

AGREEMENT FOR ENGINEERING SERVICES
FOR REHABILITATION OF
BARTLETT CREEK AT BARTLETT SPRINGS ROAD BRIDGE (14C-0106)
IN LAKE COUNTY, CALIFORNIA

This Agreement is made and entered into this _____ day of _____, 2019, by and between the COUNTY of Lake, hereinafter referred to as "COUNTY", and Quincy Engineering, Inc., hereinafter referred to as "CONSULTANT".

WHEREAS, COUNTY has identified a need to rehabilitate the Bartlett Creek Bridge at Bartlett Springs Road (14C-0106); and

WHEREAS, preliminary and final design, environmental services, right of way, bidding and construction assistance services will be required for the above-mentioned bridge, hereinafter referred to as "PROJECT"; and

WHEREAS, CONSULTANT is a licensed professional Civil Engineer in the State of California and is qualified and willing to provide said services.

NOW, THEREFORE, it is mutually agreed by the parties as follows:

**I.
SCOPE OF SERVICES**

- A. CONSULTANT shall perform the services described in Exhibit "A", attached hereto and incorporated herein by this reference hereinafter called Scope of Work. In the event of a conflict between this Agreement and Exhibit "A", the provisions of this Agreement shall control.
- B. Time of Beginning and Completion of Services: Work on the PROJECT shall begin no later than five (5) calendar days after CONSULTANT's receipt of a COUNTY issued Notice to Proceed. CONSULTANT shall perform services within the times or by the dates provided in Exhibit "A", which by reference is made a part hereof, except that, if applicable, the schedule may be adjusted to reflect any delay in issuance of the Notice to Proceed, or other delay factors not subject to CONSULTANT control.

**II.
COUNTY'S RESPONSIBILITIES**

The COUNTY's responsibilities will include the payment for the CONSULTANT's services and the time period within which payment must be made. Additionally, the COUNTY may agree to provide certain information, documents, work space, and/or materials.

- A. COUNTY Furnished Data: COUNTY will provide to CONSULTANT all data in COUNTY's possession relating to CONSULTANT's services on the PROJECT.
- B. Access to Facilities and Property: COUNTY will make its facilities accessible to CONSULTANT as required for CONSULTANT's performance of its services. COUNTY will be responsible for all acts of COUNTY's personnel.
- C. Advertisements, Permits, and Access: Unless otherwise agreed to in the Scope of Services, COUNTY will obtain, arrange and pay for all advertisements for bids; permits and licenses required by local, state, or federal authorities; and land, easements, rights-of-way, and access necessary for CONSULTANT's services.

- D. Timely Review: COUNTY will examine CONSULTANT's studies, reports, sketches, drawings, specifications, proposals, and other documents; obtain advice of an attorney, insurance counselor, accountant, auditor, bond and financial advisors, and other consultants as COUNTY deems appropriate; and render in writing decisions required by COUNTY in a timely manner.
- E. Prompt Notice: COUNTY will give prompt written notice to CONSULTANT whenever COUNTY observes or becomes aware of any development that affects the scope or timing of CONSULTANT's services, or of any defect in the work of CONSULTANT.

Environmental Clearances: COUNTY will be responsible for all environmental clearances.

- G. Asbestos or Hazardous Substances and Indemnification: If asbestos or hazardous substances in any form are encountered or suspected, CONSULTANT will stop its own work in the affected portions of the PROJECT to permit testing and evaluation.

If asbestos is suspected, CONSULTANT will if requested, manage the asbestos remediation activities using a qualified subcontractor at an additional fee and contract terms to be negotiated.

To the maximum extent permitted by law, COUNTY will indemnify CONSULTANT and CONSULTANT's officers, employees, subcontractors, and affiliated corporations from all claims, damages, losses, and costs, including, but not limited to, attorney's fees and litigation or dispute resolution expenses arising out of or relating to the presence, discharge, release, or escape of hazardous substances, contaminants, or asbestos on, under, or from the PROJECT.

III. CONSULTANT'S REPORT AND/OR MEETINGS

- A. The CONSULTANT shall submit progress reports at least once a month. The report should be sufficiently detailed for the COUNTY's Project Manager to determine if the CONSULTANT is performing to expectations or is on schedule, to provide communication of interim findings and to afford occasions for airing difficulties or special problems encountered so remedies can be developed.
- B. The CONSULTANT's Project Manager shall meet with the COUNTY's Project Manager as needed to discuss progress on the project(s).

IV. SUBCONTRACTOR/DBE PARTICIPATION

A. Subcontractors

- 1. Nothing contained in this Agreement or otherwise, shall create any contractual relation between the Agency and any subcontractors, and no subcontract shall relieve the Contractor of his/her responsibilities and obligations hereunder. The Contractor agrees to be as fully responsible to the Agency for the acts and omissions of its subcontractors 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 the Contractor. The Contractor's obligation to pay its subcontractors is an independent obligation from the Agency's obligation to make payments to the Contractor.
- 2. Any subcontract in excess of \$25,000, entered into as a result of this Agreement, shall contain all the provisions stipulated in this Agreement to be applicable to subcontractors.
- 3. Contractor shall pay its subcontractors within ten (10) calendar days from receipt of each payment made to the Contractor by the Agency.

4. Any substitution of subcontractors must be approved in writing by the Agency's Contract Manager in advance of assigning work to a substitute subcontractor.

B. Disadvantaged Business Enterprise (DBE) Participation

1. This Agreement is subject to 49 CFR, Part 26 entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." Proposers who obtain DBE participation on this contract will assist Caltrans in meeting its federally mandated statewide overall DBE goal.
2. If the contract has a DBE goal, the Consultant must meet the DBE goal by committing DBE participation or document a good faith effort to meet the goal. If a DBE subconsultant is unable to perform, the Consultant must make a good faith effort to replace him/her with another DBE subconsultant, if the goal is not otherwise met.
3. DBEs and other small businesses, as defined in 49 CFR, Part 26 are encouraged to participate in the performance of agreements financed in whole or in part with federal funds. The Consultant or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. The Consultant shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of US DOT- assisted agreements. Failure by the Consultant to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as the local agency deems appropriate.
4. Any subcontract entered into as a result of this Agreement shall contain all of the provisions of this section.

C. Performance of DBE Consultant and other DBE Subconsultants/Suppliers

1. A DBE performs a commercially useful function when it is responsible for execution of the work of the Agreement and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible with respect to materials and supplies used on the Agreement, 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 commercially useful function, evaluate the amount of work subcontracted, industry practices; whether the amount the firm is to be paid under the Agreement is commensurate with the work it is actually performing; and other relevant factors.
2. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, Agreement, 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.
3. If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its Agreement with its own work force, or the DBE subcontracts a greater portion of the work of the Agreement 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 commercially useful function.

D. Prompt Payment of Funds Withheld to Subcontractors

1. The Agency shall hold retainage from the prime consultant and shall make prompt and regular incremental acceptances of portions, as determined by the Agency, of the contract work, and pay retainage to the prime contractor based on these acceptances. The prime consultant, or subconsultant, shall return all monies withheld in retention from a subconsultant within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the agency. Federal law (49 CFR26.29) requires that any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of this provision shall subject the violating

prime consultant or subconsultant to the penalties, sanctions and other remedies specified in Section 7108.5 of the Business and Professions Code. These requirements 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 contractor, deficient subconsultant performance, or noncompliance by a subcontractor. This provision applies to both DBE and non-DBE prime consultant and subconsultants.

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

E. DBE Records

1. The Consultant shall maintain records of materials purchased and/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.
2. Upon completion of the Agreement, a summary of these records shall be prepared and submitted on the form entitled, "Final Report-Utilization of Disadvantaged Business Enterprise (DBE), First-Tier Subcontractors," CEM-2402F (Exhibit 17-F, Chapter 17, of the LAPM), certified correct by the Consultant or the Consultant's authorized representative and shall be furnished to the Contract Manager with the final invoice. Failure to provide the summary of DBE payments with the final invoice will result in 25% of the dollar value of the invoice being withheld from payment until the form is submitted. The amount will be returned to the Consultant when a satisfactory "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors" is submitted to the Contract Manager.

F. DBE Certification and Decertification Status:

If a DBE sub-consultant is decertified during the life of the Agreement, the decertified sub-consultant shall notify the Consultant in writing with the date of decertification. If a sub-consultant becomes a certified DBE during the life of the Agreement, the sub-consultant shall notify the Consultant in writing with the date of certification. Any changes should be reported to the Agency's Contract Manager within 30 days.

V. PREVAILING WAGE

- A. The 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.
- B. 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.

VI. COMPENSATION AND TERMS OF PAYMENT

Payment to CONSULTANT will be made as follows:

- A. **Invoices and Time of Payment:** Monthly invoices will be issued by CONSULTANT for all services performed under this Agreement. Invoices shall reference the project title and include a detailed

breakdown of work items and unit costs by task and project site with a summary of all work completed to date and the cost of work remaining. Undisputed invoices shall be paid within 30 days of receipt. Each invoice will include a 5% retention amount.

Invoices shall be mailed to the Contract Manager, Fred Pezeshk, at the following address:

County of Lake
Public Works Department
255 N. Forbes Street, Room 309
Lakeport, California 95453
Attn: Fred Pezeshk

Upon satisfactory completion of services enumerated in ARTICLE I herein, the final payment of any balance will be due upon receipt of the final invoice. The final invoice should be submitted within 60-calendar days after completion of the CONSULTANT's work.

- B. **Interest:** Interest at the rate of 1-1/2% per month, or that permitted by law if lesser, will be charged on all past-due amounts starting thirty (30) days after receipt of invoice and required documentation. Payments will first be credited to interest and then to principal.

In the event of a disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. COUNTY will exercise reasonableness in contesting any bill or portion thereof. No interest will accrue on any contested portion of the billing until mutually resolved.

If COUNTY fails to make payment in full to CONSULTANT for services within sixty (60) days of the date due for any uncontested billing, CONSULTANT may, after giving seven (7) days written notice to COUNTY, suspend services under this Agreement until paid in full, including interest. In the event of suspension of services, CONSULTANT will have no liability to COUNTY for delays or damages caused COUNTY because of such suspension of services.

- C. **Compensation:** The method of payment for this contract will be based on actual cost plus a fixed fee. COUNTY will reimburse CONSULTANT for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by CONSULTANT in performance of the work set forth in Exhibit "A". Direct Costs for Sub Consultants will be billed as actual costs. No payment will be made prior to approval of any work, nor for any work performed prior to approval of this Agreement.

CONSULTANT will not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved CONSULTANT'S Cost Proposal, unless additional reimbursement is provided for by contract amendment. In no event, will CONSULTANT be reimbursed for overhead costs at a rate that exceeds COUNTY's approved overhead rate set forth in the Cost Proposal. In the event, that COUNTY determines that a change to the work from that specified in the Cost Proposal and contract is required, the contract time or actual costs reimbursable by COUNTY shall be adjusted by contract amendment to accommodate the changed work.

For all services CONSULTANT shall be paid in accordance with the budget set forth in Exhibit "B", provided however that the total payments to CONSULTANT shall not exceed \$464,600.00 without prior written authorization by COUNTY and formal Amendment to this Agreement.

In addition to the allowable incurred costs, COUNTY will pay CONSULTANT a fixed fee of \$27,000.06. The fixed fee is nonadjustable for the term of the contract, except in the event of a significant change in the scope of work and such adjustment is made by contract amendment.

Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal.

- D. **Indirect Cost Rate:** The indirect cost rate established for this Agreement is extended through the duration of this specific Agreement. CONSULTANT's agreement to the extension of the 1-year applicable period shall not be a condition or qualification to be considered for the work or Agreement award.

VII. TERM

This Agreement shall commence on the date hereinabove entered into and shall terminate on December 31, 2023, unless earlier terminated as hereinafter provided. This term may be extended an appropriate period of time in case of unavoidable delays and for consideration of corresponding warranted adjustments in payment by modification of this agreement as hereafter provided.

VIII. DUE PERFORMANCE - DEFAULT

Each party to this Agreement undertakes the obligation that the other's expectation of receiving the performance due under the terms of this Agreement will not be impaired. Upon the occurrence of any default of the provisions of this Agreement, a party shall give written notice of said default to the party in default. If the party in default does not cure the default within ten (10) days of the date of that notice (i.e. the time to cure) then such party shall be in default. The time to cure may be extended at the discretion of the party giving notice. Any extension of time to cure shall be in writing executed by both parties and must specify the reason(s) for the extension and the date the extension of time to cure expires.

Notice given under this provision shall specify the alleged default and the applicable Agreement provision and shall demand that the party in default perform the provisions of this Agreement within the applicable time period. No such notice shall be deemed a termination of this Agreement, unless the party giving notice so elects in that notice, or so elects in a subsequent written notice after the time to cure has expired.

IX. TERMINATION

This Agreement may be terminated as follows:

- A. By mutual written consent of the parties; or
- B. By COUNTY or Director of Public Works upon thirty (30) days written notice to CONSULTANT.

Upon termination prior to the full and satisfactory completion of CONSULTANT's performance under this Agreement, COUNTY shall not be liable to pay CONSULTANT the total compensation set forth in Article VI of this Agreement, but CONSULTANT shall be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the CONSULTANT covered by this Agreement. Upon termination of this contract, ownership and title to all reports, documents, plans, specifications, and estimates produced as part of this contract will automatically be vested in the COUNTY, and no further agreement will be necessary to transfer ownership to the COUNTY.

X. INSURANCE

CONSULTANT shall not commence work under this Agreement until he has obtained all the insurance required herein, certificates of insurance have been submitted to COUNTY, and said insurance has been approved by COUNTY. The certificates of insurance shall contain a provision that coverage afforded under the policies will not be cancelled until at least thirty (30) days prior written notice has been given to COUNTY, ten (10) days' notice if cancellation is due to nonpayment of premium.

CONSULTANT shall not allow any subcontractor to commence work on his subcontract until the

insurance required of the subcontractor has been obtained.

Any failure of CONSULTANT to maintain the insurance required by this provision, or to comply with any of the requirements of this provision, shall constitute a material breach of the entire Agreement. COUNTY shall not be responsible for any premiums or assessments on the policy.

Certificates evidencing the issuance of the following insurance shall be filed with COUNTY within ten (10) days after the date of execution of this Agreement by CONSULTANT and prior to commencement of work hereunder.

- A. **Compensation Insurance.** CONSULTANT shall procure and maintain, at CONSULTANT's own expense during the term hereof, Workers' Compensation Insurance and Employer's Liability Insurance as required by the State of California, for all employees to be engaged in work. In any case of such work sublet, CONSULTANT shall require subcontractor similarly to provide Employer's Liability Insurance and Workers' Compensation Insurance for all of the latter's employees to be engaged in such work, unless such employees are covered by the protection afforded by CONSULTANT's Workers' Compensation Insurance and Employer's Liability Insurance. Employer's Liability Insurance shall be in an amount not less than One Million Dollars (\$1,000,000.00) per occurrence.
- B. **Commercial General Liability.** CONSULTANT shall procure and maintain, at CONSULTANT's own expense during the term hereof, upon himself and his employees at all times during the course of this Agreement, Commercial General Liability Insurance (Occurrence Form CG 0001) for bodily injury, personal injury, and broad form property damage, in an amount of not than One Million dollars (\$1,000,000.00) combined single limit coverage per occurrence, including but not limited to endorsements for the following coverages: Personal and advertising injury, Premises-operations, Products and completed operations, Blanket contractual, and Independent CONSULTANT's liability. If such policy includes an aggregate limit, such aggregate limit shall be at least double the per occurrence limit required herein.
- C. **Automobile Liability Insurance.** CONSULTANT shall procure and maintain, at CONSULTANT's own expense during the term hereof, Comprehensive Automobile Liability Insurance, both bodily injury and property damage, on owned, hired, leased, and non-owned vehicles used in connection with CONSULTANT's business in an amount not less than One Million Dollars (\$1,000,000.00) combined single limit coverage per occurrence.
- D. **Professional Liability Insurance.** CONSULTANT shall procure and maintain, at CONSULTANT's own expense during the term hereof, Professional Liability Insurance for protection against claims arising out of the performance of services under this Agreement caused by errors, omissions, or other acts for which CONSULTANT, its employees, subcontractors, and agents, are liable. Said insurance shall be written with limits of not less than One Million Dollars (\$1,000,000.00). If said insurance is written on a "claims made" form, insurance shall be maintained and evidence of insurance must be provided for at least one (1) year after completion of the work under this Agreement.
- E. **Subcontractors.** CONSULTANT shall include all subcontractors as insured under the aforesaid policies or shall furnish separate certificates and endorsements to the COUNTY for each subcontractor which shall be subject to review and approval by COUNTY. All insurance coverages for subcontractors shall be subject to each of the requirements hereinabove and contain the additional insured endorsements required of CONSULTANT described with particularity hereinbelow.
- F. **Additional Insured Endorsement.** The Commercial General Liability and Automobile Liability Insurance must each contain, or be endorsed to contain, the following provision:

The COUNTY, its officers, officials, employees, and designated agents are to be covered as additional insureds and shall be added in the form of an endorsement to CONSULTANT's insurance on Form CG 20 10 11 85. CONSULTANT shall not commence work under this Agreement until he has had delivered to COUNTY the Additional Insured Endorsements required herein. This provision is not intended to extend to construction contractors contracted by the COUNTY to perform the work

of improvement.

Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under subdivision (b) of California Civil Code Section 2782.

- G. **Other Insurance Provisions.** For any claims related to the work performed under this Agreement by CONSULTANT, the CONSULTANT's insurance coverage shall be primary insurance as to the COUNTY, its officers, officials, employees, designated agents and appointed volunteers. Any insurance or self-insurance maintained by COUNTY, its officers, officials, employees, designated agents or appointed volunteers shall be in excess of the CONSULTANT's insurance and shall not contribute with it.

Any deductibles or self-insured retentions must be declared to and approved by COUNTY. At the option of COUNTY, either CONSULTANT shall reduce or eliminate such deductibles or self-insurance retentions as they apply to COUNTY or CONSULTANT shall provide a financial guarantee satisfactory to COUNTY guaranteeing payment of losses and related investigations, claim administration, and defense and defense-related expenses.

Insurance coverage required of CONSULTANT under this Agreement shall be placed with insurers with a current A.M. Best rating of no less than A: VII.

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the CONSULTANT for liability in excess of such coverage, nor shall it preclude COUNTY from taking other action as is available to it under any other provision of this Agreement or applicable law. Failure of COUNTY to enforce in a timely manner any of the provisions of this section shall not act as a waiver to enforcement of any of these provisions at a later date.

If any insurance coverage required by this Agreement is provided on a "Claims Made", rather than "occurrence" form, CONSULTANT agrees to maintain required coverage for a period of three years after the expiration of this Agreement (hereinafter, "Post Agreement Coverage") and any extensions thereof. CONSULTANT may maintain the required Post Agreement Coverage by renewal or purchase of prior acts or tail coverage. This subprovision is contingent upon Post Agreement Coverage being both available and reasonably affordable in relation to the coverage provided during the term of this Agreement. For purposes of interpreting this requirement, a cost not exceeding 100% of the last annual policy premium during the term of this Agreement in order to purchase prior acts or tail coverage for Post Agreement Coverage shall be deemed to be reasonable.

COUNTY shall include a provision in its contract with the general contractor hired to perform the work of improvement a provision requiring that the general contractor and all of its subcontractors maintain general liability insurance of not less than \$1,000,000 and that such insurance include the COUNTY, its officers, officials, employees, designated agents, appointed volunteers and the CONSULTANT, as additional insureds.

XI.

