

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
ACTION AGENDA SUMMARY

DEPT: Public Works

BOARD AGENDA # \*C-2

Urgent  Routine

AGENDA DATE September 16, 2014

CEO Concurs with Recommendation YES  NO   
(Information Attached)

4/5 Vote Required YES  NO

SUBJECT:

Approval to Award a Contract for All-Inclusive Bridge Engineering Services to Drake Haglan and Associates of Rancho Cordova, California, for the Hickman Road over Tuolumne River Bridge Replacement Project in Stanislaus County, Federal Project Number: BRLS-5938 (199)

STAFF RECOMMENDATIONS:

1. Approval to Award a contract for All-Inclusive Bridge Engineering Services to Drake Haglan and Associates of Rancho Cordova, California, in the amount of \$1,372,863 for the Hickman Road over Tuolumne River Bridge Replacement Project.
2. Authorize the Director of Public Works to execute a contract with Drake Haglan and Associates in the amount of \$1,372,863, and to sign necessary documents, including any amendments to the agreement not to exceed 10%.

FISCAL IMPACT:

The estimated cost for the All-Inclusive Preliminary Engineering (PE) phase of the Project is \$1,372,863. An authorization to Proceed (E-76) has been secured from Caltrans for the Preliminary Engineering (PE) phase which includes design and environmental approval. The full E-76 amount secured is in the amount of \$1,662,700. The PE phase of this project is federally funded by the Highway Bridge Program (HBP) and a local match at the maximum federal reimbursement ratio; 88.53% HBP and 11.47% local match.

(Continued on Page 2)

BOARD ACTION AS FOLLOWS:

No. 2014-481

On motion of Supervisor Monteith, Seconded by Supervisor Withrow  
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Withrow, Monteith, and Chairman De Martini

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) X Approved as recommended

2) \_\_\_\_\_ Denied

3) \_\_\_\_\_ Approved as amended

4) \_\_\_\_\_ Other:

MOTION:

ATTEST: Elizabeth A. King  
ELIZABETH A. KING, Assistant Clerk

File No.

Approval to Award a Contract for All-Inclusive Bridge Engineering Services to Drake Haglan and Associates of Rancho Cordova, California, for the Hickman Road over Tuolumne River Bridge Replacement Project in Stanislaus County, Federal Project Number: BRLS-5938 (199)

### **FISCAL IMPACT (CONTINUED):**

The Federal participation portion is in the amount of \$1,215,396, the local match portion is in the amount of \$157,467. Local match funding is available in the current fiscal year's Public Works Road Projects budget.

### **DISCUSSION:**

The Hickman Road over Tuolumne River Bridge was built in 1964. The current structure allows for two travel lanes with no shoulder on either side. The sufficiency rating of this bridge is 64.7, on a scale of 100 based on Caltrans' bridge inspection report dated October 8, 2013. In addition, the bridge has a status of "Structurally Deficient" and is a "Scour Critical" Bridge, due to seismic vulnerability concerns and observed scouring at the bridge foundations. A temporary emergency scour mitigation measure was installed in 2004 and currently remains in place.

Hickman Road is a rural County road in the eastern part of Stanislaus County near Waterford that travels in the north/south direction. The bridge is located approximately 0.15 miles south of State Route 132 and serves as a major collector into Stanislaus County.

The Hickman Road over Tuolumne River Bridge is an essential route into the City of Waterford as it serves 8,000 vehicles per day with 1 in 5 of these vehicles being trucks. The truck traffic is 50% higher than average on County roads. The County has initiated discussions with the City of Waterford with the intent to split the cost of the local match (50% County, 50% City). The City of Waterford is receptive of the proposed cost share and as a result further discussion is expected.

This phase of the bridge replacement project consists of design and environmental approval. The County solicited proposals to consultants for the Hickman Road over Tuolumne River Bridge Replacement project on April 22, 2014.

The scope of design services includes:

- Project management services;
- Preliminary and Final engineering;
- Surveying and base mapping;
- Environmental documentation;
- Utility coordination; and,
- Public Outreach

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The scope of the project's physical improvements includes, but is not limited to:

- Providing adequate storm drain runoff control;
- Erosion abatement;
- Liquefaction prevention;
- Scour prevention;
- Bridge structural replacement;
- Approach roadway modification; and,
- Utility adjustments.

On May 30, 2014, five proposals were submitted for review. All proposals were evaluated based on qualifications only. Along with the proposal, consultant fees were submitted in a separate sealed fee envelope and were not part of the evaluation process. A sealed fee envelope was opened only for the most qualified proposal. Below is a list of consulting firms that submitted proposals:

- Drake Haglan and Associates
- Dokken Engineering
- CH2MHill
- Parson Brinckerhoff
- ADKO Engineering

Proposals were evaluated based on the following evaluation criteria:

- Understanding of the work to be performed;
- Quality of staff for work to be done;
- Experience with similar kinds of work;
- Familiarity with State and Federal procedures;
- Capability of developing innovative or advanced techniques;
- Financial responsibility; and,
- Demonstrated technical ability.

Public Works staff reviewed the proposals received and ranked them based on the above criteria, in the following order:

Ranking	Consultant
1	Drake Haglan and Associates
2	Parson Brinckerhoff
3 (tied)	CH2MHill
3 (tied)	Dokken Engineering
5	ADKO Engineering

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Public Works staff recommends awarding a contract to the top ranked consultant, Drake Haglan and Associates of Rancho Cordova, California, in the amount of \$1,372,863, as the most qualified consultant based on the results of the evaluation criteria.

**POLICY ISSUES:**

The recommended actions are consistent with the Board's priorities of providing A Safe Community, A Healthy Community, and A Well Planned Infrastructure System by initiating the process to replace a scour critical and structurally deficient bridge in Stanislaus County.

**STAFFING IMPACT:**

There are no staffing impacts associated with this item.

