Project Location** - Enter the project location as it appears on the project advertisement.
5. **Consultant's Name** - Enter the consultant's firm name.
6. **Prime Certified DBE** - Check box if prime contractor is a certified DBE.
7. **Description of Work, Services, or Materials Supplied** - Enter description of work, services, or materials to be provided. Indicate all work to be performed by DBEs including work performed by the prime consultant's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
8. **DBE Certification Number** - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened.
9. **DBE Contact Information** - Enter the name, address, and phone number of all DBE subcontracted consultants. Also, enter the prime consultant's name and phone number, if the prime is a DBE.
10. **DBE %** - Percent participation of work to be performed or service provided by a DBE. Include the prime consultant if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.
11. **Total Claimed DBE Participation %** - Enter the total DBE participation claimed. If the total % claimed is less than item "Contract DBE Goal," an adequately documented Good Faith Effort (GFE) is required (see Exhibit 15-H DBE Information - Good Faith Efforts of the LAPM).
12. **Preparer's Signature** - The person completing the DBE commitment form on behalf of the consultant's firm must sign their name.
13. **Date** - Enter the date the DBE commitment form is signed by the consultant's preparer.
14. **Preparer's Name** - Enter the name of the person preparing and signing the consultant's DBE commitment form.
15. **Phone** - Enter the area code and phone number of the person signing the consultant's DBE commitment form.
16. **Preparer's Title** - Enter the position/title of the person signing the consultant's DBE commitment form.

LOCAL AGENCY SECTION

17. **Local Agency Contract Number** - Enter the Local Agency contract number or identifier.
18. **Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
19. **Proposed Contract Execution Date** - Enter the proposed contract execution date.
20. **Local Agency Representative's Signature** - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Consultant Section of this form is complete and accurate.
21. **Date** - Enter the date the DBE commitment form is signed by the Local Agency Representative.
22. **Local Agency Representative's Name** - Enter the name of the Local Agency Representative certifying the consultant's DBE commitment form.
23. **Phone** - Enter the area code and phone number of the person signing the consultant's DBE commitment form.
24. **Local Agency Representative Title** - Enter the position/title of the Local Agency Representative certifying the consultant's DBE commitment form.

EXHIBIT E

Consultant Contract DBE Commitment (CALTRANS EXHIBIT 10-02)

EXHIBIT 10-02 CONSULTANT CONTRACT DBE COMMITMENT

1. Local Agency: _____ 2. Contract DBE Goal: _____
 3. Project Description: _____
 4. Project Location: _____
 5. Consultant's Name: _____ 6. Prime Certified DBE: 7. Total Contract Award Amount: _____
 8. Total Dollar Amount for **ALL** Subconsultants: _____ 9. Total Number of **ALL** Subconsultants: _____

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
Local Agency to Complete this Section			\$
20. Local Agency Contract Number: _____	14. TOTAL CLAIMED DBE PARTICIPATION		%
21. Federal-Aid Project Number: _____			
22. Contract Execution Date: _____	IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.		
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.			
23. Local Agency Representative's Signature _____	24. Date _____	15. Preparer's Signature _____	16. Date _____
25. Local Agency Representative's Name _____	26. Phone _____	17. Preparer's Name _____	18. Phone _____
27. Local Agency Representative's Title _____	19. Preparer's Title _____		

DISTRIBUTION: 1. Original – Local Agency
 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

INSTRUCTIONS – CONSULTANT CONTRACT DBE COMMITMENTCONSULTANT SECTION

1. **Local Agency** - Enter the name of the local or regional agency that is funding the contract.
2. **Contract DBE Goal** - Enter the contract DBE goal percentage as it appears on the project advertisement.
3. **Project Location** - Enter the project location as it appears on the project advertisement.
4. **Project Description** - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc).
5. **Consultant's Name** - Enter the consultant's firm name.
6. **Prime Certified DBE** - Check box if prime contractor is a certified DBE.
7. **Total Contract Award Amount** - Enter the total contract award dollar amount for the prime consultant.
8. **Total Dollar Amount for ALL Subconsultants** – Enter the total dollar amount for all subcontracted consultants. SUM = (DBEs + all Non-DBEs). Do not include the prime consultant information in this count.
9. **Total number of ALL subconsultants** – Enter the total number of all subcontracted consultants. SUM = (DBEs + all Non-DBEs). Do not include the prime consultant information in this count.
10. **Description of Work, Services, or Materials Supplied** - Enter description of work, services, or materials to be provided. Indicate all work to be performed by DBEs including work performed by the prime consultant's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
11. **DBE Certification Number** - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened.
12. **DBE Contact Information** - Enter the name, address, and phone number of all DBE subcontracted consultants. Also, enter the prime consultant's name and phone number, if the prime is a DBE.
13. **DBE Dollar Amount** - Enter the subcontracted dollar amount of the work to be performed or service to be provided. Include the prime consultant if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.
14. **Total Claimed DBE Participation** - \$: Enter the total dollar amounts entered in the "DBE Dollar Amount" column. %: Enter the total DBE participation claimed ("Total Participation Dollars Claimed" divided by item "Total Contract Award Amount"). If the total % claimed is less than item "Contract DBE Goal," an adequately documented Good Faith Effort (GFE) is required (see Exhibit 15-H DBE Information - Good Faith Efforts of the LAPM).
15. **Preparer's Signature** - The person completing the DBE commitment form on behalf of the consultant's firm must sign their name.
16. **Date** - Enter the date the DBE commitment form is signed by the consultant's preparer.
17. **Preparer's Name** - Enter the name of the person preparing and signing the consultant's DBE commitment form.
18. **Phone** - Enter the area code and phone number of the person signing the consultant's DBE commitment form.
19. **Preparer's Title** - Enter the position/title of the person signing the consultant's DBE commitment form.

LOCAL AGENCY SECTION

20. **Local Agency Contract Number** - Enter the Local Agency contract number or identifier.
21. **Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
22. **Contract Execution Date** - Enter the date the contract was executed.
23. **Local Agency Representative's Signature** - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Consultant Section of this form is complete and accurate.
24. **Date** - Enter the date the DBE commitment form is signed by the Local Agency Representative.
25. **Local Agency Representative's Name** - Enter the name of the Local Agency Representative certifying the consultant's DBE commitment form.
26. **Phone** - Enter the area code and phone number of the person signing the consultant's DBE commitment form.
27. **Local Agency Representative Title** - Enter the position/title of the Local Agency Representative certifying the consultant's DBE commitment form.