INDEMNIFICATION - HOLD HARMLESS

Each Party shall indemnify and hold the other harmless against all actions, claims, demands, and liabilities and against all losses, damage, cost, expenses, and attorney's fees, that arise out of, pertain to, or relate to its own negligent acts and/or omissions, recklessness, or willful misconduct which caused said claim, demand, liability, loss, damage, cost expense, and/or attorney's fees. This provision shall not extend to any claim, demand, liability, loss, damage, cost, expenses, and/or attorney's fees covered by the insurance of either party. CONSULTANT's liability hereunder shall be limited by the COUNTY to the amount of the available coverage under CONSULTANT's insurance coverage as described in Section X. herein.

CONSULTANT's obligations under this Section shall survive the termination of the Agreement.

XII. CONSULTANT'S WARRANTIES

CONSULTANT hereby makes the following representations and warranties:

- A. **Standard of Care.** CONSULTANT represents that it is specially trained, licensed, experienced, and competent to perform all the services, responsibilities, and duties specified herein and that such services, responsibilities, and duties shall be performed, whether by CONSULTANT or designated subcontractors, in a manner according to generally accepted practices of the engineering profession.

If COUNTY determines that any of CONSULTANT's work is not in accordance with such level of competency and standard of care, COUNTY, in its sole discretion, shall have the right to do any or all of the following: (a) require CONSULTANT to meet with COUNTY to review the quality of the work and resolve matters of concern; (b) require CONSULTANT to correct the work at no additional charge to generally accepted standards and practices of the engineering profession; (c) terminate this Agreement pursuant to the provisions of Article IX; or (d) pursue any and all other remedies at law or in equity.

Assigned Personnel:

1. CONSULTANT shall assign only competent personnel to perform work hereunder. In the event that at any time COUNTY, in its sole discretion, desires the removal of any person or persons assigned by CONSULTANT to perform work hereunder, CONSULTANT shall remove such person or persons immediately upon receiving written notice from COUNTY.
 2. Any and all persons identified in this Agreement or any exhibit hereto as the project manager, project team, or other professional performing work hereunder are deemed by COUNTY to be key personnel whose services were a material inducement to COUNTY to enter into this Agreement. CONSULTANT shall not remove, replace, substitute, or otherwise change any key personnel without the prior written consent of COUNTY. With respect to performance under this Agreement, CONSULTANT shall employ the key personnel identified in Exhibit "A".
 3. In the event that any of CONSULTANT's personnel assigned to perform services under this Agreement become unavailable due to resignation, sickness or other factors outside of CONSULTANT's control, CONSULTANT shall be responsible for timely provision of adequately qualified replacements.
- B. **Non-Discrimination in Employment.** CONSULTANT shall, in all solicitations or advertisements for employees placed by or on behalf of the CONSULTANT, state that all qualified applicants will receive consideration for employment without regard to race, color, creed religion, sex, sexual orientation, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or age. During the performance of this Contract, Consultant and its sub-consultant 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 sub-consultants shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Consultant and sub-consultants shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (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 sub-consultants shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

Consultant shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Contract.

- C. **Adherence to Applicable Disability Law.** CONSULTANT shall be responsible for knowing and adhering to the requirements of Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, (42 U.S.C. Sections 12101, et seq.). California Government Code Sections 12920 et seq., and all related state and local laws.
- D. **HIPAA Compliance.** CONSULTANT will adhere to Titles 9 and 22 and all other applicable Federal and State statutes and regulations, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and will make his best efforts to preserve data integrity and the confidentiality of protected health information.
- E. **Safety Responsibilities.** CONSULTANT will adhere to all applicable CalOSHA requirements in performing work pursuant to this Agreement. CONSULTANT agrees that in the performance of work under this Agreement, CONSULTANT will provide for the safety needs of its employees and will be responsible for maintaining the standards necessary to minimize health and safety hazards.
- F. **Interest of CONSULTANT.** CONSULTANT hereby covenants that he has, at the time of the execution of this Agreement, no interest, direct or indirect, and that he shall not acquire any interest in the future, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. CONSULTANT further covenants that in the performance of this work, no person having such interest shall be employed.
- G. **Covenant Against Contingent Fees.** 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.
- H. **Laws to be observed.** CONSULTANT will comply with all laws, regulations, orders, and decrees applicable to the PROJECT. Indemnify and defend the COUNTY against any claim or liability arising from the violation of a law, regulation, order, or decree by CONSULTANT or your employees. Immediately report to the Contract Manager a discrepancy or inconsistency between the Contract and a law, regulation, order, or decree.

If the COUNTY incurs any fines or penalties because of CONSULTANT's failure to comply with a law, regulation, order, or decree, the COUNTY will deduct the amount of the fine or penalty.

Immediately notify the Contract Manager, if a regulatory agency requests access to the job site or to records. Submit a list of documents provided to the agency and issued enforcement actions.

XIII. ASSIGNMENT

CONSULTANT shall not assign any interest in this Agreement and shall not transfer any interest in the same without the prior written consent of COUNTY, except that claims for money due or to become due the CONSULTANT from COUNTY under this Agreement may be assigned by the CONSULTANT to a bank, a trust company, or other financial institution without such approval. Written notice of any such transfer shall be furnished promptly to the COUNTY. Any attempt at assignment of rights under this Agreement except for those specifically consented to by both parties or as stated above shall be void.

XIV.
INDEPENDENT CONSULTANT

It is specifically understood and agreed that, in the making and performance of this Agreement, CONSULTANT is an independent CONSULTANT and is not an employee, agent or servant of COUNTY. CONSULTANT is not entitled to any employee benefits. COUNTY agrees that CONSULTANT shall have the right to control the manner and means of accomplishing the result contracted for herein.

CONSULTANT is solely responsible for the payment of all federal, state, and local taxes, charges, fees, or contributions required with respect to CONSULTANT and CONSULTANT's officers, employees, and agents who are engaged in the performance of this Agreement (including without limitation, unemployment insurance, social security, and payroll tax withholding).

XV.
MODIFICATION

- A. This Agreement may only be modified by a written amendment thereto, executed by both parties. However, matters concerning scope of services which do not affect the agreed price may be modified by mutual written consent of CONSULTANT and COUNTY executed by Director of Public Works.
- B. CONSULTANT shall only commence work covered by an amendment after the amendment is executed and notification to proceed has been provided by the COUNTY's Project Manager.
- C. There shall be no change in the CONSULTANT's Project Manager or members of the project team, as listed in the Cost Proposal which is a part of this contract, without prior written approval by the COUNTY's Project Manager.

XVI.
ATTORNEYS FEES AND COSTS

If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled.

XVII.
OWNERSHIP OF DATA

- A. Upon completion of all work under this contract, ownership and title to all reports, documents, plans, specifications, and estimates produced as part of this contract will automatically be vested in the COUNTY, and no further agreement will be necessary to transfer ownership to the COUNTY. The CONSULTANT shall furnish the COUNTY all necessary copies of data needed to complete the review and approval process.
- B. 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.
- C. The CONSULTANT is not liable for claims, liabilities, or losses arising out of, or connected with the modification, or misuse by the COUNTY of the machine-readable information and data provided by the CONSULTANT under this agreement; further, the CONSULTANT is not liable for claims, liabilities, or losses arising out of, or connected with, any use by the 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 the CONSULTANT.
- D. Applicable patent rights provisions described in 41 CFR 1-91, regarding rights to inventions shall be included in the Agreements as appropriate.

- E. CONSULTANT may copyright reports or other agreement products. 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.
- F. Any subcontract in excess of \$25,000 entered into as a result of this contract, shall contain all of the provisions of this Article.

XVIII.
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 10532, the CONSULTANT, subcontractors and the COUNTY shall maintain 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 (3) years from the date of final payment under the contract. The state, the State Auditor, the COUNTY, FHWA or any duly authorized representative of the federal government shall have access to any books, records, and documents of the CONSULTANT that are pertinent to the contract for audits, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.

Subcontracts in excess of \$25,000 shall contain this provision.

XIX.
JURISDICTION AND VENUE

This Agreement shall be construed in accordance with the laws of the State of California and the parties hereto agree that venue of any action or proceeding regarding this Agreement or performance thereof shall be in Lake County, California. CONSULTANT waives any right of removal it might have under California Code of Civil Procedure Section 394.

XX.
NO THIRD-PARTY BENEFICIARIES

Nothing contained in this Agreement shall be construed to create, and the parties do not intend to create, any rights in or for the benefit of third parties.

XXI.
SEVERABILITY

If any provision of this Agreement is held to be unenforceable, the remainder of this Agreement shall be severable and not affected thereby.

XXII.
NON-APPROPRIATION

In the event COUNTY is unable to obtain funding at the end of each fiscal year for professional engineering services required during the next fiscal year, COUNTY shall have the right to terminate this Agreement, without incurring any damages or penalties, and shall not be obligated to continue performance under this Agreement. To the extent any remedy in this Agreement may conflict with Article XVI of the California Constitution or any other debt limitation provision of California law applicable to COUNTY, CONSULTANT hereby expressly and irrevocably waives its right to such remedy.

XXIII.
CLAIMS FILED BY COUNTY'S CONSTRUCTION CONTRACTOR

- A. If claims are filed by the COUNTY's construction contractor relating to work performed by CONSULTANT's personnel and additional information or assistance from the CONSULTANT's personnel is required in order to evaluate or defend against such claims, CONSULTANT agrees to make its personnel available for consultation with the COUNTY's construction contract administration and legal staff and for testimony, if necessary, at depositions and at trial or arbitration proceedings.
- B. CONSULTANT's personnel that the COUNTY considers essential to assist in defending against construction contractor claims will be made available on reasonable notice from the COUNTY. Consultation or testimony will be reimbursed at the same rates, including travel costs, that are being paid for the CONSULTANT's personnel services under this Agreement.
- C. Services of the CONSULTANT's personnel in connection with the COUNTY's construction contractor claims will be performed pursuant to a written supplement, if necessary, extending the termination date of this Agreement in order to finally resolve the claims.
- D. Any subcontract in excess of \$25,000, entered into as a result of this contract, shall contain all of the provisions of this Article.

XXIV.
CONFIDENTIALITY OF DATA

- A. All financial, statistical, personal, technical, or other data and information relative to the COUNTY's operations, which is 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.
- B. Permission to disclose information on one occasion or 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.
- C. The CONSULTANT shall not comment publicly to the press or any other media regarding the contract or the COUNTY's actions on the same, 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 a Legislative committee.
- D. 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.
- E. Any subcontract, entered into as a result of this contract, shall contain all of the provisions of this Article.
- F. All information related to the construction estimate is confidential and shall not be disclosed by the CONSULTANT to any entity, other than the COUNTY.

XXV.
NATIONAL LABOR RELATIONS BOARD CERTIFICATION

In accordance with Public Contract Code, Section 10296, the CONSULTANT hereby states under penalty of perjury that no more than one final unappealable finding of contempt of court by a Federal court has been issued against the CONSULTANT within the immediately preceding two-year period because of the CONSULTANT's failure to comply with an order of a Federal court that orders the CONSULTANT to comply with an order of the National Labor Relations Board.

XXVI.
INSPECTION OF WORK

The CONSULTANT and any subCONSULTANTS shall permit the COUNTY, State and the FHWA to review and inspect the project activities at all reasonable times during the performance period of this contract including review and inspection on a daily basis.

XXVII.
NON-DISCRIMINATION

- A. During the performance of this Agreement, CONSULTANT and its subcontractors shall not unlawfully discriminate, harass or allow harassment, against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, nation origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. CONSULTANTS and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination and harassment. CONSULTANTS and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code, Section 12900.0 et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12990, 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 party hereof as if set forth in full. CONSULTANT and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- B. The CONSULTANT shall include the non-discrimination and compliance provisions of this clause in all subcontracts to perform work under this contract.
- C. CONSULTANT shall comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, 49 CFR 21 through Appendix C and 23 CFR 710.405(b) are applicable to this contract by reference.

XXVIII.
DISPUTES

- A. 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 Manager and Department Head, who may consider written or verbal information submitted by the CONSULTANT.
- B. Not later than 30 days after completion of all deliverables necessary to complete the plans, specifications and estimate, the CONSULTANT may request review by the COUNTY GOVERNING BOARD of unresolved claims or disputes, other than audit. The request for review will be submitted in writing.
- C. Neither the pendency of a dispute, nor its consideration by the committee will excuse the CONSULTANT from full and timely performance in accordance with the terms of this contract.

XXIX.
SAFETY

- A. The CONSULTANT shall comply with OSHA regulations applicable to CONSULTANT regarding necessary safety equipment or procedures. The CONSULTANT shall comply with safety instructions issued by the 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.

- B. Pursuant to the authority contained in Section 591 of the Vehicle Code, the COUNTY has determined that such areas are within the limits of the project and are open to public traffic. The CONSULTANT shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. The 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.
- C. Any subcontract entered into as a result of this contract, shall contain all of the provisions of this Article.
- D. CONSULTANT must have a Division of Occupational Safety and Health (CAL-OSHA) permit(s), as outlined in California Labor Code Sections 6500 and 6705, prior to the initiation of any practices, work, method, operation, or process related to the construction or excavation of trenches which are five feet or deeper.

XXX.
SUBCONTRACTING

- A. The 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 the COUNTY's Contract Manager, except that, which is expressly identified in the approved Cost Proposal.
- B. Any subcontract in excess of \$25,000 entered into as a result of this contract, shall contain all the provisions stipulated in this contract to be applicable to subcontractors.
- C. Any substitution of subcontractors must be approved in writing by the COUNTY's Contract Manager.

XXXI.
STATEMENT OF COMPLIANCE

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

XXXII.
DEBARMENT AND SUSPENSION CERTIFICATION

- A. The CONSULTANT's signature affixed herein, shall constitute a certification under penalty of perjury under the laws of the State of California, that the CONSULTANT has complied with Title 49, Code of Federal Regulations, Part 29, Debarment and Suspension Certificate, 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 judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years. Any exceptions to this certification must be disclosed to the COUNTY.
- B. Exceptions will not necessarily result in denial of recommendation for award, but will be considered in determining CONSULTANT responsibility. Disclosures must indicate to whom exceptions apply, initiating agency, and dates of action.

XXXIII.
CONFLICT OF INTEREST

- A. The CONSULTANT shall disclose any financial, business, or other relationship with 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.
- B. 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.
- C. Any subcontract in excess of \$25,000 entered into as a result of this contract, shall contain all of the provisions of this Article.
- D. The CONSULTANT hereby certifies that neither CONSULTANT, nor any firm affiliated with the CONSULTANT will bid on any construction contract, or on any contract to provide construction inspection for any construction project resulting from this contract. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.
- E. Except for subcontractors whose services are limited to providing surveying or materials testing information, no subcontractor who has provided design services in connection with this contract shall be eligible to bid on any construction contract, or on any contract to provide construction inspection for any construction project resulting from this contract.

XXXIV.
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; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

XXXV.
PROHIBITION OF EXPENDING COUNTY STATE OR FEDERAL FUNDS FOR LOBBYING

- A. The CONSULTANT certifies to the best of his or her knowledge and belief that:
 - 1. No state, federal or local agency 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.
 - 2. 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.
- B. 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.

- C. 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.

XXXVI. COST PRINCIPLES

- A. The 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 allowability of cost individual items.
- B. The CONSULTANT also agrees to comply with federal procedures in accordance with 2 CFR, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.
- C. Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 2 CFR Part 200 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq. are subject to repayment by CONSULTANT to the COUNTY.

XXXVII CONTINGENT FEE

The CONSULTANT warrants, by execution of this contract that no person or selling agency has been employed, or retained, to solicit or secure this contract upon an agreement or understanding, for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees, or bona fide established commercial or selling agencies maintained by the CONSULTANT for the purpose of securing business. For breach or violation of this warranty, the COUNTY has the right to annul this contract without liability; pay only for the value of the work actually performed, or in its discretion to deduct from the contract price or consideration, or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

XXXVIII. AUDIT REVIEW PROCEDURES

- A. 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 CHIEF FINANCIAL OFFICER.
- B. Not later than 30 days after issuance of the final audit report, the CONSULTANT may request a review by the COUNTY's CHIEF FINANCIAL OFFICER of unresolved audit issues. The request for review will be submitted in writing.
- C. Neither the pendency of a dispute nor its consideration by the COUNTY will excuse the CONSULTANT from full and timely performance, in accordance with the terms of this contract.
- D. CONSULTANT and subconsultants' contracts, including cost proposals and indirect cost rates (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 certified public accountant (CPA) ICR Audit Workpaper Review. If selected for audit or review, the contract, cost proposal and ICR and related workpapers, 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 Workpaper Review it is CONSULTANT's responsibility to ensure federal, state, or local government officials are allowed full access to the CPA's workpapers. The contract, cost proposal, and ICR shall be adjusted by CONSULTANT and approved by LOCAL AGENCY 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 LOCAL AGENCY 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 workpapers, will be considered a breach of contract terms and cause for termination of the contract and disallowance of prior reimbursed costs.

XXXIX.
EQUIPMENT PURCHASE

- A. Prior authorization in writing, by the COUNTY's Contract Manager 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.
- B. For purchase of any item, service or consulting work not covered in the CONSULTANT's Cost Proposal and exceeding \$5,000 prior authorization by the COUNTY's Contract Manager; three competitive quotations must be submitted with the request, or the absence of bidding must be adequately justified.
- C. 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 CONSULTANT 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. 2 CFR, Part 200 requires a credit to Federal funds when participating equipment with a fair market value greater than \$5,000 is credited to the project.
- D. All subcontracts in excess \$25,000 shall contain the above provisions.

XL.
EVALUATION OF CONSULTANT

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

XLI.
CONSULTANT'S ENDORSEMENT ON PS&E/OTHER DATA

The responsible consultant/engineer shall sign all plans, specifications, estimates (PS&E) and engineering data furnished by him/her, and where appropriate, indicate his/her California registration number.

XLII.
NOTICES

All notices that are required to be given by one party to the other under this Agreement shall be in writing and shall be deemed to have been given if delivered personally or enclosed in a properly addressed envelope and deposited with the United States Post Office for delivery by registered or certified mail

addressed to the parties at the following addresses, unless such addresses are changed by notice, in writing, to the other party.

COUNTY OF LAKE
255 North Forbes Street
Lakeport, California 95453
Attn: Scott De Leon, Public Works Director

Quincy Engineering, Inc.
11017 Cobblerock Drive, Suite 100
Rancho Cordova, CA 95670
Attn: Mark Reno

XLIII.
ADDITIONAL PROVISIONS

This Agreement shall be governed by the laws of the State of California. It constitutes the entire Agreement between the parties regarding its subject matter. This Agreement supersedes all proposals, oral and written, and all negotiations, conversations or discussions heretofore and between the parties related to the subject matter of this Agreement.

COUNTY and CONSULTANT have executed this Agreement on the day and year first written above.

COUNTY OF LAKE:

CONSULTANT:

Chair, Board of Supervisors



John Quincy, President

ATTEST: CAROL J. HUCHINGSON
Clerk of the Board
of Supervisors

APPROVED AS TO FORM:
ANITA L. GRANT
County Counsel

By: _____


By:  _____

EXHIBIT "A"

TO

AGREEMENT FOR ENGINEERING SERVICES

FOR

REHABILITATION OF BARTLETT CREEK AT BARTLETT SPRINGS ROAD BRIDGE (14C-0106)

IN LAKE COUNTY, CALIFORNIA

SCOPE OF WORK

This Detailed Scope of Work utilizes Tasks 1-11 identified in the Request for Proposals and fully satisfies all Scope of Work requirements and deliverables for this project.

Quincy has generated task hours assuming that the PS&E will be developed based on the processes, procedures of the Highway Bridge Program (HBP), the recommendations in the HBP applications and the PSRE included in the RFP. Should preliminary engineering result in a significantly different project or scope of work, a contract amendment may be required prior to final design.