**CONTACT PERSON:**

Matthew Machado, Public Works Director. Telephone: (209) 525-4130.

**ATTACHMENT(S):**

1. Professional Design Services Agreement
2. Addendum to Professional Design Services Agreement

SC:djd

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**STANISLAUS COUNTY  
PROFESSIONAL DESIGN SERVICES AGREEMENT**

This Agreement is made and entered into by and between the County of Stanislaus, a political subdivision of the State of California, hereinafter referred to as "County" and Drake Haglan & Associates, hereinafter referred to as "Consultant".

**WHEREAS**, County, by its Resolution No. 2014-481 adopted on the 16<sup>th</sup> day of September, 2014, awarded to Consultant the following Contract:

**Hickman Road over Tuolumne River Bridge Replacement Project  
Contract No. 9610  
Federal Project No. BRLS-5938(199)**

**NOW, THEREFORE**, for and in consideration of the mutual covenants and conditions contained herein, the parties hereby agree as follows:

**1.0 PROFESSIONAL SERVICES TO BE PROVIDED BY CONSULTANT**

1.1. Scope of Services: Consultant shall provide the professional services described in the County's Request for Proposal ("RFP") attached hereto as Exhibit "A" and incorporated herein by reference and Consultant's Response to County's RFP (the "Response"). A copy of said Response is attached hereto as Exhibit "B" and incorporated herein by this reference.

1.2. Professional Practices: All professional services to be provided by Consultant pursuant to this Agreement shall be provided by personnel experienced in their respective fields and in a manner consistent with the standards of care, diligence and skill ordinarily exercised by professional consultants in similar fields and circumstances in accordance with sound professional practices. Consultant also represents that it is familiar with all laws that may affect its performance of this Agreement and shall advise County of any changes in any laws that may affect Consultant's performance of this Agreement.

1.3. Representations: Consultant represents that it has reviewed the RFP and that in its professional judgment the services to be performed under this Agreement can be performed within the maximum fee set forth herein below and within the time specified in the Project Schedule attached hereto. Consultant represents that it is qualified to perform the professional services required by this Agreement and possesses the necessary licenses and permits required to perform said services. Consultant represents that it has no interest and shall not acquire any interest direct or indirect which conflicts, or has the appearance of conflicting, in any manner or degree with the performance of the work and services under this Agreement.

1.4. Compliance with Laws. Consultant agrees that it shall perform the services required by this Agreement in compliance with all applicable Federal and California laws including, but not limited to, those laws related to minimum hours and wages; occupational health and safety; fair employment and employment practices; workers' compensation insurance and safety in employment; and all other Federal, State and local laws and ordinances applicable

to the services required under this Agreement.

1.5. Non-Discrimination. During the performance of this Agreement, Consultant and its officers, employees, agents, representatives or subcontractors shall not unlawfully discriminate in violation of any federal, state or local law, rule or regulation against any employee, applicant for employment or person receiving services under this Agreement because of race, religion, color, national origin, ancestry, physical or mental disability, medical condition (including genetic characteristics), marital status, age, political affiliation, sex or sexual orientation. Consultant and its officers, employees, agents, representatives or subcontractors shall comply with all applicable Federal, State and local laws and regulations related to non-discrimination and equal opportunity, including without limitation the County's nondiscrimination policy; the Fair Employment and Housing Act (Government Code sections 12900 et seq.); California Labor Code sections 1101, 1102 and 1102.1; the Federal Civil Rights Act of 1964 (P.L. 88-352), as amended; and all applicable regulations promulgated in the California Code of Regulations or the Code of Federal Regulations.

1.6. Non-Exclusive Agreement. Consultant acknowledges that County may enter into agreements with other consultants for services similar to the services that are subject to this Agreement or may have its own employees perform services similar to those services contemplated by this Agreement.

1.7. Delegation and Assignment. This is a personal service contract, and the duties set forth herein shall not be delegated or assigned to any person or entity without the prior written consent of County. Consultant may engage a subcontractor(s) as permitted by law and may employ other personnel to perform services contemplated by this Agreement at Consultant's sole cost and expense.

1.8. Covenant Against Contingent Fees. 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 local agency 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.

## 2.0 COMPENSATION AND BILLING

2.1. Compensation. Consultant shall be paid in accordance with the fee schedule set forth in Exhibit "C", attached hereto and made a part of this Agreement (the "Fee Schedule"). Consultant's compensation shall in no case exceed **One Million Three Hundred Seventy-Two Thousand Eight Hundred Sixty-Three Dollars (\$1,372,863)**. Consultant will be compensated on a time and materials basis, based on the hours worked by the Consultant's employees or subcontractors at the hourly rates specified in the Fee Schedule. The Fee Schedule rates include direct salary costs, employee benefits, and overhead. The rates stated in the Fee Schedule are not

adjustable during the term of this Agreement. The County may retain ten percent of all periodic or progress payments made to the Consultant until completion and acceptance of all work tasks and County shall have right to withhold payment from Consultant for any unsatisfactory service until such time service is performed satisfactorily.

2.2. Reimbursements. In addition to the aforementioned fees, Consultant will be reimbursed for any expenses specifically set forth in each Project Scope of Work. All such reimbursement amounts are limited to those costs and expenses that are reasonable, necessary and actually incurred by the Consultant in connection with the services provided. The County shall not pay a mark up on any item of reimbursement. The County shall not pay for any item of overhead such as telephone, facsimile, postage, etc. All requests for reimbursement shall be accompanied by a copy of the original invoice.

2.3. Additional Services. Consultant shall not receive compensation for any services provided outside the scope of services specified in Exhibits A and B unless the County or the Project Manager for this Project, prior to Consultant performing the additional services, approves such additional services in writing. It is specifically understood that oral requests and/or approvals of such additional services or additional compensation shall be barred and are unenforceable.

2.4. Method of Billing. Consultant may submit invoices to County's Project Manager for approval on a progress basis, but no more often than once each calendar month. Said invoice shall be based on the total of all Consultants' services that have been completed to County's sole satisfaction. County shall pay Consultant's invoice within forty-five (45) days from the date County receives said invoice. Each invoice shall describe in detail, the services performed and the associated percentage of tasks completed. Any additional services approved and performed pursuant to this Agreement shall be designated as "Additional Services" and shall identify the number of the authorized change order, where applicable, on all invoices.

2.5. Records and Audits. Records of Consultant's services relating to this Agreement shall be maintained in accordance with generally recognized accounting principles and shall be made available to County or its Project Manager for inspection and/or audit at mutually convenient times for a period of three (3) years from the termination of this Agreement.

### **3.0 TIME OF PERFORMANCE**

3.1. Commencement and Completion of Work. The professional services to be performed pursuant to this Agreement shall commence within five (5) days after County delivers its Notice to Proceed. Said services shall be performed in strict compliance with the Project Schedule approved by County as set forth in Exhibit "D", attached hereto and incorporated herein by this reference. The Project Schedule may be amended by mutual agreement of the parties. Failure to commence work in a timely manner and/or diligently pursue work to completion may be grounds for termination of this Agreement.

3.2. Excusable Delays. Neither party shall be responsible for delays or lack of performance resulting from acts beyond the reasonable control of the party or parties. Such acts

shall include, but not be limited to, acts of God, fire, strikes, material shortages, compliance with laws or regulations, riots, acts of war, or any other conditions beyond the reasonable control of a party.

#### **4.0 TERM OF CONTRACT AND TERMINATION**

4.1. Term. This Agreement shall commence upon approval by the County's Board of Supervisors and continue until the work required herein is completed, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

4.2. Notice of Termination. The County reserves and has the right and privilege of canceling, suspending or abandoning the execution of all or any part of the work contemplated by this Agreement, with or without cause, at any time, by providing written notice to Consultant. The termination of this Agreement shall be deemed effective upon receipt of the notice of termination. In the event of such termination, Consultant shall immediately stop rendering services under this Agreement unless directed otherwise by the County.

4.3. Compensation. In the event of termination, County shall pay Consultant for reasonable costs incurred and professional services satisfactorily performed up to and including the date of County's written notice of termination. Compensation for work in progress shall be prorated as to the percentage of work completed as of the effective date of termination in accordance with the fees set forth in Exhibit "C". In ascertaining the professional services actually rendered hereunder up to the effective date of termination of this Agreement, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents pertaining to the services contemplated herein whether delivered to the County or in the possession of the Consultant.

4.4. Documents. In the event of termination of this Agreement, all documents prepared by Consultant in its performance of this Agreement including, but not limited to, finished or unfinished design, development and construction documents, data studies, drawings, maps and reports, shall be delivered to the County within ten (10) days of delivery of termination notice to Consultant, at no cost to County. Any use of uncompleted documents without specific written authorization from Consultant shall be at County's sole risk and without liability or legal expense to Consultant.

#### **5.0 INSURANCE REQUIREMENTS**

5.1. Minimum Scope and Limits of Insurance. Consultant, at its sole cost and expense, for the full term of this Agreement (and any extensions thereof), shall obtain and maintain, at minimum, compliance with all of the following insurance coverage(s) and requirements. If Consultant normally carries insurance in an amount greater than the minimum amount listed below, that greater amount shall become the minimum required amount of insurance for purposes of this Agreement. The insurance listed below shall have a retroactive date of placement prior to, or coinciding with, the date services are first provided that are governed by the terms of this Agreement:



- (a) Comprehensive general liability, including premises-operations, products/completed operations, broad form property damage, blanket contractual liability, independent contractors, personal injury with a policy limit of not less than Two Million Dollars (\$2,000,000), combined single limits, per occurrence and aggregate. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to any act or omission by Consultant under this Agreement or the general aggregate limit shall be twice the required occurrence limit.
- (b) Automobile liability for owned vehicles, hired, and non-owned vehicles, with a policy limit of not less than Two Million Dollars (\$2,000,000), combined single limits, per occurrence and aggregate.
- (c) Workers' compensation insurance as required by the State of California.
- (d) Professional errors and omissions ("E&O") liability insurance with policy limits of not less than Two Million Dollars (\$2,000,000), combined single limit for each occurrence. If Consultant cannot provide an occurrence policy, Consultant shall provide insurance covering claims made as a result of performance of Work on this Project and shall maintain such insurance in effect for not less than three years following Final Completion of the Project.

5.2. Endorsements. The Consultant shall obtain a specific endorsement to all required insurance policies, except Professional Liability insurance and Workers Compensation insurance, naming the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers as additional insureds for at least three years after the completion of the work to be performed under this Agreement, but, to the extent that any insurance issued to Consultant in effect after the expiration of three years provides additional insured coverage to parties Consultant agreed in writing to name as an additional insured, then Consultant shall have the obligation under this contract to obtain such additional insured coverage for the County, under any and all policies Consultant has regarding:

- (a) Liability arising from or in connection with the performance or omission to perform any term or condition of this Agreement by or on behalf of the Consultant, including the insured's general supervision of its subcontractors;
- (b) Ongoing services, products and completed operations of the Consultant;
- (c) Premises owned, occupied or used by the Consultant; and
- (d) Automobiles owned, leased, hired or borrowed by the Consultant.
- (e) For Workers' Compensation insurance, the insurance carrier shall agree to waive all rights of subrogation against the County, its officers, officials and employees for losses arising from the performance of or the omission to perform any term or condition of this Agreement by the Consultant.