This scope of work and contract budget is developed based on Quincy performing tasks as described below. During the course of the project if the County is interested in taking the lead or performing any of the tasks, Quincy and the County will work together to identify tasks for the County to perform that are in line with County staff expertise and availability.

Quincy Engineering originally assisted the County with programming this bridge in 2013. The HBP application for Bartlett Creek Bridge was for rehabilitation of this structure, which consists of replacing the existing superstructure with a new one and modifying the existing abutments to accommodate a wider bridge width to meet AASHTO standards. Based on recent experience with replacing bridge superstructures on existing foundations, there are risks with making assumptions on unknown foundations. The latest inspection report notes both abutments are founded on fractured rock outcroppings. This is a good indication they could be supported on spread footing versus a pile supported footing. Regardless, without as-built plan information it is not possible to validate the existing foundation capacities. Assumptions will be required during design to evaluate any additional loading from the new superstructure replacement. Furthermore, while there has been no evidence of significant long-term scour, localized undermining of the existing abutments which may compromise foundation capacity over time is noted in the Caltrans inspection reports. For these reasons, we recommend as a first order of business on this project to compare a rehabilitation to a replacement option through a feasibility study and life cycle cost analysis. A comparison of design and construction efforts, impacts, and costs can help the County determine which option presents the best long-term value.

If a complete bridge replacement is justified, the project would need to be re-programmed in HBP. Re-programming should be readily accomplished through submittal of the additional justification documentation to Caltrans. Quincy has had great success with in justifying exceptions to HBP guidelines (replace when SR > 50, PE/CE ratios beyond program guidelines) when such exceptions appear to better meet the intent of the program. An especially relevant example of successful justification is when Quincy assisted with successfully reprogramming the replacement of Bartlett Creek Bridge at Bartlett Springs Road (Bridge No. 14C0099), which is just a few miles away from this project. Bridge 14C0099 has very similar characteristics and deficiencies to this bridge and was also originally considered a deck replacement. But after a more detailed evaluation of rehabilitation versus replacement, it was agreed that a replacement was a more cost-effective solution. We would recommend following the same process for bridge 14C0106.

HBP funding has become more constrained since bridge 14C0099 was approved for replacement. Furthermore, bridge 14C0106 has a higher sufficiency rating than 14C0099 did at the time of justification

for replacement. We recommend that a Feasibility Study Report be prepared as one of the first orders of work in order to get a preferred bridge strategy confirmed prior to initiating Environmental technical studies.

The tasks described below would not change regardless of rehabilitation or replacement Strategy. All tasks apply to either the replacement or rehabilitation alternative. The level of design effort (hours and budget) is expected to be the same for either the replacement or rehabilitation alternative.

The replacement would involve design of all elements (substructure, superstructure and road approaches).

The rehabilitation would involve analysis of the existing abutment load capacity for the new wider superstructure, and would also involve design required to widen the existing abutments. The rehabilitation substructure analysis is further complicated by the fact that there are no as-built drawings for the existing abutments, so there would be an element of risk involved in the rehabilitation alternative. Road approach design work will be the same for both alternatives.

The attached project schedule includes time to prepare and approve the Feasibility Study Report prior to initiating Environmental Technical studies.

Quincy's Detailed Scope of Work approach for this project is as follows:

TASK 1 – PROJECT INITIATION

Task 1.1 – Kick-off Meeting

The Quincy Team (Team) will attend a kick-off meeting to bring all stakeholders, including the County, the Team, and Caltrans together to form a cooperative effort toward the timely completion of these projects.

This meeting should also include a discussion of the current HBP programming schedule and funding levels for each project.

It is anticipated that representatives from the County will participate in the kick-off meeting with Quincy. It is assumed the kickoff meetings will be held on the same day for Wolf Creek Road, Rancheria Road and Bartlett Springs Road.

Task 1.2 – Site Visit

The kickoff meeting and first site visit will be coordinated with a Caltrans field review. Quincy recommends a site visit with the County and Caltrans District 1 representatives. Meeting participants would discuss required technical studies, and the anticipated limits of impact for biological and cultural studies (BSA and APE). A draft PES and draft APE map will be prepared by Quincy and Gallaway (Task 4.2) prior to the field review, in anticipation of finalizing and signing the documents at or shortly after the meeting.

Task 1.3 – Scope Verification

This task was accomplished during the negotiations phase, therefore no hours will be allotted. The scope of work, presented herein, reflects the scope as agreed by Quincy and the County.

Task 1.4 – Establish Project Schedule

Quincy will develop a detailed Microsoft Project schedule for each project showing each task, start and end dates, and task duration. This schedule will be updated and coordinated with the County throughout project development as appropriate. The County will be notified immediately of any problems that may adversely impact the project schedule. Quincy assumes an initial baseline schedule and three updates.

Task 1 Deliverables

- ✓ Kickoff Meeting
- ✓ Site Visit
- ✓ Schedule

TASK 2 – PROJECT MANAGEMENT

Task 2.1 – Project Management

The Quincy Project Manager will coordinate between all Team members to monitor and ensure progress, ensure adherence to the project schedule, ensure the proper resources are assigned to the project, and communicate regularly with the PDT members. Monthly invoices will be reviewed and sent to the County with a progress report on that month's work. Quincy will submit a Project Management Plan which provides Quincy's approach to project management, Quality Assurance/Quality Control (QA/QC), cost control, schedule management, independent technical review/design check, and constructability review. Effort for this task is based on the attached project schedule.

Task 2.2 – Progress Meetings

Quincy will work with the County to schedule and attend meetings, prepare agenda items, and compile project meeting minutes for distribution. In addition to the kick-off and site visit meetings, Quincy anticipates face to face team meetings at the completion of the 65%, and 95% design completion to review and address County comments as well as Caltrans comments, as applicable. These will be supplemented by regular conference calls as necessary to keep the County informed as to the project status. A one-hour duration per conference call for the Project Manager and one Project Engineer is budgeted. This scope includes 18 conference calls, and 2 meetings in the County office.

Task 2.3 – Assist the County with State Administration Requirements

Quincy will assist the County in preparing funding documents for the Request for Authorization (RFA) of upcoming phases of work. Quincy will also assist the County with any revisions that may be necessary to receive additional approval or allocations for each phase of the project. Quincy will provide the cost estimate information needed for revisions to the HBP funding Exhibits 6A, 6B, and 6D. The County will complete the forms and submit them to Caltrans. Quincy will also assist with annual HBP Surveys (typically sent out in August and due in September), or other program updates. 24 hours has been budgeted for this effort.

Task 2 Deliverables

- ✓ Meeting Agenda and Minutes
- ✓ Completed HBP forms as requested

TASK 3 - PRELIMINARY ENGINEERING

Task 3.1 – Surveys and Mapping

Quincy will perform the associated office and field work to conduct a topographic survey of the existing bridge, associated structures as well as the approach roadways.

The topographic survey will include features such as, but not limited to: utility markings and visible utility surface features, trees four (4) inches and larger, headwalls, retaining walls, fences, gates, guard rails, driveways, tops, toes, grade-breaks, buildings, signs, abutments, drainage features and any other features pertinent to the project. Cross sections for the approach roadways will be conducted for approximately five hundred (500) feet in both directions from the ends of the existing bridge and will be taken at approximately fifty (50) foot intervals (as needed), including all angle points, BCs and ECs.

Quincy will obtain an Ortho-rectified photo of the project site utilizing the latest drone technology.

Quincy will establish sufficient ground control at permanent locations to ensure consistent survey datums throughout the project.

The Topographic map will be compiled at 1"=20' with 1' contours utilizing AutoCAD Civil 3D 2015. The project will be tied to California State Plane Zone 2 NAD 83 for horizontal datum and NAVD 88 for Vertical.

A preliminary property boundary survey will be prepared and added to the base topographic map.

Hydraulic cross-sections will be conducted downstream and upstream of the proposed bridge at the necessary locations in coordination with WRECO.

Quincy will prepare language for requesting rights of entry for access to private properties for surveying or other design studies. The County will send the requests and follow up to obtain final property owner permissions.

Task 3.1 Deliverables
✓ Topographic Survey
✓ Supplemental Creek Cross-Sections
✓ Preliminary Right-of-way & Adjoining Property Information
✓ Ortho-Rectified Photo

Task 3.2 – Geotechnical Investigations (Crawford and Associates, Inc)

Crawford & Associates, Inc (CAInc) will provide geotechnical services. CAINc's professional services will include Preliminary, Draft, and Final Foundation Reports. The Foundation Report will also include geotechnical design recommendations and criteria for the approach roadway sections.

Preliminary Foundation Report

CAInc will prepare a Preliminary Foundation Report (PFR) consistent with current Caltrans guidelines for Bridge Foundation Reports. To prepare the PFR, CAINc will review record documents, published geologic data and aerial photographs. CAINc will perform subsurface exploration as part of the Preliminary Foundation Report to provide more detailed information during the preliminary design phase of the project.

CAInc will obtain necessary permits for drilling, visit the site to mark for underground utility locations and complete drilling and sampling in order to assess the subsurface materials.

The PFR is expected to include: Project Location and Vicinity Map; Summary of Site Geology and Subsurface Conditions (based on review of available record documents, published geologic data, site review and boring data); Seismic Data and Evaluation using current Caltrans seismic design criteria (including preliminary ARS curve using Caltrans ARS Online tool); Liquefaction Considerations; Roadway/Subgrade Considerations; Preliminary Foundation Alternatives (e.g., spread footings, cast-in-drilled-hole piling, etc.); Preliminary Foundation Recommendations with conditions and constraints on likely foundation types; Preliminary Construction Considerations; Location of Field Tests; and boring logs (8.5"x11" format).

Permit Acquisition and Underground Service Alert (USA) Notification

Test borings are expected to be drilled along the existing roadway(s) and/or within dry portions of the creek banks during dry field conditions. The field exploration locations are expected to be within public right-of-way and/or private property.

CAInc will obtain a County encroachment permit and also a boring permit from the County Health Department. It is assumed that the County will provide rights-of-entry (if needed) and the County will waive the encroachment permit fees and bond requirements. No other permits are expected to be required for this project.

Prior to commencement of field exploration, CAINc personnel will mark the boring locations and notify Underground Service Alert (USA) for location of underground utilities. Field exploration will be coordinated with county personnel in accordance with permit requirements as necessary.

Subsurface Exploration

Since there are two alternatives being considered which would alter the recommended geotechnical boring locations, the field work will be performed after a preferred alignment and bridge alternative is determined. This will limit the cost of field work to only that necessary for final design. After the preferred bridge alternative is determined, CAINc will drill, sample and log two bridge borings to 40 to 60-ft depth (shallower if rock/conditions suitable for spread footing foundations is encountered). Soil samples will be recovered at 3 to 5-ft intervals. Where rock is encountered, diamond coring equipment will be used to recover rock cores as necessary. Bulk soil samples will also be recovered for laboratory testing and reference. Provision is made for drill cutting disposal. The borings will be backfilled in accordance with County permit requirements.

For this project, shoulder closure with signs and traffic cones (without flaggers) is expected to be appropriate for the boring operations. Boring at the current abutment locations may require temporary bridge closure (6-8 hours/day). We anticipate that the County will provide notification to nearby residents.

Laboratory Testing

Laboratory testing to supplement field evaluation of earth material parameters is expected to include:

In house testing (CAI):

- moisture-density (MD)
- gradation (sieve analysis and #200 wash)
- unconfined compressive strength (UC)
- Plasticity Index (PI)
- point load index on suitable rock cores (PL)

Sunland testing:

- soil corrosivity screening (pH / minimum Resistivity / sulfate / chloride content)

Since Bartlett Springs Road is not paved, an R-value test will not be performed.

Engineering Evaluation and Analysis

Engineering evaluation and analysis to develop geotechnical recommendations for this project is expected to include: bearing capacity; lateral capacity; site seismicity including, deterministic / probabilistic procedures consistent with current Caltrans Seismic Design Criteria and Caltrans ARS Online tool to determine the site acceleration response spectrum (ARS); lateral earth pressure and coefficient of friction to resist sliding; soil corrosivity; and, new flexible pavement design for roadway approaches as needed.

Draft and Final Foundation Reports

CAInc will prepare one Draft Foundation Report for bridge design consistent with current Caltrans guidelines from Bridge Foundation Reports. The report will provide a site/project description, summarize site geology, subsurface exploration and field and laboratory soil/rock tests, discuss scour considerations (based on Hydraulics Report prepared by others), and include a “Log of Test Borings” (LOTB) drawing. Earth materials and foundation conditions will be discussed including seismic criteria and the design ARS curve. The report will discuss structure foundation conditions/constraints, recommended type, level and loading of bridge foundation elements, and include construction considerations. Design pavement structural section(s) and earthwork recommendations for associated roadway improvements will also be provided as needed. CAINC will complete a Final Foundation Report incorporating the review comments.

Task 3.2 Deliverables

- ✓ Preliminary Foundation Report
- ✓ Draft and Final Foundation Report
- ✓ Log of Test Borings

Task 3.3 – Hydrologic/Hydraulic Studies (WRECO)

WRECO will perform a Location Hydraulic Study and a Preliminary Bridge Design Hydraulic Study. WRECO will provide the Project Team’s structural engineers with necessary hydraulic data for their structure and foundation design. The Final Bridge Design Hydraulic Study is included in Task 5.1.

Project Management

WRECO will attend a project kickoff meeting, conduct a site visit, and one additional in-person PDT meeting in Lake County. Four conference calls with the PDT have been budgeted.

Data Review

WRECO will review available data, including previous studies, provided by the County and Project Team. Key information to review will be the available hydrologic and hydraulic data for Bartlett Creek, Middle Creek, and Wolf Creek, County and Caltrans Bridge Inspection Reports, and maintenance records for the bridge sites.

Hydrologic Analysis

WRECO’s preliminary research of the Federal Emergency Management Agency’s (FEMA) Flood Insurance Study (FIS) indicated that a detailed study is not available at the bridge site. WRECO will coordinate with the County to confirm the most recent Bartlett Creek hydrology. Assuming there is no available recent hydrologic data, WRECO will perform hydrologic analyses using the following two methods: 1) the USGS Regional Regression Method and 2) Unit Hydrograph Method. WRECO will identify the appropriate design floods (usually the 50-year flood), base flood (100-year flood), flood of record (if possible), and the overtopping flood.

Hydraulic Analysis

WRECO will perform a hydraulic analysis to determine the design flow characteristics for the existing condition including the limits and water surface profiles through the study area for the base flood and overtopping flood. The hydraulic model of choice will be the U.S. Army Corps of Engineers’ HEC-RAS Model. WRECO will coordinate with the Project Team to obtain the surveyed channel cross-sections for setting up the hydraulic model.

Location Hydraulic Study

Based on WRECO’s preliminary qualitative assessments, there is a potential for floodplain encroachment. Therefore, WRECO will prepare a Floodplain Evaluation Report, including the Location

Hydraulic Study form and Floodplain Evaluation Report Summary form to document the investigation and determine the specific impacts to the floodplain.

Scour Analysis

WRECO will perform a bridge scour analysis to determine the scour potential per the methodology specified in the Federal Highway Administration's (FHWA) HEC-18, HEC-20, and HEC-23 manuals. WRECO will make recommendations on the need for scour countermeasures for the proposed bridge per the HEC-23 and *California Bank and Shore Protection Manual*.

Preliminary Bridge Design Hydraulic Study

WRECO will prepare a Preliminary Bridge Design Hydraulic Study Memorandum, which will summarize the results from the hydraulic and bridge scour analyses and recommendations for bridge scour countermeasures. The memorandum will also include the detailed hydraulic model output.

Task 3.3 Deliverables

- ✓ Draft and Final Floodplain Evaluation Report
- ✓ Preliminary Bridge Design Hydraulic Study Memo

Task 3.4 – Feasibility Study Report and Structure Type Selection

Quincy will prepare an initial Feasibility Study Report to compare the long-term value of a rehabilitation option with a replacement option. A life cycle cost analysis of each option will be performed and documented in a Feasibility Study Report that will be used to gain concurrence on the preferred strategy. The Feasibility Study Report will be presented to Caltrans for consideration. If Caltrans concludes that a replacement option is the more cost-effective option and agrees that the project can be re-programmed to a replacement, Quincy will assist the County in preparing the justification and revised funding application. It should be noted that there is the potential that the rehabilitation option might be more cost-effective yet offer lower overall project performance and have higher potential risks. This too could result in the replacement alternative being selected as the preferred alternative.

The Feasibility Study Report will include, existing bridge geometry, deficiencies and condition, existing hydraulic and geotechnical conditions, description of one rehabilitation option and one replacement option, risks and challenges of each option, and the cost to construct with future maintenance costs of each option.

Once concurrence is obtained, the preferred strategy will be further evaluated with structure type alternatives and documented in the Type Selection Report.

Quincy will evaluate up to (2) bridge alternatives and (1) roadway alignment alternative and prepare a Bridge Advance Planning Study drawing for each alternative. The appropriate bridge structure type/rehabilitation strategy will be dictated by public safety, environmental and hydraulic concerns, right-of-way, and economics. Different foundation types (i.e., spread footings or drilled piles, etc.) will also be evaluated. We will compare the advantages and disadvantages of the two alternatives.

An "Engineers Opinion of Probable Construction Cost" will be prepared for each bridge alternative and will include roadway approach costs and appropriate contingency factors for this level of design.

A Draft Type Selection Report will be prepared by Quincy, and will include:

- Bridge type, size, span arrangement, and construction methods
- Advanced Planning Study drawings that will include a bridge plan, elevation, and section view

- Preliminary approach road plans, and traffic handling strategy
- Preliminary Bridge Design Hydraulic Study and Preliminary Foundation Report
- An “Engineer’s Opinion of Probable Construction Cost”
- Our Team’s recommendation for the preferred alternative.

The preferred alternative will be discussed and confirmed with the County. Quincy will submit the Advance Planning Studies and Draft Type Selection Report along with the Design Criteria Memo (see Task 3.5), and Preliminary Foundation Report and Draft Bridge Design Hydraulic Study to the County to be forwarded to Caltrans for review. If necessary, Quincy will attend a technical design meeting with Caltrans to discuss comments on the report and obtain conditional approval on the recommended alternative. Once the conditional approval is obtained from Caltrans, the Draft Type Selection Report will become the basis for the Final Design Phase of the project. A Final Type Selection Report will then be submitted during Final Design (see Task 5 deliverables). Our estimated effort and budget includes one technical design meeting with Caltrans Structures representatives in Sacramento, including preparing an agenda and meeting minutes.

Task 3.5 – Preliminary Plans

Design Criteria

Prior to any design, Quincy will draft our recommended design criteria for the project site based on terrain, existing facility, and traffic volumes. Items such as design speed, minimum sight distance, and hydraulic freeboard will be summarized on the Quincy Design Criteria Memo form for County approval. This ensures that all design criteria are established and approved ahead of time to avoid costly changes and schedule delays.

Preliminary Roadway Plans (35% Plans)

Alternative roadway and detour alignments will be discussed with the County staff. Other issues affecting the final design such as right-of-way, environmental, economic and safety issues, construction detours, coordination with local fire districts regarding the detour alternatives, drainage, and anticipated design exceptions (if any) should also be addressed at this time.

Prior to performing the preliminary roadway approach design, Quincy will recommend a method for maintaining traffic during construction for approval by the County. Options include: road closure and detour on adjacent roads, an onsite low water crossing or temporary bridge detour adjacent to the existing bridge or constructing the new bridge on a new alignment allowing the existing bridge to remain in service.

Preliminary Typical Cross Sections, Plan and Profile (Geometric Approval) drawings will be prepared for one preferred alignment alternative. If appropriate, a preliminary temporary detour alignment will also be developed. An “Engineers Opinion of Probable Construction Cost” will be prepared and will include appropriate contingency factors for this level of design (incorporated into the Draft Type Selection Report - Task 3.4).

Task 3.4 & 3.5 Deliverables

- ✓ Design Criteria
- ✓ Preliminary Plan & Profile Sheets
- ✓ Preliminary Cost Estimates
- ✓ Bridge Advance Planning Studies

TASK 4 - ENVIRONMENTAL STUDIES

Gallaway Enterprises will perform field work and prepare reports for the various technical studies that are required. This scope of work represents the studies that are anticipated based on our understanding

of the proposed projects and related construction impacts, and our Team's collective past experience on similar projects. The required NEPA technical studies will be confirmed after the PES form is approved by Caltrans. If additional studies are needed but not included, a contract amendment may be requested. The project descriptions prepared under Task 4.2 will be the basis for the technical studies. If the project description changes after the technical studies are finalized, an amendment may be requested. We understand that the County will be preparing and processing CEQA documents based on the NEPA technical studies.

Task 4.1 – Project Management and Meetings

Gallaway Enterprises will attend a kick off meeting, as a sub-consultant to Quincy Engineering with County and/or Caltrans, either at the County or Caltrans District offices or at the project site to discuss communication and information exchange protocols, review project work schedules, and confirm current project descriptions applicability for use in all of the technical studies, and permit applications.

Gallaway Enterprises will utilize time from this task to manage sub-consultants and communicate with Quincy via telephone conferences and/or email regarding scheduling, project progress, milestones, strategy, and schedules. Gallaway will provide written environmental technical studies action item meeting notes and follow up responses to action items as appropriate. Gallaway has budgeted for one kickoff meeting and six PDT meetings with Quincy, Caltrans and/or Caltrans staff.

Task 4.2 – Preliminary Environment Study, Project Description, and Area of Potential Effects (APE)

Following the site visit with the County, Quincy, and Caltrans, Quincy will prepare a project description for County approval. Gallaway Enterprises will use the approved project description to prepare a Preliminary Environment Study (PES) for the Bartlett and Wolf Creek bridges. Utilizing the project description, project limits, staging areas, etc., Quincy will prepare an administrative draft APE map, one for each of the two (2) bridge sites. Gallaway Enterprises will review each map in consultation with their in-house archaeologist and, if necessary, prepare one set of comments for each bridge site (two (2) rounds of review per bridge are included). Quincy will incorporate all appropriate comments into a revised Draft APE, if necessary, and, upon Lake County's direction, submit to Caltrans for Final APE map approval with the PES.

Task 4.2 Deliverables

- ✓ Project Description
- ✓ Admin Draft and Final PES
- ✓ Admin Draft, Draft and Final APE map

Task 4.3 – Natural Environmental Study

Gallaway Enterprises will prepare a draft Natural Environmental Study (NES) document following their field surveys of the Biological Study Area (BSA). The NES document will be prepared taking into consideration the information obtained from the respective delineations of waters of the US, field surveys, project specific impacts, and mitigation.

Based on our recent site visit and preliminary review of the California Natural Diversity Database (CNDDB), it appears that there are no federally listed species within close proximity to this bridge site; however, there is suitable habitat and documented occurrences of California Department of Fish and Game (CDFW) Species of Special Concern (SSC) and species protected under the California Endangered Species Act (CESA). Species with the potential to occur include foothill yellow-legged frog, western pond turtle, and migratory birds and raptors. There is no potential for structure roosting bats, but bats known to roost in trees such as the pallid bat have the potential to occur in trees adjacent to the bridge. In addition, Gallaway Enterprises' staff biologist identified evidence of birds nesting on the Bartlett Creek bridge structure.

Construction activities have the potential to impact habitat and/or species; therefore, mitigation that would require avoidance and minimization measures can be expected. It is Gallaway Enterprises' experience that these issues can be identified during the Caltrans NES documentation process and resolved during the subsequent permitting process.

Gallaway Enterprises will conduct botanical and biological surveys, including migratory bird surveys, per CDFW, California Natural Plant Society (CNPS), and all other appropriate protocols. Gallaway Enterprises will document all vegetation communities, plant species observed on-site and will report any sensitive species per CNPS and CDFW guidelines to the CNDDDB. The NES report will follow Caltrans' most recent guidance and document formats, currently the October 13, 2014 version. Gallaway Enterprises will coordinate with Quincy, County, and Caltrans to ensure consistency in the project description between all associated documents. Documents will be submitted to Quincy unless otherwise directed.

Task 4.3 Deliverables

✓ Draft and Final NES Reports

Task 4.4 – Water Quality Technical Memorandum (WQTM)

Gallaway Enterprises will prepare a WQTM for the Bartlett Creek bridge. As there is no Caltrans template for Water Quality Technical Memorandums, Gallaway Enterprises will use the Revised Scoping Questionnaire for Water Quality Issues, February 2010, in addition to paring down the pertinent sections of the Caltrans Water Quality Assessment Report Content and Recommended Format, October 2017 to develop the WQTM. The WQTM will address water quality issues at the site to address NEPA/CEQA and, as appropriate, and the National Pollution Discharge Elimination System (NPDES) permitting. Considering the timing of the project, extent of project, and the affected environment, Gallaway assumes that water quality impacts will be minimal and temporary. The technical memorandum will be an appendix to the NES. The technical memo at a minimum will include a discussion of the affected environment, regulatory setting, and avoidance and minimization measures. The WQTM does not make conclusions regarding significance of the impacts; the determination of significance will be addressed in the NEPA/CEQA document based on information provided in the WQTM.

Task 4.4 Deliverables

✓ Draft and Final WQTM
(Bartlett Creek)

Task 4.5 – Delineation of Waters of the United States

Delineations of Waters of the U.S. are required if jurisdictional waters occur within the projects' boundaries. All waters of the United States that meet the US Army Corps of Engineers (Corps) criteria will be delineated within the BSA. Gallaway Enterprises will obtain aerial photography of the site, using readily available resources. Topography for the project area will be supplied by Quincy, the County or, if not available, USGS topo will be used. All wetland resources will be mapped according to the Corps' Minimum Standards for Acceptance of Aquatic Resource Delineation Reports (January 2016) and Revised Mapping Standards (February 2016). Formal delineation reports, prepared per the 1987 Wetland Delineation Manual and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region version 2 (2008), will be prepared by Gallaway and submitted to Quincy.

Task 4.5 Deliverables

✓ Draft and Final Wetland
Delineation Report

Task 4.6 – Section 106 Studies (Archeological Survey Report (ASR), Historic Properties Survey Report (HPSR), and Historic Resources Evaluation Report (HRER))

Gallaway Enterprises will use an in-house archaeologist to prepare the ASR and HPSR documentation. Gallaway Enterprises archaeologist will complete the following:

- Conduct Records Searches involving County Records maintained by the Northwest Information Center (NWIC) at CSU, Sonoma.
- Consult with the Native American Heritage Commission regarding Sacred Land listings and with local Native American representatives for information they may provide concerning prehistoric sites and possible traditional use areas within or near the APEs.
- Conduct pedestrian archaeological survey (for prehistoric and historic archaeological sites) within the APEs.
- Prepare an ASR and HPSR documentation, including relevant Primary Records (State DP 523 forms) for prehistoric and historic-era archaeological sites identified during the pedestrian field survey.
- Deliver Final inventory reports to NWIC

The Bartlett Creek Bridge is identified in the Caltrans inspection reports as "Category 5" - not eligible for listing as historic resources, therefore we have not included a Historic Resource Evaluation Report (HRER) for the bridge. Based on our preliminary review of the site, no historic resources are anticipated to lie within the potential APE limits, therefore a historic resources evaluation has not been included.

Task 4.6 Deliverables

- ✓ Draft and final ASR
- ✓ Draft and final HPSR

Task 4.7 – Construction Noise Memo

There are no sensitive noise receptors in proximity to this project, therefore a Construction Noise Memo is not included.

Task 4.8 – Farmland Memo

Land adjacent to the Bartlett Creek bridge is not designated as "prime" or "unique" Farmland, therefore farmland memo is not included for this project.

Task 4.9 – 4(f) *de minimis* Finding

The Bartlett Springs Road project is located on public lands (likely Bureau of Land Management). Right of way will be acquired from the federal agency for the road. Temporary use of additional land will be needed to construct a temporary detour and for construction staging. Gallaway will prepare a Section 4(f) *de minimis* Finding Report for the impacts to public lands.

Task 4.9 Deliverables

- ✓ Draft and Final 4(f) *de minimis* Finding Report

Task 4.10 – NESHAP Compliance (Crawford)

For National Emissions Standards for Hazardous Air Pollutants (NESHAP), professional services will consist of asbestos containing materials (ACM) assessment of the existing bridge. For these services, a certified asbestos consultant will make a site visit and collect up to a total of seven samples for asbestos analysis. Samples may include structural bridge concrete, utility pipe insulators, conduits, etc. Asbestos will be tested using either EPA 600/R-93/116 and/or EPA 600/M4-82-020. An evaluation report including test results (as applicable) will be prepared.

Task 4.10 Deliverables

- ✓ ACM Assessment
- ✓ CAC Report
- ✓ LCAQMD Notification Form

Task 4.11 – Initial Site Assessment (ISA) (Crawford)

If required by the PES, an Initial Site Assessment will be prepared, the ISA report submittals would include a “draft” version for review, a “revised draft” version incorporating review comments, and a final report incorporating any final comments. The asbestos evaluation report will be appended to the ISA report.

Records Review

Selected federal, state, and regional environmental agency databases will be reviewed for information pertaining to the sites and properties within a minimum search distance of not less than one-quarter mile from the alignment. This data will be obtained from a vendor specializing in retrieval of environmental information. Chain of title research and/or review is not included.

Telephone interviews will be conducted with representatives of the County Environmental Health Department, the California State Regional Water Quality Control Board or the California Department of Toxic Substances Control for any property identified during database review for which hydrogeologic conditions and other reasonable factors indicate a potential for environmental impact on a site.

Physical Setting and Site History

Review of readily available documents will be performed to identify physical setting of the site and obvious past uses of site and adjoining properties. Elements of the physical setting identified typically include: topographic conditions; geological conditions of area, including the potential for presence of naturally occurring asbestos at the site; and, hydrogeological conditions including depth to groundwater, depth to other aquifers and regional and local gradient.

Documents reviewed pertaining to site history will include: recent and historical topographic maps; sanborn maps, if they exist for the project area; recent and historical aerial photographs including any provided by the county/client; published geologic maps and reports, and, if provided by the county/client, any geotechnical, hydrogeologic or environmental reports pertaining to the site or vicinity; limited historical land use documents, if provided by the County, to include the Historical Property Survey Report and other CEQA/NEPA documents; other existing studies completed in the project vicinity as provided by the County; and, environmental reports for contaminated sites identified in the environmental database review or the site reconnaissance.

In addition to the above sources, historic topographic maps and aerial photographs in CALinc’s (formerly Taber’s) library and in the collection at Sacramento State University library, with coverage of the project site will be reviewed.

Site Reconnaissance

Reconnaissance of the site will be performed to identify visual evidence of: current uses and evidence of past uses of the site and adjacent properties; and, potential areas of concern such as above or below ground fuel storage tanks, vehicle maintenance areas, past mining operations, dump sites, discolored soils or stressed vegetation, discharges, odors, transformers, wells, standing water, hazardous substance containers or unidentified containers, etc.

Reconnaissance will be performed primarily by drive-by observation (windshield survey) along the project corridor, supplemented by local walking traverse at locations where drive-by observation indicates possible evidence of hazardous materials or petroleum products that could affect the project.

Interviews

Reasonable attempts will be made to conduct interviews with persons identified as knowledgeable about potentially contaminated locations on or adjacent to the site to obtain information indicating their potential impacts on the project. Interviews may be conducted in person, by telephone, or in writing. Individuals interviewed might include owners, occupants, local government officials, or others.

Meetings

Meeting attendance is not included in these services.

Lead Paint Sampling

CAInc will assess and photo-document the condition of paint on the bridge structure. Should the paint be documented to be flaking, peeling or otherwise in poor condition, CAINc will collect up to six (6) samples of potentially lead-based paint and soil below the bridge. Samples will be collected at several locations and analyzed for lead to determine if hazardous levels of lead may be present in the paint and soil. Samples will be analyzed by a California-certified hazardous materials testing laboratory for lead using EPA Method 6010. If paint cannot be physically sampled due to access constraints, then a portable X-ray Fluorescent (XRF) analyzer will be used to analyze the paint in those areas. Results of the lead-based paint sampling, along with recommendations for proper disposal, will be included in the ISA report.

Certified Asbestos Consultant

An evaluation report including test results will be appended to the Initial Site Assessment report. This work is included in Task 4.10.

Aerial Deposited Lead Sampling

Perform aerial deposited lead (ADL) sampling and testing to test for the presence of ADL. Four to six samples will be collected in the field at various depths including 0-4", 5"-8", and 10"- 16" below ground surface. Analytical laboratory testing including pH, total lead, and soluble lead will be performed on the sampled materials.

Naturally Occurring Asbestos

The potential presence of naturally occurring asbestos NOA is screened through review of geologic mapping, site review, and if need be, materials sampling and sample analysis. Generally, if the bridge is located in an area mapped in or near a region composed of ultramafic, ultrabasic, and/or serpentine rock or other conditions where NOA is known to be present, a sample of rock and soil which may potentially contain NOA is collected and analyzed. NOA is analyzed using the California Air Resources Board (ARB) Method 435. Testing for NOA has been included.

ISA Report

A report documenting CAINc's assessment will be prepared. The report will include but not necessarily be limited to the following: Site Description; Records Review; Site reconnaissance information; Interview Information; Photocopied pictures of significant items of environmental concern on the site (if any); Pertinent supporting documentation, such as boring logs and laboratory results available from reports reviewed (if any); and, Findings and Conclusions - including opinions on potential impacts of any recognized environmental conditions concerning the project site and, if considered warranted, recommendations for further study.

Task 4.11 Deliverables

✓ Draft and Final ISA report

Task 4.12 – Environmental Commitment Record (ECR) and Public Meetings

Gallaway Enterprises will develop an ECR that incorporates all applicable measures from permits, licenses, agreements, and certifications obtained for each bridge.

Attendance at public meetings is not included.

Task 4.12 Deliverables

✓ Draft and Final ECR

TASK 5 – FINAL DESIGN ENGINEERING

Final design will be authorized once NEPA clearance is obtained unless additional engineering is required to support the NEPA approval in which case some final design tasks could be authorized earlier.

Portions of the following tasks may be advanced to Task 3.5. Caltrans requires that enough engineering be completed to support the environmental document; however the preferred design alternative is not confirmed until after environmental approval. Depending on the project complexity a 65% design may be required to provide environmental support.

Task 5.1 – Design

Bridge Design

Bridge design will be performed in accordance with “AASHTO LRFD Bridge Design Specifications” with the latest Caltrans Amendments and other Caltrans design manuals. Design will be based on the “Load and Resistance Factor Design” method, with HL-93 (including alternative) and permit truck design live loads. Seismic design will be performed in accordance with the latest version of the Caltrans “Seismic Design Criteria ” (SDC), and the latest information available from Caltrans Earthquake Research. Computer analysis and design programs used are “state-of-the-art” for bridge design.

The scope and budget have been developed based on designing a replacement bridge or a rehabilitation (new superstructure on widened abutments) on the existing alignment with a single span precast prestressed concrete girder bridge with a cast-in-place or precast concrete deck, supported by reinforced concrete abutments founded on spread footings.

Approach Roadway Design

The final approach roadway design will be performed in accordance with County Standards, AASHTO “Greenbook” and current Caltrans Standard Specifications. Final grading and drainage details will be developed as well as new/existing roadway conformance details, as required.

Bartlett Creek Bridge: Consistent with the bridge design, the roadway design scope and level of effort are based on replacing the bridge on the existing horizontal alignment. The vertical alignment will be adjusted to meet the hydraulic requirements, but is not anticipated to have significant increases (retaining walls are not anticipated). The road is not paved, and paving for the roadway approaches is not anticipated.

A temporary low water crossing consisting of clean fill and culverts to accommodate summer flows will be designed and constructed to carry traffic during bridge construction. If a temporary low water crossing is not feasible, a temporary bridge may be planned for crossing the channel during construction. Quincy will prepare a horizontal and vertical alignment for the low water crossing or temporary bridge. If a temporary bridge is selected, it is assumed that the contractor will be required to provide a structure design (including foundations) for the bridge.

This project is outside the Lake County MS4 permit areas. Using the State Water Resources Control

Board's post construction water balance calculator and preliminary calculations, no post construction water quality treatment design is anticipated.

All required environmental mitigation plans, specifications, and estimates will be completed by the Team for inclusion with the roadway and bridge PS&E package. At this time, we do not anticipate significant mitigation design as part of this project.

Dry Weather Flow and Bypass

WRECO will determine the magnitude of the dry weather flow volume and work with the Project Team to develop the design concept for the dry weather flow bypass system during construction.

Final Bridge Design Hydraulic Study

WRECO will address the review comments from Caltrans and the County on the Preliminary Bridge Design Hydraulic Study Memorandum. WRECO will update the hydraulic model and scour analysis to reflect the preferred design bridge alternative. WRECO will prepare the Bridge Design Hydraulic Study Report to document the design basis, hydrologic and hydraulic analyses, scour analysis, and the recommendations on the bridge scour countermeasures.

Task 5.2 – Prepare Design Exception Fact Sheets

Design Exception Fact Sheets are not anticipated to be necessary, and are not included in this scope of work. If it is determined that exceptions are needed, a contract amendment will be requested.

Task 5.3 – Prepare Plans, Specifications, and Estimate

Plan sheets will be prepared in English using Quincy drafting standards. All plans will be signed by the civil engineer (registered in the state of California) in responsible charge of the design, in accordance with the Local Programs Manual. Typically, the plans, specifications, and estimate (PS&E) will contain the following plan sheets (the number of sheets will vary depending on the site and the final structure type):

- | | |
|---|------------------------------|
| • Title Sheet | • Quantities Sheet |
| • Typical Cross Section | • General Plan |
| • Layout/Profile Sheets | • Deck Contours |
| • Construction Signs & Traffic Handling/Detour Plan Sheet | • Foundation Plan |
| • Contour Grading | • Abutment Layout |
| • Erosion Control Plan | • Abutment Details |
| • Utility Plan | • Typical Section |
| • Construction Details | • Girder Layout |
| • Drainage Plans and Details | • Log of Test Borings Sheets |

Quincy has assumed a maximum of 25 plan sheets for this project

Submittal of 65% Plans (Unchecked Details)

Quincy proposes that a PDT meeting be held upon completion of the unchecked bridge details to discuss both the bridge and the roadway plans. This should save considerable time in the County's review of the Draft PS&E because most of the major issues will have been previously discussed and addressed.

Preliminary quantities will be prepared along with an estimate of probable construction costs for programming purposes. Quantities will be calculated in accordance with Caltrans' practice and segregated into pay items. The estimate will show quantities and costs as well as a project cost summary.

Independent Design Check

After the 65% plans have been revised to incorporate County comments, an independent check of the design will be performed. This involves a completely independent analysis of the project using the unchecked bridge detailed plans and 65% roadway plans by an engineer that has not been intimately involved in the design. This is an important part of the Team's QA/QC Plan and is identical to the Caltrans/Local Agency process. Based upon the independent check and agreement to revisions by the checker and designer, the plans will be revised. Independent Check comments are summarized and resolutions are documented.