5.3. Deductibles: Any deductibles, self-insured retentions or named insureds must be declared in writing and approved by County. At the option of the County, either: (a) the insurer shall reduce or eliminate such deductibles, self-insured retentions or named insureds, or (b) the Consultant shall provide a bond, cash, letter of credit, guaranty or other security satisfactory to the County guaranteeing payment of the self-insured retention or deductible and payment of any and all costs, losses, related investigations, claim administration and defense expenses. The

County, in its sole discretion, may waive the requirement to reduce or eliminate deductibles or self-insured retentions, in which case, the Consultant agrees that it will be responsible for and pay any self-insured retention or deductible and will pay any and all costs, losses, related investigations, claim administration and defense expenses related to or arising out of the Consultant's defense and indemnification obligations as set forth in this Agreement.

5.4. Certificates of Insurance: At least ten (10) days prior to the date the Consultant begins performance of its obligations under this Agreement, Consultant shall furnish County with certificates of insurance, and with original endorsements, showing coverage required by this Agreement, including, without limitation, those that verify coverage for subcontractors of the Consultant. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements shall be received and, in County's sole and absolute discretion, approved by County. County reserves the right to require complete copies of all required insurance policies and endorsements, at any time.

5.5. Non-limiting: Nothing in this Section or the insurance described herein shall be construed as limiting in any way, the indemnification provisions contained in this Agreement, or the liability of Consultant and Consultant's officers, employees, agents, representatives or subcontractors for payments of damages to persons or property.

5.6. Primary Insurance: The Consultant's insurance coverage shall be primary insurance regarding the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers. Any insurance or self-insurance maintained by the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers shall be excess of the Consultant's insurance and shall not contribute with Consultant's insurance. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the County or its officers, officials and employees. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability. Any and all insurances carried by it shall be deemed liability coverage for any and all actions it performs in connection with this Contract.

5.7. Cancellation of Insurance: Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party except after thirty (30) days prior written notice has been given to County. The Consultant shall promptly notify, or cause the insurance carrier to promptly notify, the County of any change in the insurance policy or policies required under this Agreement, including, without limitation, any reduction in coverage or in limits of the required policy or policies. Consultant shall maintain such coverage in effect for three (3) years after substantial completion of the project to the extent it is commercially available at reasonable rates.

5.8. California Admitted Insurer: Insurance shall be placed with California admitted insurers (licensed to do business in California) with a current rating by Best's Key Rating Guide of no less than A-:VII; provided, however, that if no California admitted insurance company provides the required insurance, it is acceptable to provide the required insurance through a United States domiciled carrier that meets the required Best's rating and that is listed on the

current List of Eligible Surplus Line Insurers maintained by the California Department of Insurance.

5.9. Subcontractors: Consultant shall require that all of its subcontractors are subject to the insurance and indemnity requirements stated herein, or shall include all subcontractors as additional insureds under its insurance policies.

## **6.0 INDEMNIFICATION**

6.1. Indemnification: To the fullest extent allowed by law, Consultant shall defend, indemnify, and hold harmless the County and its officers, directors, officials, agents, employees, volunteers and representatives (collectively, "Indemnitee") from and against any and all claims, suits, actions, losses, injuries, damages or expenses of every name, kind, and description, including litigation costs and reasonable attorney's fees incurred, (collectively, "losses") which are founded upon, arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the alleged negligence, recklessness, or willful misconduct of Consultant, its officers, agents, employees, volunteers, representatives, contractors and subcontractors, excluding, however, such liabilities caused in part by the sole negligence, active negligence or willful misconduct of the County, its agents, employees, and representatives. These indemnification obligations shall not be limited by any assertion or finding that (1) the person or entity indemnified is liable by reason of non-delegable duty, or (2) the losses were caused in part by the negligence of, breach of contract by, or violation of law by Indemnitee. Nothing in this Agreement, including the provisions of this paragraph, shall constitute a waiver or limitation of any rights which Indemnitee may have under applicable law, including without limitation, the right to implied indemnity.

6.2. Duty to Defend: The duty of Consultant to indemnify and save harmless as set forth herein, shall include both the duty to indemnify and at Consultant's own cost and expense the duty to defend as set forth in Section 2778 of the California Civil Code and as limited in section 2782.8 of the California Civil Code. This duty to defend arises immediately when such claim is made and shall be independent of any finding of negligence and shall arise regardless of any claim or assertion that Indemnitee caused or contributed to the Losses. Consultant shall provide legal counsel acceptable to the County.

6.3. Duty to Cooperate: Each party shall notify the other party within ten (10) days in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Consultant shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

6.4. Patent Rights: Consultant represents that professional services provided by Consultant pursuant to this Agreement does not infringe on any other copyrighted work. Consultant shall defend, indemnify and hold harmless the County from all loss, cost, damage, expense, liability or claims, including attorneys' fees, court costs, litigation expenses and expert consultant or witness fees, that may at any time arise for any infringement of the patent rights,

copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person or persons in consequence of the use by the County of any articles or services supplied under this agreement.

6.5. The foregoing provisions shall survive the term and termination of this Agreement.

## 7.0 GENERAL PROVISIONS

7.1. Entire Agreement: This Agreement constitutes the entire Agreement between the parties with respect to any matter referenced herein and supersedes any and all other prior writings and oral negotiations. This Agreement may be modified only in writing, and signed by the parties in interest at the time of such modification. The terms of this Agreement shall prevail over any inconsistent provision in any other contract document appurtenant hereto, including exhibits to this Agreement.

7.2. Representatives. The Director of the Stanislaus County Department of Public Works, or his designee, shall be the representative of County for purposes of this Agreement and may issue all consents, approvals, directives and agreements on behalf of the County, called for by this Agreement, except as otherwise expressly provided in this Agreement. Consultant shall designate a representative for purposes of this Agreement who shall be authorized to issue all consents, approvals, directives and agreements on behalf of Consultant called for by this Agreement, except as otherwise expressly provided in this Agreement.

7.3. Project Managers. County shall designate a Project Manager to work directly with Consultant in the performance of this Agreement. Consultant shall designate a Project Manager who shall represent it and be its agent in all consultations with County during the term of this Agreement. Consultant or its Project Manager shall attend and assist in all coordination meetings called by County.