Final Construction Quantities & Estimate

The 65% quantities will be updated to final construction quantities, and the Team's estimate of construction costs (Q and E) will be updated.

Technical Specifications

Project specifications will be developed based on Caltrans **2015 Standard Specifications and Standard Plans**. Quincy will produce the technical special provisions based on Caltrans "Standard Special Provisions" (SSP) templates. The County will provide its boilerplate specifications for Quincy to combine with the technical special provisions. A construction (working days) schedule will also be developed to determine the number of working days for the construction contract.

The project specifications will be initially submitted with the 90% draft PS&E for County review and comment. The County comments will be summarized by Quincy in a comment resolution table with every comment reviewed and addressed with a written response. Based upon agreement of the responses between the County and Quincy, the specifications will be revised.

Quality Control & Constructability Review

As an integral part of the Quincy QA/QC Program, a senior level engineer will review the entire draft PS&E (90% PS&E) package for uniformity, compatibility, and constructability as well as conformance with the federal HBP program requirements.

The review will include comparing bridge plans with the roadway plans for conflicts or inconsistencies, and to ensure that the final design is in accordance with all environmental documents, permit requirements, hydraulics reports, and foundation recommendations. The specifications and estimate will be reviewed for consistency with the plans, and to ensure that each construction item has been covered.

Submittal of 90% PS&E

The plans, specifications, and estimate, along with bridge design, check, and final quantity calculations,

will be submitted to the County at the 90% completion stage.

Submittal of Final (100%) PS&E

Upon receiving review comments from the County and other agencies, each comment will be reviewed, discussed, and addressed in writing. All apparent conflicts will be resolved in person or via telephone as necessary. Appropriate modifications will be made to the plans, specifications, and estimate.

Quincy will furnish the final PS&E package: full and half-sized plans in hard copy and PDF electronic files, MS Word format and PDF "camera ready" special provisions, and excel and PDF copies of the engineer's estimate. Quincy will furnish roadway design cross sections (at 25' intervals) as well as Notice to Bidders, Special Provisions and the Bid Book. It is assumed that the County will compile and duplicate the actual bid documents for distribution to bidders.

Quincy will prepare a Resident Engineer file including bridge "4-scale" drawings, quantity calculations, staking information, and other necessary information for coordination of right of way and utilities.

Task 5 Deliverables

- ✓ Draft and Final Bridge Design Hydraulic Study Report
- ✓ 65% Plans and Estimate
- ✓ 90%, and Final PS&E Packages
- ✓ Final Type Selection Report
- ✓ Stamped Bridge Calculations & Bridge/Roadway Quantities
- ✓ QC & Constructability Review
- ✓ Roadway Design Cross Sections
- ✓ Notice to Bidders and Bid Book
- ✓ RE Pending File

TASK 6 - PERMITS

Task 6.1 – Environmental Permits (Gallaway)

Gallaway will prepare permitting packages for the County's signature and submittal. Based on the issues associated with the proposed project, Gallaway anticipates the following permits will be required:

Section 404 Permit (U.S. Army Corps of Engineers – Sacramento District)

Projects of this nature are generally covered by Nationwide Permit (NWP) 14 (Linear Transportation Projects). NWP 14 applies to activities required for the construction, expansion, modification, or improvement of linear transportation project in Waters of the U.S. Currently, for linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater

than ½ acre of Waters of the U.S. After bridge project plans are further refined and final project scope identified, the NWP 3 (Maintenance) or NWP 33 (Temporary Construction, Access, and Dewatering) may be the more appropriate permitting approach for bridge preventative maintenance / rehabilitation projects. Gallaway Enterprises will prepare the appropriate Corps permit application based on final design and scope of work when it becomes available.

Gallaway will provide draft a permit application, ready for review and signatures (One hard copy and one pdf) after incorporating any comments from Quincy and the County, Gallaway will revise and submit a final application (One hard copy and one pdf copy) and submit directly to the Corps.

Section 401 Water Quality Certification (Central Valley Regional Water Quality Control Board)

Gallaway Enterprises will prepare the CWA § 401 application for the project and obtain the Water Quality Certification from the RWQCB, as needed. The application cannot be submitted until the lead agency has made a determination pursuant to CEQA and the Notice of Determination (NOD) has been filed with the State Clearinghouse. Gallaway will draft the CWA § 401 Water Quality Certification Application with fee calculator (One hard copy and one pdf copy) along with a final application (One hard copy and one pdf).

Gallaway assumes one (1) County review of permit application and County payment of application fees, and signature(s).

Section 1600 Streambed Alteration Agreement (California Department of Fish and Wildlife (CDFW))

Gallaway Enterprises will prepare the § 1602 application for Streambed Alteration Agreement from the CDFW. Construction drawings at greater than 60% complete for improvements that result in impacts to waters within CDFW jurisdiction will be required. Upon submission of the permit application, Gallaway Enterprises may conduct a site visit with CDFW to assure that all desired information is included in our submittal. The application cannot be submitted until the CEQA documentation and NOD has been filed with the California Office of Planning and Research State Clearinghouse.

Gallaway will provide a completed permit application ready for review and signature. Gallaway assumes the County will supply copies of the CEQA document and NOD and that there will be one (1) County review of the permit application, and the County will provide payment of the application fee.

CDFW Incidental Take Permit (ITP)

Based on the presence of suitable habitat and CNDDB occurrences for FYLF an Incidental Take Permit (ITP) from the CDFW may be required. Gallaway Enterprises will prepare an ITP application for impacts to FYLF. The ITP application will include the preparation of a Habitat Mitigation and Monitoring Plan or Habitat Enhancement Plan, and Frog Relocation Plan as appendices. This scope of work does not include construction or mitigation monitoring for FYLF. If the California Fish and Game Commission determines that listing the FYLF is not warranted before the permitting process is started for each project, then an ITP may not be required.

Task 6 Deliverables

- ✓ One (1) copy of each draft permit application identified
- ✓ One (1) copy of the final version of each permit application identified

Task 6.2 – Regional Water Quality Control Board - Construction General Permit (Quincy/WRECO)

The Project is required to comply with the California Statewide Construction General Permit, Order No. 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-0006-DWQ). The Regional Water Quality Control Board has relatively new Post Construction requirements as part of the Construction General Permit. It is assumed that the 401 Certification to be obtained from the Central Valley Regional Water Quality Control Board will not include additional requirements.

It is assumed that the size of this project will not trigger the need for Post-Construction Water Quality treatment BMP's.

Quincy will submit the Construction General Permit information to the SWRCB SMARTS for the Notice of Intent. The contractor prepared SWPPP will need to be submitted before the Construction General Permit is considered in force.

TASK 7 – RIGHT-OF-WAY SERVICES

Task 7.1 – Surveying

Quincy will perform the necessary office and field work associated with the Right-of-way and adjoining property lines resolution, property acquisition plats and legals and staking, as well as mapping/monumentation including the following tasks:

- Prepare and deliver a Right-of-way exhibit depicting the exiting Right-of-way, adjacent property lines and current record information such as easements, owner names, document numbers, etc.

- Prepare necessary plats and legal descriptions for any fee title acquisitions and temporary construction easements of adjoining parcels within the project limits
- Set permanent survey monuments along the right-of-way (and the centerline alignment, if necessary), resulting from any fee title acquisitions after construction
- Prepare and record a Record of Survey with the County of Lake depicting new right-of-way lines and established monumentation

One (1) parcel (APN: 016-011-060-000) is included for this scope of work for which plats and legal descriptions will be prepared for one (1) right-of-way take and one (1) temporary construction easement.

Assumptions:

- Quincy will obtain corresponding title reports in order to determine encumbrances on subject parcels.
- The proposed right-of-way take lines will not need to be staked for appraisal purposes.
- There are no existing monuments (per all available record data) located within the vicinity and surrounding areas that may possibly be affected by the proposed bridge construction and approaches; no corner records will need to be prepared.
- One mobilization has been budgeted to set monuments on the new right-of-way take lines which will be completed post construction.
- Lake County will pay any associated submittal and recording fees associated with the record of survey.
- If any discrepancies are found in the subject parcels, per the Professional Land Surveyors Act, a Record of Survey must be prepared. A Record of Survey for this purpose is excluded from this task.

**Task 7.2 – Right-of-Way Appraisals
(Bender Rosenthal, Inc.)**

For the parcels impacted by the project, BRI will develop a complete appraisal that will state the estimated fair market value of the Temporary Construction Easement (TCE) and/or Permanent Easement interest for that property. The Appraisal report will be a summary appraisal report that will be prepared in conformance with and subject to the requirements of the Code of Professional Ethics and the Standards of Professional Practice of the Appraisal Institute, which fully incorporate the Uniform Standards of Professional Appraisal Practice (USPAP) of the Appraisal Foundation. Jurisdictional exceptions may apply in some cases. Plats and legal descriptions for each of the properties to be appraised will be provided to BRI by Quincy.

Some items that may affect the appraisal process may include:

- Complexity of the valuation
- Impact of interests to be acquired (e.g. Temporary Construction Easement - Permanent Easement)
- Damage Analysis (Severance Damage, Cost to Cure, etc.)

The primary steps in completion of fair market value appraisals of the property rights to be acquired include but are not limited to the following:

- Onsite physical inspection of the subject properties with the Owner (where possible)
- Visual inspection of the comparable market data
- Study of community and neighborhood in which the subject is located
- Collection of data from appropriate governmental agencies
- Market investigation of vacant and improved comparable data
- Verification of market data with sources knowledgeable with the pertinent details of the transaction
- Analysis of all appropriate data in before and after conditions to arrive at opinion of value
- Preparation of report

If the anticipated parcel take will have a value of less than \$10,000 and if the property owner is a willing participant, the County may direct the appraiser to provide a Waiver Valuation instead which does not require the same level as assessment and can be completed at a cost less than an appraisal. Waiver valuations cannot be used for condemnation purposes so should not be used on parcels that may require eminent domain proceedings.

The contract budget for this project includes one appraisal and one acquisition (one set of negotiations). BRI anticipates an appraisal will be required to meet the Federal requirements for the transfer. If during preliminary work prior to the initiation of the appraisal work it is determined that the Federal Agency will accept a waiver valuation as the basis of the agreement, BRI will revise the scope to provide a waiver valuation in lieu of the appraisal report. BRI will be involved in preparing the agreement and working with the Federal Land Agency for the land transfer.

These assumptions will be confirmed or changed during preliminary engineering.

Task 7.3 – Right-of-Way Acquisition (Bender Rosenthal, Inc.)

BRI proposes to develop all necessary contracts, conveyance documents and escrow instructions necessary to make offers in accordance with state and federal laws and following our client's processes. BRI will prepare the offer letter based on the "Just Compensation" value determined by the County. BRI will meet with the owners and convey documents until acceptance or impasse is reached regarding necessary acquisitions and easements. BRI will contact each property owner at least 6 times within the first 60 days of approval to proceed. BRI will attempt to meet with each owner at least 1 time in person and may make additional contacts by phone, e-mail or through the postal service.

Steps within the acquisition process are outlined below and will be tailored to the client's need for services:

1. Review the project concept and design with staff and other consultants.
2. Review appraisals, title reports, maps and descriptions of the required parcels.
3. Conduct field review of the project area.
4. Prepare right-of-way purchase agreements and other acquisition documents.
5. Meet with the property owners to discuss the project in general; review of maps and legal descriptions; confirm information about occupants/owners and make the official First Written Offer to owner.
6. The acquisition task assumes a settlement by the sixth contact either in person, telephone, or e-mail. A recommendation to client will be made after *impasse* has been reached. To reach *impasse*:

- a. Go through the *acquisition steps* outlined; plus
 - b. Make up to six attempts to contact the owner (personal call, letter or phone call) in any combination. Contact attempts will be made at least once each week; plus
 - c. Respond to property owner inquiries verbally and in writing within two business days.
7. Deliver signed purchase agreement contract and signed and acknowledged documents for a closed transaction or deliver a memorandum explaining impasse.
 8. If the property owner provides a counter-offer, BRI staff will prepare a recommendation to the client to accept, reject, or modify the counter-offer.
 9. If the client accepts the counter-offer, BRI will prepare up to one (1) Administrative Settlement that complies with State and Federal guidelines.
 10. BRI will work with all parties to encourage acquisition within 60 days of the approval of the just compensation.
 11. BRI's acquisition agents will maintain a parcel diary to document all interactions with property owners and their tenants.
 12. BRI will prepare a final report, including transfer of all pertinent correspondence and files to client.

Condemnation Support (As required)

BRI's team of appraisers and acquisition agents strive to provide tailored services with the goal to complete the transaction in the best interest of all parties involved while adhering to all applicable regulations and guidelines. However, even with the best intentions and attention to details, some acquisitions will need to be completed through eminent domain. BRI staff will support the Lake County staff by preparing staff reports and presentations to the County Board for the Resolution of Necessity (RON). In addition, we will work with the Lake County legal team to develop the minimum 15-day notice of hearing for the RON and provide assistance in preparing any legal declarations in support of the court hearings. Our appraisers are qualified and available to provide testimony during condemnation trials as an additional service. BRI will provide support services to the condemnation attorney such as appearing as an expert witness, delivery of parcel file including the title report, legal description, appraisal, negotiation records and all correspondence; and assisting the attorney with locating the property owner and other interest holders. Budget is not included for condemnation support. If needed, BRI will provide these services and bill the services based on an hourly rate.

Task 7.4 – Right-of-Way Certification (Bender Rosenthal, Inc.)

Upon completion of the ROW acquisition, BRI will prepare the ROW Certification per Chapter 14 of the Caltrans ROW Manual. BRI will provide coordination services with Caltrans District 1 and the property owner, as required.

TASK 8 – UTILITY RELOCATION

The Team will provide communication and coordination with the utility companies during the preliminary and final design processes. Quincy will follow the Caltrans utility relocation process and develop "A" and "B" letters, and Notice to Owner (NTO) letters ("C" letters). Communications with utility owners will be documented in a correspondence log. Quincy will prepare a plan of existing utilities for the project based on the information obtained

Task 7 Deliverables

For each bridge site:

- ✓ Plat and Legal Descriptions
- ✓ Record of Survey Maps
- ✓ Appraisals as noted
- ✓ Waiver Valuations
- ✓ Acquisitions
- ✓ Right of Way Certification

from the various affected utilities and determine which are in conflict. This conflict map will be provided to owners with the “B” letter.

Depending on the final bridge type selected, Quincy may be able to provide adequate openings for utilities in the bridge. It will be the responsibility of each utility owner to provide a design of their relocations. If the relocations are to be included in the bridge PS&E, the utility owners will provide all plan sheets, bid items, complete specifications and cost estimates to Quincy for merging into the construction documents.

There appears to be an underground fiber optic line on the north side of Bartlett Creek. We anticipate that it will not be in conflict with construction, and can be protected in place. No other utilities are anticipated at this site.

Task 8.2 – Report of Investigation and Utility Agreement (As Required)

If required, Quincy will prepare a Report of Investigation (ROI) and a Utility Agreement (UA). These documents are required by Caltrans for HBP funding if the utility has prior rights and the cost of the utility relocation will be borne by the project. This task is not anticipated, therefore no budget has been included. A scope amendment may be requested if this task is needed.

Task 8.3 – Field Staking for Utilities (As Required)

If required, Quincy will perform staking as requested for utility relocation purposes. This task would include the field work to stake right of way, proposed edge of pavement, sidewalk, drainage or other proposed construction within the areas of concern for utility relocations. This task is not anticipated, therefore no budget has been included. A scope amendment may be requested if this task is needed.

Task 8 Deliverables

- ✓ "A", "B", and "C" notice to owner letters
- ✓ Utility coordination

Work on Tasks 9-11 will not proceed without written authorization from the County to proceed.

TASK 9 – BIDDING ASSISTANCE

The individuals that were directly involved in the design will be available during the bid period to interpret the plans and specifications, prepare addenda if needed, and provide general consultation to the County to obtain bids. The Quincy Team will be available to answer contractor inquiries during the bidding phase. When the construction bids are opened, Quincy will be available to provide analysis and recommendations concerning award of the contract.

Task 9 Deliverables

- ✓ Prepare Addenda
- ✓ Answer Bidder Inquiries
- ✓ Bid Analysis

TASK 10 – CONSTRUCTION SUPPORT

After award of the construction contract, the Team will be available to continue providing services such as reviewing contractor submittals, reviewing shop plans, reviewing falsework plans and calculations, preparing and/or reviewing change orders, and making other field observations, at the Resident Engineer's or County's request. All activities include appropriate recommendations and documentation of the Team's activities.

Quincy will work closely with the Construction Management Team to provide clarifications as needed in a timely manner. Quincy will work closely with the Construction Management firm to identify the timing of upcoming shop plan reviews and other contractor submittals to have resources ready.

TASK 11 – PREPARE RECORD (AS-BUILT) DRAWINGS

When construction is completed, Quincy will prepare Record Drawings (As-builts) for the County's files. These as-builts will be based on information clearly marked on a set of contract plans prepared by the Resident Engineer.

Task 10 Deliverables

- ✓ Construction Support
- ✓ Answer RFIs
- ✓ Review Shop Plans
- ✓ One site visit

Task 11 Deliverables

- ✓ As-Builts

Schedule

Quincy has prepared a general milestone schedule for this project.

Phase	Approximate Duration	Estimated Completion
Consultant Selection		April 2018
Award Consultant Contract		October 2018
Project Development Kick-Off Meeting	1 Day	December 2018
Topographic Survey/Stream Cross Sections	4 weeks	December 2018
Feasibility Study Report	3 months	April 2019
Preliminary Geotechnical Recommendations/Hydraulic Studies	4 months	June 2019
Develop Preliminary Roadway Plans and Bridge APS	4 months	July 2019
Engineering Feasibility Report & Select Preferred Alternative	2 months	August 2019
Geotechnical Investigations/Foundation Report	4 months	December 2019
Obtain NEPA/CEQA Clearance	9 months	November 2019
Final Design	9 months	August 2020
Permits	5 months	July 2020
Right-of-Way and Utility Coordination	6 months	July 2020
Complete PS&E	8 months	August 2020
Bid & Award Construction Contract	2 months	January 2021
Complete Construction	8 months	October 2021

The critical path will be: approval of the preliminary engineering and determining if it is appropriate to change the project from a rehabilitation to a replacement; environmental clearance; and right-of-way coordination. Quincy will maintain constant communication with the Team members to monitor activities internal to the Team to verify adequate progress and timely delivery. The Quincy Team has adequate staff to ensure timely delivery and our history of delivering on time speaks firmly to this point. Should the schedule need to be accelerated, we have redundancy within our Team to ensure accelerated delivery. Should the schedule slip for reasons beyond our control, our Team members are committed to the successful completion of the project regardless of duration.



County of Lake
Department of Public Works
Scott De Leon, Public Works Director

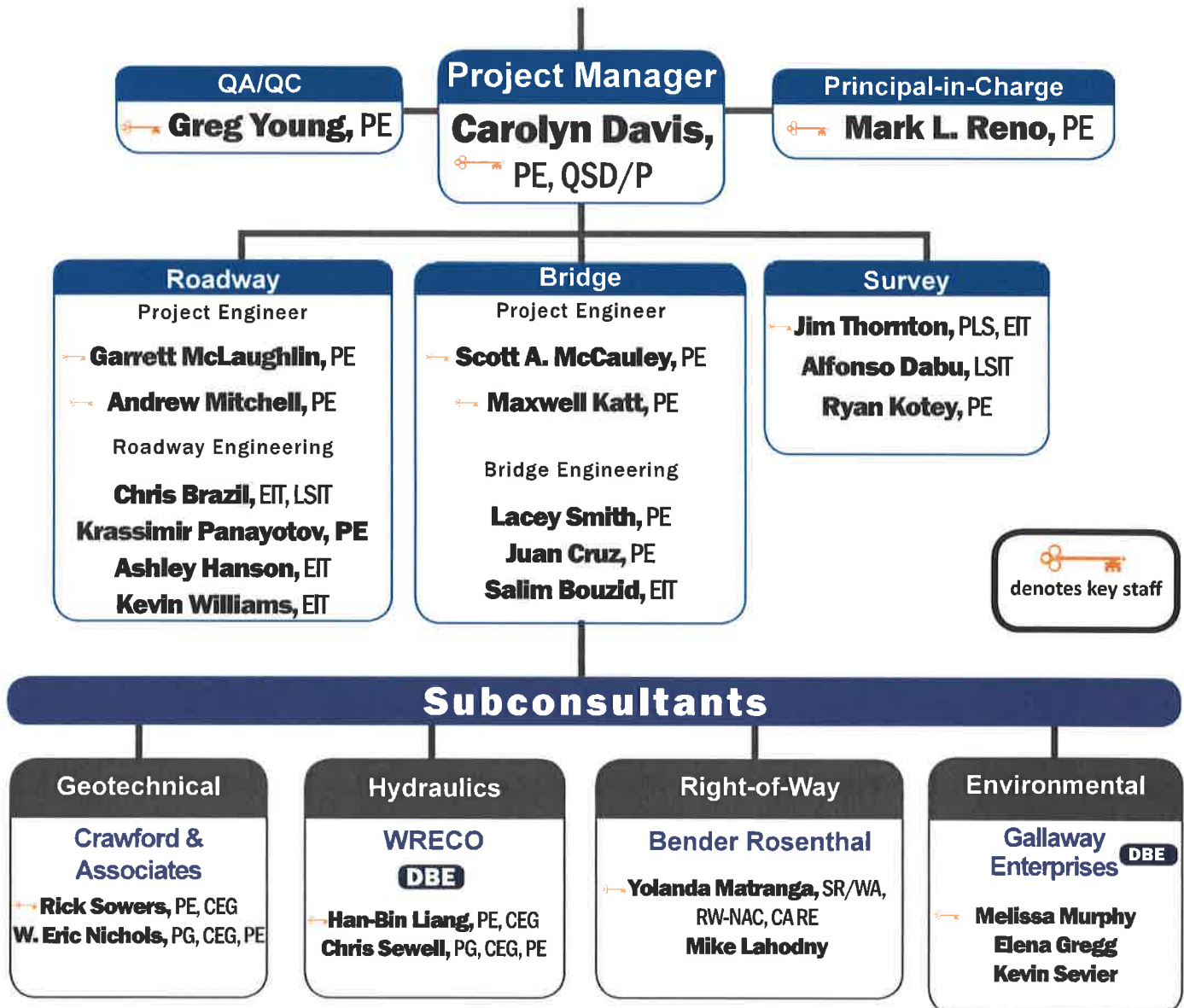


EXHIBIT “B”

TO

AGREEMENT FOR ENGINEERING SERVICES

FOR

REHABILITATION OF BARTLETT CREEK AT BARTLETT SPRINGS ROAD BRIDGE (14C-0106)

IN LAKE COUNTY, CALIFORNIA

EXHIBIT 10-O2 CONSULTANT CONTRACT DBE COMMITMENT

1. Local Agency: County of Lake 2. Contract DBE Goal: 8%
 3. Project Description: Rehabilitation of Bartlett Creek Road Bridge
 4. Project Location: Bartlett Creek at Bartlett Springs Road 14C0106 (Latitude/Longitude 39.1651, -122.6455)
 5. Consultant's Name: Quincy Engineering, Inc. 6. Prime Certified DBE: ☐ 7. Total Contract Award Amount: \$464,600.00
 8. Total Dollar Amount for ALL Subconsultants: \$164,842.86 9. Total Number of ALL Subconsultants: 4

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
Hydraulics	30066	WRECO 1243 Alpine Road, Suite 108, Walnut Creek, CA 94596 925-941-0017	\$27,004
Environmental	31237	Gallaway Ent. 117 Meyers St., Suite 120, Chico, CA 95928 530-332-9909	\$44,631
Local Agency to Complete this Section			
20. Local Agency Contract Number: _____	14. TOTAL CLAIMED DBE PARTICIPATION		\$71,635
21. Federal-Aid Project Number: <u>BHLO-5914(091)</u>			15 %
22. Contract Execution Date: _____	<p>Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.</p> <p>IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.</p>		
23. Local Agency Representative's Signature _____	24. Date _____	15. Preparer's Signature <u>Curran</u>	16. Date <u>10/17/18</u>
25. Local Agency Representative's Name _____	26. Phone _____	Carolyn Davis	916-368-9181
27. Local Agency Representative's Title _____		17. Preparer's Name _____	18. Phone _____
		Project Manager	
		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.

Cost Proposal

Project Number: JP2040		Project Name: Bartlett Creek Bridge																				Quincy Total Hours	Quincy Total Labor Dollars	Quincy Labor	Quincy Profit	Quincy NLF Budget	Callaway Enterprises	WRECO	Crawford & Associates, Inc.	Bender Rosenthal, Inc.	Subconsultant Subtotal		
		Principal Eng.	Senior PM	Senior Eng.	Assoc Eng.	Assoc Eng.	Assoc Eng.	Assist Eng. I	Assoc Eng.	Intern	Assist Eng. I	Survey Mgr	Survey Tech	Assoc Eng.	Survey Chief of Party **	Survey Chairman / Rodman **	Senior Eng.	Admin Asst	PM Asst	Senior Eng.	CAD Manager											CAD Tech	
TASKS		MR	CD	SMc	LSm	JCr	AM	CB	KP	KW	Sbo	JT	AD	RK	Scop	SCR	GY	PJ	ER	RMdO	BM	PK		Direct Labor	Labor+OH Multiplier	Fee Multiplier	Actual Labor Multiplier						
No.	Initial Hourly Rate	\$90.30	\$79.20	\$66.90	\$57.90	\$48.50	\$52.10	\$32.40	\$57.90	\$17.90	\$32.00	\$63.00	\$43.10	\$46.50	\$46.71	\$43.63	\$71.10	\$36.50	\$36.30	\$61.10	\$49.50	\$33.30			2.698	10%	2.968						
1.1	Kick-off Meeting		6	8		6																	20	\$1,323	\$3,569	\$356.93	\$3,926					\$0	
1.2	Site Visit		2	2		2																	6	\$396	\$1,069	\$106.94	\$1,176					\$0	
1.3	Scope Verification																						0	\$0	\$0	\$0.00	\$0					\$0	
1.4	Establish Project Schedule (assume 3 updates)		8																				8	\$634	\$1,709	\$170.94	\$1,880					\$0	
2.1	Project Management		68															10					78	\$5,771	\$15,569	\$1,556.85	\$17,125					\$0	
2.2	Progress Meetings (Agenda, attend, notes)		32	40		16																	88	\$5,986	\$16,151	\$1,615.07	\$17,766					\$0	
2.3	Assist the County with State Admin Requirements		12	12															4				28	\$1,898	\$5,122	\$512.17	\$5,634					\$0	
3.1	Surveys and Mapping			2								8	24	4	32	32						8	110	\$5,023	\$13,553	\$1,355.28	\$14,908					\$0	
3.2	Geotechnical Investigations			12		4																	16	\$997	\$2,689	\$268.93	\$2,958				\$43,487.90	\$43,488	
3.3	Hydrologic/Hydraulic Studies			8		8	6																22	\$1,236	\$3,334	\$333.41	\$3,667		\$26,424.79			\$26,425	
3.4	Feasibility Study and Structure Type Selection		4	40		70	8															24	146	\$7,604	\$20,514	\$2,051.43	\$22,566					\$0	
3.5	Preliminary Plans (35%)		2				12	40													12		66	\$2,674	\$7,213	\$721.31	\$7,934					\$0	
4	Environmental Studies																						0	\$0	\$0	\$0.00	\$0	\$44,361.02				\$44,361	
	PES, APE Map, Project Description		2	4			2	12															20	\$919	\$2,479	\$247.94	\$2,727					\$0	
	Technical Studies, ECR, Respond to Public Comment		16	16			16																48	\$3,171	\$8,556	\$855.56	\$9,411				\$7,423.04	\$7,423	
5.1	Road and Bridge Design		8	20		120	40	40															228	\$11,172	\$30,140	\$3,013.99	\$33,154					\$0	
5.2	Prepare Design Exception Fact Sheets																						0	\$0	\$0	\$0.00	\$0					\$0	
5.3	Prepare PS&E																						0	\$0	\$0	\$0.00	\$0					\$0	
	65% Plans		2	8		12	20	50													30	40	162	\$6,755	\$18,223	\$1,822.32	\$20,046					\$0	
	Independent Check				40	12	4	14	24														94	\$4,950	\$13,354	\$1,335.35	\$14,689					\$0	
	Quantities and Estimate					32	8	24		24	24												112	\$3,944	\$10,641	\$1,064.05	\$11,705					\$0	
	Specifications		4	25			16																45	\$2,823	\$7,616	\$761.59	\$8,377					\$0	
	QA/QC		2	4		8	8										28			4			54	\$3,466	\$9,351	\$935.09	\$10,286					\$0	
	90% PS&E		4	16	8	16	8	24		6												20	102	\$4,594	\$12,395	\$1,239.47	\$13,634					\$0	
	100% PS&E		4	4		8	14													8		12	50	\$2,590	\$6,988	\$698.81	\$7,687					\$0	
6	Permits		4	2		8	12																26	\$1,464	\$3,949	\$394.92	\$4,344					\$0	
7	Right of Way Services		2			8						14	50	10	30	30							144	\$6,779	\$18,288	\$1,828.80	\$20,117				\$10,465.32	\$10,465	
8.1	Utility Coordination						8												16				24	\$998	\$2,691	\$269.14	\$2,961					\$0	
9	Bidding Assistance		2	4			10																16	\$947	\$2,555	\$255.49	\$2,810					\$0	
10	Construction Support		4	8		40	4	12															68	\$3,389	\$9,144	\$914.37	\$10,058					\$0	
11	Prepare Record (As-Built) Drawings			4			4															14	22	\$942	\$2,542	\$254.20	\$2,796					\$0	
																							0	\$0	\$0	\$0.00	\$0					\$0	
																							0	\$0	\$0	\$0.00	\$0					\$0	
																							0	\$0	\$0	\$0.00	\$0					\$0	
																							0	\$0	\$0	\$0.00	\$0					\$0	
	Subtotal- Hours	0	188	239	48	362	208	216	24	30	24	22	74	14	62	62	28	10	20	12	42	118	1803	\$92,443.58	\$249,403.53	\$24,940.35	\$274,343.89					0	
	Estimated Salary Increases for Multi-Year Project																							\$7,634.49	\$20,597.10	\$2,059.71	\$22,656.81						
	Other Direct Costs																										\$2,756.45	\$270.56	\$579.52	\$29,958.00	\$1,872.71		32,681
	Total Cost	\$0	\$14,890	\$15,989	\$2,779	\$17,557	\$10,837	\$6,998	\$1,390	\$537	\$768	\$1,386	\$3,189	\$679	\$2,896	\$2,705	\$1,991	\$385	\$726	\$733	\$2,079	\$3,929	\$92,444	\$100,078	\$270,001	\$27,000	\$299,757	\$44,631.58	\$27,004.31	\$80,868.94	\$12,338.03	\$164,843	

Exhibit 10-H1 Cost Proposal
Actual Cost-Plus-Fixed Fee Contracts

☒ Prime Consultant ☐ Subconsultant
 Consultant **Quincy Engineering, Inc.**
 Project Name **Bartlett Creek Bridge**
 Project No. **JP2040** Contract No. _____ Date **10/17/2018**

DIRECT LABOR

Classification/Title	Name	Initials	Range	Hours	Initial Hourly Rate	Total
Principal Eng. *	Mark Reno	MR	\$70-\$105	0	\$ 90.30	\$ -
Senior PM *	Carolyn Davis	CD	\$55-\$95	188	\$ 79.20	\$ 14,889.60
Senior Eng. *	Scott McCauley	SMc	\$49-\$85	239	\$ 66.90	\$ 15,989.10
Assoc Eng.	Lacey Smith	LSm	\$32-\$65	48	\$ 57.90	\$ 2,779.20
Assoc Eng.	Juan Cruz	JCr	\$32-\$65	362	\$ 48.50	\$ 17,557.00
Assoc Eng. *	Andrew Mitchell	AM	\$32-\$65	208	\$ 52.10	\$ 10,836.80
Assist Eng. I	Chris Brazil	CB	\$26-\$46	216	\$ 32.40	\$ 6,998.40
Assoc Eng.	Krassimir Panayotov	KP	\$32-\$65	24	\$ 57.90	\$ 1,389.60
Intern	Kevin Williams	KW	\$16-\$25	30	\$ 17.90	\$ 537.00
Assist Eng. I	Salim Bouzid	Sbo	\$26-\$46	24	\$ 32.00	\$ 768.00
Survey Mgr *	Jim Thornton	JT	\$37-\$67	22	\$ 63.00	\$ 1,386.00
Survey Tech	Alfonso Dabu	AD	\$29-\$50	74	\$ 43.10	\$ 3,189.40
Assoc Eng.	Ryan Kotey	RK	\$32-\$65	14	\$ 48.50	\$ 679.00
Survey Chief of Party **	Survey Chief of Party	Scop	\$37-\$67	62	\$ 46.71	\$ 2,896.02
Rodman **	Survey Chainman / Rodman	SCR	\$29-\$48	62	\$ 43.63	\$ 2,705.06
Senior Eng. *	Greg Young	GY	\$49-\$85	28	\$ 71.10	\$ 1,990.80
Admin Asst	Phyllis Jordan	PJ	\$12-\$70	10	\$ 38.50	\$ 385.00
PM Asst	Erin Ritz	ER	\$25-\$52	20	\$ 36.30	\$ 726.00
Senior Eng.	Ramon Montes de Oca	RMdO	\$49-\$85	12	\$ 61.10	\$ 733.20
CAD Manager	Bob Maechler	BM	\$34-\$56	42	\$ 49.50	\$ 2,079.00
CAD Tech	Patrick Kenney	PK	\$22-\$37	118	\$ 33.30	\$ 3,929.40
				1803		\$ 92,443.58

LABOR COSTS

a) Subtotal Direct Labor Costs \$92,443.58
 b) Estimated Salary Increases for Multi-Year Project \$7,634.49 (see calculation page attached)
 c) TOTAL DIRECT LABOR COSTS [(a) + (b)] \$100,078.07

INDIRECT COSTS

d) Fringe Benefits (Rate: 45.95%): _____
 f) Overhead (Rate: 123.84%): _____
 h) General Administration (Rate: 0.0%): _____
 e) Total Fringe Benefits [(c) x (d)] \$45,985.87
 g) Overhead [(c) x (f)] \$123,936.68
 i) Gen & Admin [(c) x (h)] \$0.00
 j) TOTAL INDIRECT COSTS [(e) + (g) + (i)] \$169,922.56

FIXED FEE

k) Fixed Fee _____
 l) TOTAL FIXED FEE [(c) + (j)] x (k) \$27,000.06

CONSULTANT'S OTHER DIRECT COSTS (ODC)

Travel (@ active IRS mileage rate)	1810 miles @	\$0.545	\$986.45
Pier Diem (Meals & Lodging)	6 days @	\$170.00	\$1,020.00
Delivery	0 @	\$20.00	\$0.00
Vendor Reproduction			
	Vellum @		\$0.00
	8 1/2 X 11 Reproduction @		\$0.00
	11 X 17 Reproduction @		\$0.00
	Mounting Boards for Presentations @	\$50.00	\$0.00
	Newsletters (Translation and printing) @		\$0.00
	Subtotal Vendor Reproduction		\$0.00
Title Report	1 @	\$750.00	\$750.00
Miscellaneous			\$0.00
			\$0.00
m) TOTAL OTHER DIRECT COSTS		\$2,756.45	\$2,756.45

n) SUBCONSULTANT COSTS (attach detailed cost proposal for each subconsultant)

Galloway Enterprises	\$44,631.58
WRECO	\$27,004.31
Crawford & Associates, Inc.	\$80,868.94
Bender Rosenthal, Inc.	\$12,338.03
	<u>\$164,842.86</u>
	\$164,842.86

o) TOTAL COST [(c) + (j) + (l) + (m) + (n)] \$464,600.00

NOTES:

- Key personnel marked with an asterisk (*).
- Employees subject to prevailing wage marked with two asterisks (**).
- Anticipated salary increases calculation (Item "b") on attached page.

EXHIBIT 10-H1 COST PROPOSAL

PAGE 2 OF 2

**ACTUAL COST-PLUS-FIXED FEE CONTRACTS
(CALCULATIONS FOR ANTICIPATED SALARY INCREASES)**Consultant Quincy Engineering, Inc.Contract No. 0Date 10/17/2018Bartlett Creek Bridge**1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal		Avg Hourly Rate	5 Year Contract Duration
\$ 92,443.58	1803	=	\$51.27	Year 1 Avg Hourly Rate

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

Proposed Escalation = 8.0%					
Avg Hourly Rate		Proposed Escalation			
Year 1 \$51.27	+	4.0%	=	\$53.32	Year 1 Avg Hourly Rate
Year 2 \$53.32	+	8.0%	=	\$57.59	Year 2 Avg Hourly Rate
Year 3 \$57.59	+	8.0%	=	\$62.20	Year 3 Avg Hourly Rate
Year 4 \$62.20	+	8.0%	=	\$67.18	Year 4 Avg Hourly Rate
Year 5 \$67.18	+	8.0%	=	\$72.55	Year 5 Avg Hourly Rate

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	20.00%	*	1803.0	=	360.6	Estimated Hours Year 1
Year 2	30.00%	*	1803.0	=	540.9	Estimated Hours Year 2
Year 3	40.00%	*	1803.0	=	721.2	Estimated Hours Year 3
Year 4	10.00%	*	1803.0	=	180.3	Estimated Hours Year 4
Year 5	0.00%	*	1803.0	=	0.0	Estimated Hours Year 5
Total	100%		Total	=	1803.0	

4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$51.27	*	361	=	\$18,488.72	Estimated Hours Year 1
Year 2	\$53.32	*	541	=	\$28,840.79	Estimated Hours Year 2
Year 3	\$57.59	*	721	=	\$41,533.91	Estimated Hours Year 3
Year 4	\$62.20	*	180	=	\$11,214.66	Estimated Hours Year 4
Year 5	\$67.18	*	0	=	\$0.00	Estimated Hours Year 5
Total Direct Labor Cost with Escalation				=	\$100,078.07	
Direct Labor Subtotal before Escalation				=	\$92,443.58	
Estimated total of Direct Labor Salary Increase				=	\$7,634.49	Transfer to Page 1

NOTES:

- This assumes that an average of one half year will be worked at the rate on the cost proposal.

EXHIBIT 10-H1 COST PROPOSAL Page 3 of 3


Certification of Direct Costs:

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management, and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement. Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:

Name: John S. Quincy Title *: President
Signature :  Date of Certification (mm/dd/yyyy): 9/17/18
Email: johnsq@quincyeng.com Phone Number: 916-368-9181
Address: 11017 Cobblersrock Drive, Rancho Cordova, CA 95670

*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

Project Management, engineering design for roadway and bridge, PS&E,

Cost Proposal

Bartlett Creek Bridge

0

Date: 10/17/2018

Quincy Engineering, Inc.