7.4. Designated Personnel: A material covenant of this agreement is that the Consultant shall assign the individuals designated below to perform the functions designated so long as they continue in the employ of the Consultant. The designated individuals shall, so long as their performance continues to be acceptable to County, remain in charge of the services for the Project from beginning through completion of services.

- a. Project Manager: Michael Pugh, PE, SE
- b. Lead/Manager: n/a

7.5. Removal of Personnel or Sub-Consultants: If the County, in its sole discretion at any time during the term of this agreement, desires the removal of any person or sub-consultant assigned by Consultant to perform services, then the Consultant shall remove such person or consultant immediately upon receiving notice from the County.

7.6. Notices: Any notices, documents, correspondence or other communications concerning this Agreement or the work hereunder may be provided by personal delivery,

facsimile or mail and shall be addressed as set forth below. Such communication shall be deemed served or delivered: a) at the time of delivery if such communication is sent by personal delivery; b) at the time of transmission if such communication is sent by facsimile; and c) 48 hours after deposit in the U.S. Mail as reflected by the official U.S. postmark if such communication is sent through regular United States mail.

If to County:

Stanislaus County Public Works  
Attn: Linda Allsop, Contract Administrator  
1716 Morgan Road  
Modesto, CA 95358

If to Consultant:

Drake Haglan and Associates  
Attn: Michael Pugh, Project Manager  
11060 White Rock Road, Ste. 200  
Rancho Cordova, CA 95670

7.7. Attorneys' Fees: In the event that litigation is brought by any party in connection with this Agreement, the prevailing party shall be entitled to recover from the opposing party all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party in the exercise of any of its rights or remedies hereunder or the enforcement of any of the terms, conditions, or provisions hereof.

7.8. Governing Law: This Agreement shall be governed by and construed under the laws of the State of California without giving effect to that body of laws pertaining to conflict of laws. In the event of any legal action to enforce or interpret this Agreement, the parties hereto agree that the sole and exclusive venue shall be a court of competent jurisdiction located in Stanislaus County, California.

7.9. Assignment: Consultant shall not voluntarily or by operation of law assign, transfer, sublet or encumber all or any part of Consultant's interest in this Agreement without County's prior written consent. Any attempted assignment, transfer, subletting or encumbrance shall be void and shall constitute a breach of this Agreement and cause for termination of this Agreement. Regardless of County's consent, no subletting or assignment shall release Consultant of Consultant's obligation to perform all other obligations to be performed by Consultant hereunder for the term of this Agreement.

7.10. Independent Contractor: Consultant is and shall be acting at all times as an independent contractor and not as an employee of County. Consultant shall secure, at his expense, and be responsible for any and all payment of Income Tax, Social Security, State Disability Insurance Compensation, Unemployment Compensation, and other payroll deductions for Consultant and its officers, agents, and employees, and all business licenses, if any are required, in connection with the services to be performed hereunder. Consultant hereby indemnifies and holds County harmless from any and all claims that may be made against County based upon any contention by any third party that an employer-employee relationship exists by reason of this Agreement.

7.11. Confidentiality: The Consultant agrees to keep confidential all information obtained or learned during the course of furnishing services under this Agreement and to not disclose or reveal such information for any purpose not directly connected with the matter for which services are provided, unless such disclosure is required by law.

7.12. Ownership of Documents: Any interest, including copyright interests, of Consultant or its contractors or subconsultants in studies, reports, memoranda, computational sheets, drawings, plans or any other documents, including electronic data, prepared in connection with the Services, shall be the property of County. To the extent permitted by law, work product produced under this Agreement shall be deemed works for hire and all copyrights in such works shall be the property of the County. In the event that it is ever determined that any works created by Consultant or its subconsultants under this Agreement are not works for hire, Consultant hereby assigns to County all copyrights to such works. With the County's prior written approval, Consultant may retain and use copies of such works for reference and as documentation of experience and capabilities.

7.13. Reuse of Design Documents: Should the County desire to reuse the documents specified above and not use the services of the Consultant, then the County agrees to require the new consultant to assume any and all obligations for the reuse of the documents, and the County releases Consultant and its subconsultants from all liability associated with the reuse of such documents.

7.14. Public Records Act Disclosure: Consultant has been advised and is aware that all reports, documents, information and data including, but not limited to, computer tapes, discs or files furnished or prepared by Consultant, or any of its subcontractors, and provided to County may be subject to public disclosure as required by the California Public Records Act (California Government Code Section 6250 et. seq.). Exceptions to public disclosure may be those documents or information that qualifies as trade secrets, as that term is defined in the California Government Code Section 6254.7, and of which Consultant informs County of such trade secret. The County will endeavor to maintain as confidential all information obtained by it that is designated as a trade secret. The County shall not, in any way, be liable or responsible for the disclosure of any trade secret including, without limitation, those records so marked if disclosure is deemed to be required by law or by order of the Court.

7.15. Responsibility for Errors: Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

7.16. Order of Precedence: In the event of an inconsistency in this Agreement and any of the attached Exhibits, the terms set forth in this Agreement shall prevail. If, and to the extent this Agreement incorporates by reference any provision of the RFP or the Response, such provision shall be deemed a part of this Agreement. Nevertheless, if there is any conflict among the terms and conditions of this Agreement and those of any such provision or provisions so incorporated by reference, this Agreement shall govern over both the Response and the RFP and the Response shall govern over the RFP.

7.17. Costs: Each party shall bear its own costs and fees incurred in the preparation and negotiation of this Agreement and in the performance of its obligations hereunder except as expressly provided herein.

7.18. No Third Party Beneficiary Rights: This Agreement is entered into for the sole benefit of County and Consultant and no other parties are intended to be direct or incidental beneficiaries of this Agreement and no third party shall have any right in, under or to this Agreement.