Direct Labor:	\$92,443.58
Estimated Salary Increases for Multi-Year Project	\$7,634.49
Subtotal	\$100,078.07
Overhead (1.698):	\$169,922.56

A. Labor Subtotal **\$270,000.63**

Subconsultant Costs:

Gallaway Enterprises	\$44,631.58
WRECO	\$27,004.31
Crawford & Associates, Inc.	\$80,868.94
Bender Rosenthal, Inc.	\$12,338.03
0	\$0.00
0	\$0.00
0	\$0.00
0	\$0.00
0	\$0.00

B. Subconsultant Subtotal **\$164,842.86**

Other Direct Costs:

Travel (@ active IRS mileage rate)	1810 miles @	\$0.545	\$986.45
Pier Diem/ Hotel	6 days @	\$170.00	\$1,020.00
Delivery	0 @	\$20.00	\$0.00
Vendor Reproduction			
Vellum	@	\$0.00	
8 1/2 X 11 Reproduction	@	\$0.00	
11 X 17 Reproduction	@	\$0.00	
Mounting Boards for Presentations	@	50 \$0.00	
Newsletters (Translation and printing)	@	\$0.00	

Subtotal Vendor Reproduction \$0.00

Title Report 1 @ \$750.00 \$750.00

Miscellaneous

C. Other Direct Cost Subtotal: **\$2,756.45**

Labor Subtotal A. = \$270,000.63

Fixed Fee \$27,000.06

Subconsultant Subtotal B. = \$164,842.86

Fixed Fee (0.0%): \$0.00

Other Direct Cost Subtotal: C. = \$2,756.45

Fixed Fee (0.0%): \$0.00

TOTAL = **\$464,600.00**

COST PROPOSAL

Consultant Gallaway Enterprises, Inc.
Project No. Bartlett Creek BHLO-5914(091) Contract No. _____ Date 8-Oct-18

DIRECT LABOR

Classification	Name	Hours	Actual Hourly Rate	Total
Biologist/Project Manager*	Melissa Murphy	300.0 @	\$ 29.00	\$ 8,700.00
Sr. Planner/Assistant Project Manager*	Kevin Sevier	47.0 @	\$ 37.00	\$ 1,739.00
Senior Botanist*	Elena Gregg	72.0 @	\$ 26.00	\$ 1,872.00
Archaeologist	Cate Davis	60.0 @	\$ 26.00	\$ 1,560.00
GIS Analyst 1	Cate Davis	48.0 @	\$ 26.00	\$ 1,248.00
Administrator / Clerical	Ganna Kleppe	12.0 @	\$ 18.00	\$ 216.00

LABOR COSTS

a) Subtotal Direct Labor Costs \$ 15,335.00
b) Anticipated Salary Increases \$ 496.27

Total Direct Labor Costs \$ 15,831.27

INDIRECT COSTS

	Rate	Total
Fringe Benefits	26.82%	\$ 4,245.95
Overhead/General and Administrative	128.15%	\$ 20,287.77
Total Indirect Costs		\$ 24,533.72

FIXED FEE @ 10% \$ 4,036.50

CONSULTANTS DIRECT COST

Description	Quantity	Unit	Unit Cost	Total
Hardcopy report	7	1	\$ 10.00	\$ 70
Mileage (\$0.545 per mile)	368.00	1	\$ 0.545	\$ 200.56
Total Direct Costs				\$ 270.56

SUBCONSULTANTS COSTS

\$ 0.00
\$ _____
Total Subconsultants Costs \$ -

TOTAL COSTS

Total other Direct Costs Including Subconsultants \$ 270.56
\$ 44,672.04

1. Key personal must be marked with an asterisk (*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (**). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.

2) The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultants's annual accounting period and established by a cognizant agency or accepted by Caltrans.

3) Anticipated salary increases calculation (page 2) must accompany.

10-H1 Cost Proposal: Anticipated Salary Increases (page 2 of 3)

1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal	Avg Hourly Rate	4 Year Contract Duration
\$ <u>15,335.00</u>	<u>239</u>	\$ <u>64.16</u>	

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

	Avg Hourly Rate	Proposed Escalation		
Year 1	\$ <u>64.16</u>	2%	\$ <u>65.45</u>	Year 2 Avg Hourly Rate
Year 2	\$ <u>65.45</u>	2%	\$ <u>66.76</u>	Year 3 Avg Hourly Rate
Year 3	\$ <u>66.76</u>	2%	\$ <u>68.09</u>	Year 4 Avg Hourly Rate

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal	Total Hours Per Year	
Year 1	10	x	239	23.9	Est. Hours Year 1
Year 2	40	x	239	95.6	Est. Hours Year 2
Year 3	30	x	239	71.7	Est. Hours Year 3
Year 4	20	x	239	47.8	Est. Hours Year 4
Total	100%		Total	239	

4. Calculate Total Costs including Escalation (Multiply Average Hourly rate by the number of hours)

	Avg Hourly Rate		Estimated Hours	Cost per Year	
Year 1	\$ <u>64.16</u>	x	23.9	\$ <u>1,533.50</u>	Est. Hours Year 1
Year 2	\$ <u>65.45</u>	x	95.6	\$ <u>6,256.68</u>	Est. Hours Year 2
Year 3	\$ <u>66.76</u>	x	71.7	\$ <u>4,786.36</u>	Est. Hours Year 3
Year 4	\$ <u>68.09</u>	x	47.8	\$ <u>3,254.72</u>	Est. Hours Year 4
Total Direct Labor Cost with Escalation				\$ 15,831.27	
Direct Labor Subtotal before Escalation				\$ 15,335.00	
Estimated Total of Direct Labor Salary					Transfer to page 1
Increase				\$ 496.27	

EXHIBIT 10-H1 COST PROPOSAL Page 3 of 3

Certification of Direct Costs:

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management, and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement. Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:

Name: Kevin Serier Title *: Vice President
Signature: [Signature] Date of Certification (mm/dd/yyyy): 10/8/18
Email: Kevin@GallowayEnterprises.com Phone Number: 5303329909
Address: 117 Meyers St. Suite 120, Chico CA 95928

*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

Environmental Consulting

EXHIBIT 10-H1 COST PROPOSAL

Page 1 of 3

ACTUAL COST-PLUS-FIXED-FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS

(DESIGN, ENGINEERING AND ENVIRONMENTAL STUDIES)

Note: Mark-ups are Not Allowed

☐ Prime Consultant ☒ Subconsultant ☐ 2nd Tier SubconsultantConsultant: WRECO Contract No.: Bartlett Creek Date: 11/27/2018

DIRECT LABOR

Classification/Title	Name	Hours	Actual Hourly Rate	Total
Principal Engineer	Han-Bin Liang	12	\$ 95.38	\$ 1,144.56
Supervising Engineer I	Chris Sewell	4	\$ 70.02	\$ 280.08
Senior Engineer	TBD	22	\$ 63.00	\$ 1,386.00
Associate Engineer	TBD	88	\$ 43.75	\$ 3,850.00
Staff Engineer	TBD	90	\$ 33.75	\$ 3,037.50
Senior Technician	TBD	4	\$ 30.30	\$ 121.20
Clerical/Tech Editor	TBD	6	\$ 26.07	\$ 156.42

LABOR COSTS

a) Subtotal Direct Labor Costs	\$ 9,975.76
b) Anticipated Salary Increases (see page 2)	\$ 149.65
c) TOTAL DIRECT LABOR COSTS	\$ 10,125.41

INDIRECT COSTS

d) Fringe Benefits Rate:	72.69%	e) Total Fringe Benefits	\$ 7,360.17
f) Overhead Rate:	30.98%	g) Overhead	\$ 3,136.85
h) General and Administrative Rate:	33.58%	i) Gen & Admin	\$ 3,400.11
		j) TOTAL INDIRECT COSTS	\$ 13,897.13

FIXED FEE

Rate:	10.00%	k) TOTAL FIXED FEE	\$ 2,402.25
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I) CONSULTANT'S OTHER DIRECT COSTS (ODC) – ITEMIZE

Description	Quantity	Unit(s)	Unit Cost	Total
Travel/Mileage/Vehicle (supported by consultant actual costs)	329.4	Miles	\$ 0.545	\$ 179.52
Reproductions	6	EA	\$ 50.00	\$ 300.00
Overnight Delivery/Shipment	2	EA	\$ 50.00	\$ 100.00
Laboratory Testing - Non-DBE		LS	\$ -	\$ -
Drilling and Field Sampling - Non-DBE		LS	\$ -	\$ -
Traffic Control Non-DBE		LS	\$ -	\$ -
Potholing & Roadway Patching		LS	\$ -	\$ -

l) TOTAL OTHER DIRECT COSTS \$ 579.52

m) SUBCONSULTANTS' COSTS

Subconsultant 1:	\$ -
m) TOTAL SUBCONSULTANTS' COSTS	\$ -

n) TOTAL OTHER DIRECT COSTS INCLUDING SUBCONSULTANTS \$ 579.52

TOTAL COST \$ 27,004.31

NOTES:

1. Key personnel must be marked with an asterisk (*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (**). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
2. The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant's annual accounting period and established by a cognizant agency or accepted by Caltrans.
3. Anticipated salary increases calculation (page 2) must accompany.

EXHIBIT 10-H1 COST PROPOSAL

Page 2 of 3

ACTUAL COST-PLUS-FIXED-FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS

(SAMPLE CALCULATIONS FOR ANTICIPATED SALARY INCREASES)

Consultant: WRECO Contract No.: Bartlett Creek Date: 11/27/2018

1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal		Avg Hourly Rate	5 Year Contract Duration
\$9,975.76	226.0	=	44.14	Year 1 Avg Hourly Rate

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

	Avg Hourly Rate		Proposed Escalation			
Year 1	\$44.14	+	3%	=	\$45.46	Year 2 Avg Hourly Rate
Year 2	\$45.46	+	3%	=	\$46.83	Year 3 Avg Hourly Rate
Year 3	\$46.83	+	3%	=	\$48.23	Year 4 Avg Hourly Rate
Year 4	\$48.23	+	3%	=	\$49.68	Year 5 Avg Hourly Rate

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	50.0%	*	226.00	=	113.00	Estimated Hours Year 1
Year 2	50.0%	*	226.00	=	113.00	Estimated Hours Year 2
Year 3	0.0%	*	226.00	=	0.00	Estimated Hours Year 3
Year 4	0.0%	*	226.00	=	0.00	Estimated Hours Year 4
Year 5	0.0%	*	226.00	=	0.00	Estimated Hours Year 5
Total	100%		Total	=	226.0	

4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$44.14	*	113.00	=	\$4,987.88	Estimated Hours Year 1
Year 2	\$45.46	*	113.00	=	\$5,137.52	Estimated Hours Year 2
Year 3	\$46.83	*	0.00	=	\$0.00	Estimated Hours Year 3
Year 4	\$48.23	*	0.00	=	\$0.00	Estimated Hours Year 4
Year 5	\$49.68	*	0.00	=	\$0.00	Estimated Hours Year 5
Total Direct Labor Cost with Escalation				=	\$10,125.40	
Direct Labor Subtotal before Escalation				=	\$9,975.75	
Estimated total of Direct Labor Salary Increase				=	\$149.65	Transfer to Page 1

NOTES:

1. This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
2. An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology)
3. This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
4. Calculations for anticipated salary escalation must be provided.

EXHIBIT 10-H1 COST PROPOSAL

Page 3 of 3

Certification of Direct Costs:

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. [Title 23 United States Code Section 112 - Letting of Contracts](#)
4. [48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures](#)
5. [23 Code of Federal Regulations Part 172 - Procurement, Management, and Administration of Engineering and Design Related Service](#)
6. [48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board \(when applicable\)](#)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:Name: Han-Bin Llang, Ph.D., P.E.Title: PresidentSignature: Date of Certification (mm/dd/yyyy): 11/27/18Email: hanbln_llang@wreco.comPhone Number: (925) 941-0017Address: 1243 Alpine Road, Suite 108, Walnut Creek, CA 94596

*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

Bridge hydraulics

Consultant or Sub consultant **Crawford & Associates, Inc. (PFR)**

Project No. _____ Contract No. _____

Date **9/18/2018****DIRECT LABOR**

Classification/Title	Name	Initials	Range	Hours	Initial Hourly Rate	Total
Principal*	R. Sowers	RS	\$55-\$70	6.00	\$ 60.09	\$ 360.54
Principal	B. Crawford	BC	\$55-\$70	4.00	\$ 60.09	\$ 240.36
Senior Project Manager*	E. Nichols	WN	\$45-\$60	24.00	\$ 51.99	\$ 1,247.76
Senior Engineer	S. Levva	SL	\$30-\$45	32.00	\$ 33.65	\$ 1,076.80
Project Engineer I	E. Tiedemann	ET	\$23-\$38	40.00	\$ 27.88	\$ 1,115.20
Project Engineer I	H. Wagenman	HW	\$25-\$40	24.00	\$ 29.25	\$ 702.00
Project Engineer II	R. Houghton	RH	\$25-\$40	10.00	\$ 31.00	\$ 310.00
Project Engineer II	R. Gilbert	RG	\$30-\$45	12.00	\$ 35.57	\$ 426.84
Drafter	B. Updegraff	SC	\$10-\$25	12.00	\$ 25.00	\$ 300.00
Admin	T. Adkins	TA	\$30-\$45	3.00	\$ 36.05	\$ 108.15
Admin	T. Vanderveer	TV	\$20-\$35	4.00	\$ 24.03	\$ 96.12

LABOR COSTS

a) Subtotal Direct Labor Costs	\$ 5,983.77
b) Anticipated Salary Increases (see page 2 for calculation)	\$ 47.87
c) TOTAL DIRECT LABOR COSTS [(a) + (b)]	\$ 6,031.64

INDIRECT COSTS

d) Fringe Benefits (Rate 42%)	a) Total Fringe Benefits [(c) x (d)]	2533.29
f) Overhead & G&A (Rate 135%)	g) Overhead [(c) x (f)]	8142.71
h) General & Admin (Rate 20%)	i) Gen & Admin [(c) x (h)]	1206.33
	j) TOTAL INDIRECT COSTS [(e) + (g) + (i)]	\$ 11,882.33

FIXED FEE	k) TOTAL FIXED FEE [(c) + (j)] x fixed fee: 10%	\$ 1,791.40
------------------	--	--------------------

I) CONSULTANT'S OTHER DIRECT COSTS (ODC) - ITEMIZE (Add additional pages if necessary)

Description of Item	Quantity	Unit	Unit Cost	Total
Mileage	Miles	400.00	\$ 0.545	\$ 218.00
In House Laboratory Testing	EA	0.00	\$ -	\$ -
Per Diem (Lodging and Meals)	Day	5.00	\$ 180.00	\$ 900.00
Environmental Health Permit	EA	1.00	\$ 400.00	\$ 400.00
Fish & Wildlife Permit	EA	0.00	\$ 1,000.00	\$ -
Traffic Control	EA	1.00	\$ 500.00	\$ 500.00
			\$ -	\$ -

l) TOTAL OTHER DIRECT COSTS \$ 2,018.00**m) SUBCONSULTANTS' COSTS (Add additional pages if necessary)**

Subconsultant 1: Taber Drilling	\$ 20,650.00
Subconsultant 2: Geocon	\$ -
Subconsultant 3: Sunland Analytical	\$ -
Subconsultant 4:	\$ -

m) TOTAL SUBCONSULTANTS' COSTS \$ 20,650.00**n) TOTAL OTHER DIRECT COSTS INCLUDING SUBCONSULTANTS [(l) + (m)] \$ 22,668.00****TOTAL COST [(c) + (j) + (k) + (n)] \$ 42,373.37****NOTES:**

- Key personnel must be marked with an asterisk (*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (**). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
- The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant's annual accounting period and established by a cognizant agency or accepted by Caltrans.
- Anticipated salary increases calculation (page 2) must accompany.

CALCUATIONS FOR ANTICIPATED SALARY INCREASES

Consultant Crawford & Associates, Inc.

Project No. 0 Contract No. 0

Date 9/18/2018

1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal		Avg Hourly Rate	5 Year Contract Duration Year 1 Avg Hourly Rate
\$ 5,983.77	171	=	\$ 34.99	

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

	Avg Hourly Rate			Proposed Escalation					
Year 1	\$	34.99	+	2%	=	\$	35.69	Year 2 Avg Hourly Rate	
Year 2	\$	35.69	+	2%	=	\$	36.41	Year 3 Avg Hourly Rate	
Year 3	\$	36.41	+	2%	=	\$	37.13	Year 4 Avg Hourly Rate	
Year 4	\$	37.13	+	2%	=	\$	37.88	Year 5 Avg Hourly Rate	

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated %		Total Hours		Total Hours	
	Completed Each Year		per Cost Proposal		per Year	Estimated Hours
Year 1	60.00%	*	171.0	=	102.6	Year 1 Estimated Hours
Year 2	40.00%	*	171.0	=	68.4	Year 2 Estimated Hours
Year 3	0.00%	*	171.0	=	0.0	Year 3 Estimated Hours
Year 4	0.00%	*	171.0	=	0.0	Year 4 Estimated Hours
Year 5	0.00%	*	171.0	=	0.0	Year 5 Estimated Hours
Total	100%		Total	=	171.0	

4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)

	Avg Hourly Rate (calculated above)			Estimated hours (calculated above)			Cost per Year			
Year 1	\$	34.99	*		103	=	\$	3,590.26	Estimated Hours	
Year 2	\$	35.69	*		68	=	\$	2,441.38	Year 1 Estimated Hours	
Year 3	\$	-	*		0	=	\$	-	Year 2 Estimated Hours	
Year 4	\$	-	*		0	=	\$	-	Year 3 Estimated Hours	
Year 5	\$	-	*		0	=	\$	-	Year 4 Estimated Hours	
Total Direct Labor Cost with Escalation							=	\$	6,031.64	Year 5 Estimated Hours
Direct Labor Subtotal before Escalation							=	\$	5,983.77	
Estimated total of Direct Labor Salary Increase							=	\$	47.87	Transfer to Page 1

NOTES:

1. This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
2. An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology).
3. This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
4. Calculations for anticipated salary escalation must be provided.

Consultant Crawford & Associates, Inc.