7.19. Construction: The parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement, this Agreement shall be construed as if drafted jointly by the parties and in accordance with its fair meaning. There shall be no presumption or burden of proof favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

7.20. Amendments: This Agreement may be amend only by a writing executed by the parties hereto or their respective successors and assigns.

7.21. Waiver: The delay or failure of either party at any time to require performance or compliance by the other of any of its obligations or agreements shall in no way be deemed a waiver of those rights to require such performance or compliance. No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the party against whom enforcement of a waiver is sought. The waiver of any right or remedy in respect to any occurrence or event shall not be deemed a waiver of any right or remedy in respect to any other occurrence or event, nor shall any waiver constitute a continuing waiver.

7.22. Severability: If any provision of this Agreement is determined by a court of competent jurisdiction to be unenforceable in any circumstance, such determination shall not affect the validity or enforceability of the remaining terms and provisions hereof or of the offending provision in any other circumstance. Notwithstanding the foregoing, if the value of this Agreement, based upon the substantial benefit of the bargain for any party is materially impaired, which determination as made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.


7.23. Counterparts: This Agreement may be executed in one or more counterparts, each of which shall be deemed an original. All counterparts shall be construed together and shall constitute one agreement.

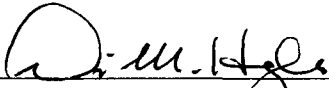
7.24. Corporate Authority: The persons executing this Agreement on behalf of the parties hereto warrant that they are duly authorized to execute this Agreement on behalf of said parties and that by doing so, the parties hereto are formally bound to the provisions of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their respective authorized officers:

**COUNTY OF STANISLAUS**

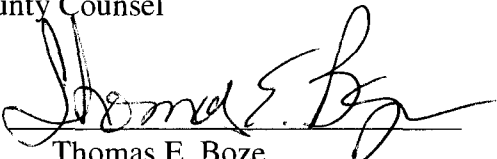
**DRAKE HAGLAN AND ASSOCIATES**

By:   
Matt Machado, Director  
Department of Public Works

By:   
Dennis Haglan, PE  
President/Principal in Charge

**APPROVED AS TO FORM:**

John P. Doering  
County Counsel

By:   
Thomas E. Boze  
Deputy County Counsel



**EXHIBIT A**  
**COUNTY'S REQUEST FOR PROPOSAL**



**DEPARTMENT OF PUBLIC WORKS**

**Matt Machado, PE, LS**  
**Director, County Surveyor**

**Chris Brady, PE**  
**Deputy Director - Construction/Roads/Bridges**

**Colt Esenwein, PE**  
**Deputy Director - Engineering/Survey/Fleet**

**David Leamon, PE**  
**Deputy Director - Development/Traffic**

**Kathy Johnson**  
**Assistant Director - Finance/GIS/HR/Transit**

[www.staniscounty.com/publicworks](http://www.staniscounty.com/publicworks)

**STANISLAUS COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

**REQUEST FOR PROPOSALS FOR**  
**HICKMAN ROAD OVER TUOLUMNE RIVER**  
**BRIDGE REHABILITATION/REPLACEMENT PROJECT**  
**ALL –INCLUSIVE BRIDGE ENGINEERING SERVICES**

**Federal Project No.: BRLO-5938(199)**  
**State Bridge No.: 38C-0004**

**Invitation Date:** April 22, 2014  
**Questions Deadline:** 5:00 PM, May 16, 2014  
**Last Addendum:** 5:00 PM, May 23, 2014  
**Proposal Due Date:** 5:00 PM, May 30, 2014

Stanislaus County Department of Public Works is soliciting a Request for Proposal (RFP) for All Inclusive Bridge Engineering Services for the Hickman Road over Tuolumne River Bridge Rehabilitation/Replacement project located in Stanislaus County.

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**Attachments**

1. Sample Fee Proposal .....	<b>A1</b>
2. Exhibit 10-I – Notice to Proposers DBE Information .....	<b>A2</b>
3. Exhibit 10-J – Standard Agreement for Sub-Consultants/DBE Participation .....	<b>A3</b>
4. Exhibit 10-OI – Consultant Proposal DBE Commitment .....	<b>A4</b>
5. Exhibit 10-O2 – Consultant Contract DBE Information .....	<b>A5</b>
6. Sample Design Services Agreement and Addendum to Professional Design Services .....	<b>A6</b>
7. Exhibit 10-B – Suggested Consultant Evaluation Sheet .....	<b>A7</b>
8. Exhibit 10-K – Consultant Certification of Contract Cost and Financial Management System .....	<b>A8</b>
9. Exhibit 10-F – Certification of Consultant, Commissions and Fees .....	<b>A9</b>
10. Project Vicinity and Location Map .....	<b>A10</b>
11. Caltrans Bridge Report .....	<b>A11</b>
12. Existing Project Documents (If Applicable) .....	<b>A12</b>

## **Project Description**

The Hickman Road over Tuolumne River Bridge was built in 1964 and the structure is classified as a Reinforced Concrete (RC) box girder on RC solid pier walls and RC wing abutments supported by steel piles. The bridge is located 0.15 mile south of State Route 132 near the town of Waterford.

The purpose of the project is to improve public safety. The California Department of Transportation (Caltrans) bridge inspection report identifies major deficiencies with the Hickman Road over Tuolumne River Bridge:

- The bridge deck has 12 to 16 inch long transverse and pattern cracks throughout.
- There are several edge spalls of up to 3 feet long x 4 inch wide x 1 inch deep along the right curb in Span 4.
- There is an erosion gully of approximately 3 feet wide x 5 feet deep along the right slope embankment at Abutment 8 due to roadway runoff.
- The scour protection at Piers 4 and 5 has deteriorated in front and at the upstream right side of the footing with up to 6 feet wide sections missing.
- Settlement and displacement observed at Piers 4 and 5.

In addition, the existing bridge is deemed "Scour Critical" with a scour rating of 3. The Hickman Road over Tuolumne River Rehabilitation/Replacement project is necessary due to the bridge structure being deemed Structurally Deficient (SD) with a sufficiency rating (SR) of 64.7. Additional deficiencies may exist and be discovered as a result of additional studies or investigation performed by the winning consultant.

## **Scope of Work**

The estimated schedule for the project is as follows:

Project Advertisement and Environmental Document: April 2014 – January 2017

Plans, Specifications, and Estimate:

- i. 30% : January 2015
- ii. 60% : February 2016
- iii. 90% : February 2017
- iv. 100%: November 2017

Right of Way: January 2017 – October 2017

Bidding and Award Contract: February 2018

Construction: September 2018

The scope of services will consist of the engineering design and preparation of 100% contract documents consisting of plans, specifications, and cost estimates for the construction of this project. The scope of services will also include the necessary environmental studies, right of way services and work scopes to assist the County to obtain required State and Federal environmental permits and authorizations.

## **STRATEGY MEETING**

The Consultant shall be responsible for coordinating and scheduling a strategy meeting. At a minimum, representatives from the following fields shall attend the strategy meeting:

- Caltrans Structures
- Caltrans Earthquake Engineering
- Caltrans Hydraulics
- Caltrans Geotechnical
- Stanislaus County
- Consultant and relevant sub consultants

## **STRATEGY REPORT**

**Task 1: Archive Strategy Report Review and Technical Memorandum Preparation (\*Task 1 shall be completed prior to scheduling the strategy meeting):**

The consultant shall review the existing strategy report (see Attachment A12) and perform a feasibility study investigating retrofit and replacement options for the existing bridge.

- Retrofit Alternative: A seismic vulnerability was performed in 2003. Using the existing retrofit strategy, update the retrofit project cost and perform a Caltrans Life-Cycle Benefit-Cost Analysis.

- Replacement Alternative: As a starting point, the proposed structure type, span configuration, and typical sections shown in the existing strategy report shall be updated to reflect the current standards. Update the replacement project cost and perform a Caltrans Life-Cycle Benefit-Cost Analysis.

The consultant shall prepare and submit to the County a short technical memorandum for review discussing the following:

- For each bridge alternative, discuss approach road improvements, right-of-way implications including temporary easements, construction staging and access, utility relocations and accommodation, environmental considerations, anticipated design exceptions and anticipated future maintenance costs.
- List of pros and cons for each alternative.
- Present preliminary quantities and estimated construction cost for each alternative.
- Present preliminary results of the Life-Cycle Benefit-Cost-Analysis for each alternative.

### **Task 2: Draft and Final Strategy Report:**

Upon completion of Task 1 a Draft Strategy Report comparing the project alternatives, shall be submitted to the County for review. For the purposes of the environmental document, three to four project alternatives should be considered. The Consultant will also coordinate with Caltrans to determine the most practical project alternative. Once the County and Caltrans approve a specific project alternative, the Consultant will prepare a Final Strategy Report thus completing Phase – I of the project. Suggested project alternatives may include but are not limited to:

- Retrofit existing bridge alternatives,
- Construct new bridge on new alignment and demolish existing bridge alternative,
- Based on the selected project alternative, the Consultant will conduct preliminary engineering, environmental documents, right of way services, final design, bid, and construction support for the project.

Based on the selected project alternative, the Consultant will conduct preliminary engineering, environmental document, right of way services, final design, bid, and construction support for the project.

### **PROJECT MANAGEMENT**

The scope of comprehensive project management includes, but is not limited to, project management, quality assurance and control, and efficiently managing schedules of any sub-consultants involved in the project. Ultimately, the Consultant will be responsible for completing all project tasks in a timely fashion and diligently follow the anticipated schedule set forth for this project. On a monthly basis, the Consultant shall provide letter-type progress reports to brief the County on the project progress and, as

necessary, hold Project Development Team (PDT) meetings. For the purposes of estimating project fees, assume a total of 24 meetings. Project schedule will be strictly enforced. Consultant must notify the County of any issues that cause schedule delays.

## **PUBLIC OUTREACH**

Perform necessary public outreach, including public hearing and meetings as required to facilitate community involvement and to educate the community of the importance of this bridge, and the current condition of the existing bridge in support of the environmental determination. The Consultant shall schedule all meetings, make arrangements for facilities, issue meetings notices, and prepare agenda and minutes. The Consultant will be required to obtain prior approval of the County Public Information Officer (through the County's Project Manager) for any communications with public media pertaining to the bridge engineering work. Public comments shall be recorded, provided with an appropriate response, and be considered in the design where appropriate. The Consultant shall be responsible for compiling all comments and recommendations for administrative and public review.

## **GEOTECHNICAL INVESTIGATION**

Provide a geotechnical report for the site as required for the completion of design, construction documents, and permit applications. The geotechnical report shall include, but is not limited to an evaluation of the effects of any slope erosion and periodic land movements during extreme storm and seismic events.

## **TOPOGRAPHICAL SURVEY**

Perform a Topographic and Property Boundary Survey as needed. For these activities, the Consultant will work in close coordination with the County. All Surveying and Mapping shall comply with the provisions of the Professional Land Surveyors Act, Sections 8700 to 8805 Business and Professions Code, the provisions of the California Coordinate System, Sections 8801 through 8819 of the Public Resources Code and any other applicable code in the State of California. If necessary, the design shall include any legal descriptions and plats for temporary construction easements (TCE) necessary for construction staging areas, disposal areas for excess soil generated by project construction. The Consultant will include and verify any existing surveys, specify existing and proposed Right of Ways, land dedications, and easement agreements. At a minimum, the Consultant will verify property lines at those locations where any portion of the project infringes upon the required setback limits or lies within 50 feet of project improvements, work areas, storage, and staging areas. Consultant should plan on filing a record of survey for any new right of way acquired.