Project No. 0 Contract No. 0

Date 9/18/2018

Certification of Direct Costs:

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:

Name: Benjamin Crawford Title *: President

Signature:  Date of Certification: 09/18/2018

Email: ben.crawford@crawford-inc.com Phone number: 916-455-4255 x 101

Address: 1100 Corporate Way, Suite 230, Sacramento CA 95831

* An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

Preliminary Foundation Report, Foundation Report, NESHAP, Optional: ISA

Note: Mark-ups are Not Allowed

Cost Proposal

Consultant or Sub consultant

Crawford & Associates, Inc. (Foundation Report)

Project No. _____

Contract No. _____

Date **9/18/2018****DIRECT LABOR**

Classification/Title	Name	Initials	Range	Hours	Initial Hourly Rate	Total
Principal*	R. Sowers	RS	\$55-\$70	12.00	\$ 60.09	\$ 721.08
Principal	B. Crawford	BC	\$55-\$70	6.00	\$ 60.09	\$ 360.54
Senior Project Manager*	E. Nichols	WN	\$45-\$60	40.00	\$ 51.99	\$ 2,079.60
Senior Engineer	S. Leyva	SL	\$30-\$45	30.00	\$ 33.65	\$ 1,009.50
Project Engineer I	E. Tiedemann	ET	\$23-\$38	40.00	\$ 27.88	\$ 1,115.20
Project Engineer I	H. Wagenman	HW	\$25-\$40	20.00	\$ 29.25	\$ 585.00
Project Engineer II	R. Gilbert	RG	\$30-\$45	20.00	\$ 35.57	\$ 711.40
Drafter	B. Updegraff	SC	\$10-\$25	12.00	\$ 25.00	\$ 300.00
Admin	T. Adkins	TA	\$30-\$45	4.00	\$ 36.05	\$ 144.20
Admin	T. Vanderveer	TV	\$20-\$35	4.00	\$ 24.03	\$ 96.12

LABOR COSTS

a) Subtotal Direct Labor Costs	\$ 7,122.64
b) Anticipated Salary Increases (see page 2 for calculation)	\$ 156.98
c) TOTAL DIRECT LABOR COSTS [(a) + (b)]	\$ 7,279.62

INDIRECT COSTS

d) Fringe Benefits	(Rate <u>42%</u>)	e) Total Fringe Benefits [(c) x (d)]	<u>3057.44</u>
f) Overhead & G&A	(Rate <u>135%</u>)	g) Overhead [(c) x (f)]	<u>9827.49</u>
h) General & Admin	(Rate <u>20%</u>)	i) Gen & Admin [(c) x (h)]	<u>1455.92</u>
		j) TOTAL INDIRECT COSTS [(e) + (g) + (i)]	\$ 14,340.86
FIXED FEE		k) TOTAL FIXED FEE [(c) + (j)] x fixed fee: 10%	\$ 2,162.05

l) CONSULTANT'S OTHER DIRECT COSTS (ODC) - ITEMIZE (Add additional pages if necessary)

Description of Item	Quantity	Unit	Unit Cost	Total
Mileage	Miles	400.00	\$ 0.545	\$ 218.00
In House Laboratory Testing	EA	1.00	\$ 2,200.00	\$ 2,200.00
Per Diem (Lodging and Meals)	Day	0.00	\$ 180.00	\$ -
Environmental Health Permit	EA	0.00	\$ 400.00	\$ -
Fish & Wildlife Permit	EA	0.00	\$ 1,000.00	\$ -
Traffic Control	EA	0.00	\$ 500.00	\$ -
			\$ -	\$ -

l) TOTAL OTHER DIRECT COSTS \$ 2,418.00**m) SUBCONSULTANTS' COSTS (Add additional pages if necessary)**

Subconsultant 1: Geocon (1 - R Value Test)	\$ 285.00
Subconsultant 2: Sunland Analytical (2 - Soil Corrosivity Test (\$137 ea))	\$ 274.00
Subconsultant 3:	\$ -
Subconsultant 4:	\$ -

m) TOTAL SUBCONSULTANTS' COSTS \$ 559.00**n) TOTAL OTHER DIRECT COSTS INCLUDING SUBCONSULTANTS [(l) + (m)] \$ 2,977.00****TOTAL COST [(c) + (j) + (k) + (n)] \$ 26,759.53****NOTES:**

1. Key personnel must be marked with an asterisk (*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (**). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
2. The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant's annual accounting period and established by a cognizant agency or accepted by Caltrans.
3. Anticipated salary increases calculation (page 2) must accompany.

CALCUATIONS FOR ANTICIPATED SALARY INCREASES

Consultant Crawford & Associates, Inc.

Project No. 0 Contract No. 0

Date 9/18/2018

1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal		Avg Hourly Rate	5 Year Contract Duration
\$ 7,122.64	188	=	\$ 37.89	Year 1 Avg Hourly Rate

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

	Avg Hourly Rate		Proposed Escalation			
Year 1	\$ 37.89	+	2%	=	\$ 38.64	Year 2 Avg Hourly Rate
Year 2	\$ 38.64	+	2%	=	\$ 39.42	Year 3 Avg Hourly Rate
Year 3	\$ 39.42	+	2%	=	\$ 40.21	Year 4 Avg Hourly Rate
Year 4	\$ 40.21	+	2%	=	\$ 41.01	Year 5 Avg Hourly Rate

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	0.00%	*	188.0	=	0.0	Estimated Hours Year 1
Year 2	90.00%	*	188.0	=	169.2	Estimated Hours Year 2
Year 3	10.00%	*	188.0	=	18.8	Estimated Hours Year 3
Year 4	0.00%	*	188.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	188.0	=	0.0	Estimated Hours Year 5
Total	100%		Total	=	188.0	

4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$ -	*	0	=	\$ -	Estimated Hours Year 1
Year 2	\$ 38.64	*	169	=	\$ 6,538.58	Estimated Hours Year 2
Year 3	\$ 39.42	*	19	=	\$ 741.04	Estimated Hours Year 3
Year 4	\$ -	*	0	=	\$ -	Estimated Hours Year 4
Year 5	\$ -	*	0	=	\$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation				=	\$ 7,279.62	
Direct Labor Subtotal before Escalation				=	\$ 7,122.64	
Estimated total of Direct Labor Salary Increase				=	\$ 156.98	Transfer to Page 1

NOTES:

1. This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
2. An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology).
3. This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
4. Calculations for anticipated salary escalation must be provided.

Consultant Crawford & Associates, Inc.

Project No. 0 Contract No. 0

Date 9/18/2018

Certification of Direct Costs:

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:

Name: Benjamin Crawford Title *: President

Signature:  Date of Certification: 06/24/2018

Email: ben.crawford@crawford-inc.com Phone number: 916-455-4255 x 101

Address: 1100 Corporate Way, Suite 230, Sacramento CA 95831

* An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

Preliminary Foundation Report, Foundation Report, NESHA, Optional: ISA

Note: Mark-ups are Not Allowed

Cost Proposal

Consultant or Sub consultant **Crawford & Associates, Inc. (ISA with NESHAP)**Project No. _____ Contract No. _____ Date **10/18/2018****DIRECT LABOR**

Classification/Title	Name	Initials	Range	Hours	Initial Hourly Rate	Total
Principal*	R. Sowers	RS	\$55-\$70	2.00	\$ 60.09	\$ 120.18
Senior Project Manager*	E. Nichols	WN	\$45-\$60	6.00	\$ 51.99	\$ 311.94
Project Manager	J. Price	JP	\$35-\$50	4.00	\$ 43.27	\$ 173.08
Senior Project Geologist	S. Carter	SC	\$35-\$50	26.00	\$ 40.00	\$ 1,040.00
Project Engineer I	S. Walker	SW	\$35-\$50	8.00	\$ 42.00	\$ 336.00
Drafter	S. Crawford	SC	\$10-\$25	4.00	\$ 14.71	\$ 58.84
Admin	T. Adkins	TA	\$30-\$45	2.00	\$ 36.05	\$ 72.10
Admin	T. Vanderveer	TV	\$20-\$35	2.00	\$ 24.03	\$ 48.06
Admin	D. Isom	DI	\$20-\$35	2.00	\$ 22.66	\$ 45.32

LABOR COSTS

a) Subtotal Direct Labor Costs	\$ 2,205.52
b) Anticipated Salary Increases (see page 2 for calculation)	\$ 66.61
c) TOTAL DIRECT LABOR COSTS [(a) + (b)]	\$ 2,272.13

INDIRECT COSTS

d) Fringe Benefits	(Rate <u>42%</u>)	e) Total Fringe Benefits [(c) x (d)]	<u>954.29</u>
f) Overhead & G&A	(Rate <u>135%</u>)	g) Overhead [(c) x (f)]	<u>3067.37</u>
h) General & Admin	(Rate <u>20%</u>)	i) Gen & Admin [(c) x (h)]	<u>454.43</u>
		j) TOTAL INDIRECT COSTS [(e) + (g) + (i)]	\$ 4,476.09
FIXED FEE		k) TOTAL FIXED FEE [(c) + (j)] x fixed fee: 10%	\$ 674.82

l) CONSULTANT'S OTHER DIRECT COSTS (ODC) - ITEMIZE (Add additional pages if necessary)

Description of Item	Quantity	Unit	Unit Cost	Total
Mileage	Miles	400.00	\$ 0.545	\$ 218.00
EDR Report	EA	1.00	\$ 350.00	\$ 350.00
Field Supplies (hand auger, gloves, wipes, saleen wash, etc)	LS	1.00	\$ 200.00	\$ 200.00
Analytical Testing (Outside Vendor TBD)	LS	1.00	\$ 2,000.00	\$ 2,000.00
Mail	EA	1.00	\$ 25.00	\$ 25.00
NOA Testing (Outside Vendor TBD)	EA	1.00	\$ 300.00	\$ 300.00
			\$ -	\$ -

l) TOTAL OTHER DIRECT COSTS \$ 3,093.00**m) SUBCONSULTANTS' COSTS (Add additional pages if necessary)**

Subconsultant 1: National Laboratories (ISA Field Work & Testing)	\$ 1,200.00
Subconsultant 2:	\$ -
Subconsultant 3:	\$ -
Subconsultant 4:	\$ -

m) TOTAL SUBCONSULTANTS' COSTS \$ 1,200.00**n) TOTAL OTHER DIRECT COSTS INCLUDING SUBCONSULTANTS [(l) + (m)] \$ 4,293.00****TOTAL COST [(c) + (j) + (k) + (n)] \$ 11,716.04****NOTES:**

- Key personnel must be marked with an asterisk (*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (**). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
- The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant's annual accounting period and established by a cognizant agency or accepted by Caltrans.
- Anticipated salary increases calculation (page 2) must accompany.

CALCUATIONS FOR ANTICIPATED SALARY INCREASES

Consultant Crawford & Associates, Inc.

Project No. 0 Contract No. 0

Date 10/18/2018

1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)

Direct Labor <u>Subtotal</u> per Cost Proposal	Total Hours per Cost Proposal	Avg Hourly Rate	5 Year Contract Duration
\$ 2,205.52	56	= \$ 39.38	Year 1 Avg Hourly Rate

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

	Avg Hourly Rate		Proposed Escalation			
Year 1	\$ 39.38	+	2%	=	\$ 40.17	Year 2 Avg Hourly Rate
Year 2	\$ 40.17	+	2%	=	\$ 40.98	Year 3 Avg Hourly Rate
Year 3	\$ 40.98	+	2%	=	\$ 41.79	Year 4 Avg Hourly Rate
Year 4	\$ 41.79	+	2%	=	\$ 42.63	Year 5 Avg Hourly Rate

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	0.00%	*	56.0	=	0.0	Estimated Hours Year 1
Year 2	50.00%	*	56.0	=	28.0	Estimated Hours Year 2
Year 3	50.00%	*	56.0	=	28.0	Estimated Hours Year 3
Year 4	0.00%	*	56.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	56.0	=	0.0	Estimated Hours Year 5
Total	100%		Total	=	56.0	

4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$ 39.38	*	0	=	\$ -	Estimated Hours Year 1
Year 2	\$ 40.17	*	28	=	\$ 1,124.82	Estimated Hours Year 2
Year 3	\$ 40.98	*	28	=	\$ 1,147.31	Estimated Hours Year 3
Year 4	\$ 41.79	*	0	=	\$ -	Estimated Hours Year 4
Year 5	\$ -	*	0	=	\$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation				=	\$ 2,272.13	
Direct Labor Subtotal before Escalation				=	\$ 2,205.52	
Estimated total of Direct Labor Salary Increase				=	\$ 66.61	Transfer to Page 1

NOTES:

1. This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
2. An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology).
3. This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
4. Calculations for anticipated salary escalation must be provided.

Consultant Crawford & Associates, Inc.

Project No. 0 Contract No. 0

Date 10/18/2018

Certification of Direct Costs:

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:

Name: Benjamin Crawford Title *: President

Signature:  Date of Certification: 10/18/2018

Email: ben.crawford@crawford-inc.com Phone number: 916-455-4255 x 101

Address: 1100 Corporate Way, Suite 230, Sacramento CA 95831

* An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

Preliminary Foundation Report, Foundation Report, NESHAP, Optional: ISA

Crawford & Associates, Inc. & Others
2018 Fee and Lab Schedule

In House Lab Schedule	Unit	Cost
Classification & Index		
Moisture Content	ASTM D2216	\$40.00
Moisture & Density	ASTM D2216 & D2937	\$60.00
Sieve Analysis to #200	ASTM D6913	\$150.00
#200 Wash	ASTM D1140	\$110.00
Hydrometer Analysis	ASTM D422	\$175.00
Plasticity Index	ASTM D4318	\$250.00
Strength		
Unconfined Compression - Soil	ASTM D2166	\$165.00
Unconfined Compression - Rock	ASTM D2166	\$225.00
Point Load	ASTM D5731-16	\$65.00
Compaction Curves and Stability		
4-inch Mold	ASTM D698/D1557	\$265.00
6-inch Mold	ASTM D698/D1557	\$295.00
R-Value	CTM301	\$350.00
Outside Consultants Schedule	Unit	Cost
Sunland (Chemical and Corrosion) - Not Crawford's Price		
pH & Resistivity	CTM643	\$137.00
Sulfate Content	CTM417	
Chloride Content	CTM422	
Geocon - Not Crawford's Price		
R-Value	CTM643	\$285.00
Additional testing costs available upon request		
Taber Drilling Cost - Not Crawford's Price		
Mobility	Job (Site dependent)	\$1,800 to \$2,200
Hourly Rate (3-Man Crew)	Hr	\$360.00
Overtime Hourly Rate (3-Man Crew)	Hr	\$430.00
Perdiem (3-Man Crew)	dy	\$500.00
Daily Travel Rate (3-Man Crew)	dy	\$260.00
Diamond Core Bit	ft	\$12.00
Cement - Normal	bg	\$8.00
Cement - Quick setting	bg	\$16.00
Bentonite	bg	\$15.00
Plastic Sheeting	ea	\$20.00
Cardboard - Core Boxes	bx	\$120.00
Disposal - Cuttings	ft	\$7.00
Tech Studies/ISA/NESHAP Analytical Testing (Outside Vendor TBD)		
Lead Test	ea	\$20.00
pH	ea	\$15.00
STLC	ea	\$57.50
TCLP	ea	\$50.00
NOA Testing (Outside Vendor TBD)		
NOA Test	ea	\$300.00

Exhibit 10-H1 Cost Proposal
Actual Cost-Plus-Fixed Fee Contracts☐ Prime Consultant ☒ SubconsultantConsultant **Bender Rosenthal, Inc.**Project Name Lake County: Bartlett Creek BridgeProject No. _____ Contract No. N/A Date 10/2/2018**DIRECT LABOR**

Classification/Title	Name	Initials	Range	Hours	Initial Hourly Rate	Total
ROW Project Manager	Yoli Matranga*	YM	\$80-\$86	6	\$ 80.77	\$ 484.62
Appraiser	Mike Lahodny	ML	\$40-\$70	24	\$ 65.10	\$ 1,562.40
Project Coordinator	TBD		\$30-\$60	4	\$ 55.29	\$ 221.16
Acquisition Agent	TBD		\$50-\$75	36	\$ 56.65	\$ 2,039.40
Senior ROW Specialist	TBD		\$50-\$75	1	\$ 69.71	\$ 69.71
Researchers	TBD		\$20-\$30	4	\$ 26.83	\$ 107.32
Administrator / Clerical	TBD		\$18-\$30	2	\$ 24.86	\$ 49.72
				77		\$ 4,534.33

LABOR COSTS

- a) Subtotal Direct Labor Costs \$4,534.33
- b) Estimated Salary Increases for Multi-Year Project \$0.00 *None*
- c) **TOTAL DIRECT LABOR COSTS** [(a) + (b)] \$4,534.33

INDIRECT COSTS

- d) Fringe Benefits (Rate: 64.22%):
- e) Total Fringe Benefits [(c) x (d)] \$2,911.95
- f) Overhead (Rate: 12.28%):
- g) Overhead [(c) x (f)] \$556.82
- h) General Administration (Rate: 33.32%):
- i) Gen & Admin [(c) x (h)] \$1,510.84
- j) **TOTAL INDIRECT COSTS** [(e) + (g) + (i)] \$4,979.60

FIXED FEE

- k) Fixed Fee (10.0%):
- l) **TOTAL FIXED FEE** [(c) + (j)] x (k) \$951.39

CONSULTANT'S OTHER DIRECT COSTS (ODC)

Travel (@ active IRS mileage rate) 520 miles @ \$0.5450 \$283.40

Delivery 3 @ \$29.77 \$89.31

Vendor Reproduction

m) **TOTAL OTHER DIRECT COSTS** \$372.71 \$372.71

n) SUBCONSULTANT COSTS

Sierra West Valuation

Independent Appraisal Reviews

Each

1 Review \$1,500 \$1,500.00

\$1,500.00\$1,500.00

o) **TOTAL COST** [(c) + (j) + (l) + (m) + (n)] \$12,338.03

NOTES:

1. Key personnel marked with an asterisk (*).
2. Employees subject to prevailing wage marked with two asterisks (**).

EXHIBIT 10-H1 COST PROPOSAL

PAGE 2 OF 2

ACTUAL COST-PLUS-FIXED FEE CONTRACTS

(CALCULATIONS FOR ANTICIPATED SALARY INCREASES)

Consultant Bender Rosenthal, Inc.Contract No. 0Date 10/2/2018Bartlett Creek Bridge**1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal		Avg Hourly Rate	5 Year Contract Duration
\$ 4,534.33	77	=	\$58.89	Year 1 Avg Hourly Rate

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

Proposed Escalation =		0.0%		
Avg Hourly Rate		Proposed Escalation		
Year 1 \$58.89	+	0.0%	=	\$58.89 Year 1 Avg Hourly Rate
Year 2 \$58.89	+	0.0%	=	\$58.89 Year 2 Avg Hourly Rate
Year 3 \$58.89	+	0.0%	=	\$58.89 Year 3 Avg Hourly Rate
Year 4 \$58.89	+	0.0%	=	\$58.89 Year 4 Avg Hourly Rate
Year 5 \$58.89	+	0.0%	=	\$58.89 Year 5 Avg Hourly Rate

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	100.00%	*	77.0	=	77.0	Estimated Hours Year 1
Year 2	0.00%	*	77.0	=	0.0	Estimated Hours Year 2
Year 3	0.00%	*	77.0	=	0.0	Estimated Hours Year 3
Year 4	0.00%	*	77.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	77.0	=	0.0	Estimated Hours Year 5
Total	100%		Total	=	77.0	

4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$58.89	*	77	=	\$4,534.33	Estimated Hours Year 1
Year 2	\$58.89	*	0	=	\$0.00	Estimated Hours Year 2
Year 3	\$58.89	*	0	=	\$0.00	Estimated Hours Year 3
Year 4	\$58.89	*	0	=	\$0.00	Estimated Hours Year 4
Year 5	\$58.89	*	0	=	\$0.00	Estimated Hours Year 5
Total Direct Labor Cost with Escalation				=	\$4,534.33	
Direct Labor Subtotal before Escalation				=	\$4,534.33	
Estimated total of Direct Labor Salary Increase				=	\$0.00	Transfer to Page 1

NOTES:

- This assumes that an average of one half year will be worked at the rate on the cost proposal.

EXHIBIT 10-H1 COST PROPOSAL Page 3 of 3

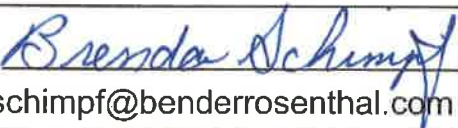
Certification of Direct Costs:

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. [Title 23 United States Code Section 112](#) - Letting of Contracts
4. [48 Code of Federal Regulations Part 31](#) - Contract Cost Principles and Procedures
5. [23 Code of Federal Regulations Part 172](#) - Procurement, Management, and Administration of Engineering and Design Related Service
6. [48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board](#) (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement. Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:

Name: Brenda Schimpf Title *: Vice President
Signature:  Date of Certification (mm/dd/yyyy): 03/13/2018
Email: b.schimpf@benderrosenthal.com Phone Number: (916) 978-4900
Address: 2825 Watt Avenue, Suite 200, Sacramento, CA 95821

*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

ROW Project Management
Appraisal
Acquisition Services
Escrow
Right of Way Certification