The Consultant shall conduct a field topographical survey to be used for the roadway design. The survey shall also include boundary lines and monumentation necessary to prepare right of way maps. Consultant shall prepare a final right of way map, plats, and



legal descriptions for use by the County in the acquisition of all necessary parcels and easements.

**Datum:**

- Horizontal Control: Zone III, California Coordinate System of North American Datum 1983 (NAD83).
- Vertical Control: North American Vertical datum of 1988 (NAVD88). The Consultant shall coordinate with County surveyor to determine the primary vertical datum.

**ENVIRONMENTAL**

Consultant shall complete all aspects of environmental review as required under NEPA and CEQA and obtain all permits required to comply with applicable federal, state, and local environmental laws and regulations. Consultant shall pro-actively coordinate environmental review and permitting activities, in consultation with the County's Project Manager. Consultant will be expected to provide the County with active leadership in environmental review and permit decision-making, in the identification of opportunities to minimize cost, and time delays. Consultant shall coordinate with environmental permitting agencies to identify and resolve potential environmental issues as early in the decision-making process as feasible.

Consultant shall facilitate Caltrans' NEPA determination process by providing any needed technical support and by coordinating with Caltrans' environmental and technical staff as appropriate in the preparation and submittal of environmental technical information. NEPA work will include preparation and field review of the Preliminary Environmental Study (PES) and preparation of required technical studies to Caltrans satisfaction. All NEPA work shall be prepared in accordance with the Caltrans Standard Environmental Reference (SER).

Consultant shall complete all required aspects of the CEQA review process for the County as Lead Agency, including preparation of draft environmental documents, conduct of the public review process, preparation of responses to comments, preparation of final documents, and filing of all required notices. All CEQA work shall conform to the latest version of the State CEQA Guidelines.

The Consultant shall, based on its experience, specify and explain the anticipated level of NEPA and CEQA review for the project, and describe the scope of work needed to complete these processes at the specified level. This would include identification of the required environmental impact review documents and supporting technical studies as well as work required to ensure that the environmental review processes are completed in accordance with the applicable standard, and adequately documented.

Consultant shall identify and explain environmental permit requirements for the project and describe the scope of work required to obtain each permit. Potential permit requirements may include, but are not limited to the following:

- Section 404 Nationwide Permit from the U.S. Army Corps of Engineers
- Section 7 consultation with NMFS and USFWS
- Section 401 Water Quality Certification (or waiver, if applicable) from the California Regional Water Quality Control Board
- Streambed Alteration Agreement from the Department of Fish and Game
- A land use lease from the State Lands Commission
- An encroachment permit from the Central Valley Flood Protection Board

#### **APPROACH ROADWAY DESIGN:**

The Consultant shall perform roadway design in accordance with the latest version of the Caltrans Highway Design Manual and County design standards, and prepare design plans for construction. Design shall include details for traffic control plans in accordance with the Caltrans Manual of Uniform Traffic Control Devices.

#### **UTILITY DESIGN AND COORDINATION**

The Consultant shall be responsible for all electrical and lighting design that might be necessary to complete this project. A qualified licensed electrical engineer shall perform all electrical design.

The Consultant shall locate all existing utilities in the project area with the topographical survey and determine all potential conflicts. Once all existing utilities are identified in the field, the Consultant shall contact all corresponding utility companies and coordinate the relocation of all affected utilities. Consultant shall be responsible for coordinating the relocation of all existing utilities prior to the start of project construction.

#### **BRIDGE STRUCTURAL DESIGN**

The Consultant will perform structural and seismic design investigations, analysis, computations, and prepare detailed structural design plans for the proposed replacement bridge in accordance with the latest Caltrans bridge design techniques including a Foundation Study and Report and a Location Hydraulic Study. If required, a Type Selection Report shall be prepared for approval by the County and Caltrans Local Assistance. Additional tasks related to the design may include attending meetings such as design coordination meetings, pre-construction conferences, field reviews, field design inspections, and general site visits.

Standard construction materials shall be used in the design of the proposed bridge replacement wherever possible. Where specialized non-standard construction/building materials are required, the Consultant shall first obtain approval from the County prior to incorporating them into the design.

#### **HYDRAULICS**

Hydraulics items may include, but are not limited to, the items listed below. It will be the

Consultants responsibility to determine the appropriate components for proper hydraulic analysis. Some of hydraulics related reports include but are not limited to:

- Scour Report: Determine the potential abutment, contraction, and pier scour for the preferred project configuration. Determine the potential for degradation and channel migration considering historic changes in channel geometry and land use.
- Hydrologic Analysis: Identify the appropriate design flood. Prepare a flood frequency curve for the TID canal at the project site.
- Existing Condition Hydraulic Analysis: Prepare an existing condition stage discharge curve and flood profile at the bridge site. Identify the existing condition water surface profiles for the most probable 50- and 100-year floods, flood of record and identify the flow of the overtopping flood.
- Preliminary Project Hydraulic Analysis: Determine conveyance capacities and estimate the effects, if any, of the preliminary configurations on the water surface elevations of the most probable 100-year flood (FEMA Base Flood).
- Final Project Hydraulic Analysis: Prepare a final backwater model representing this bridge including additional project details. Using appropriate model, identify the water surface profiles of the Design Flood, Base Flood (most probable 100-year flood) and other floods of significance to design of the preferred bridge. Identify the minimum required conveyance capacity and the effects of the preferred bridge on risk of flood damage to structures. Determine hydraulic characteristics necessary for estimating potential scour. Prepare figures showing flood profiles and stage-discharge curves as appropriate.
- Final Report: Prepare final report with appropriate recommendations and provide two copies to the County for review.

## **RIGHT OF WAY SERVICES**

The fees for any reimbursable Preliminary Title Reports will be paid by the County. The Consultant shall tabulate the anticipated number of Preliminary Title Reports (and any associated fees) required for the project. This information shall be attached with the Fee Proposal and submitted inside the sealed envelope.

If necessary, the Consultant shall secure Rights of Entry agreements with all affected property owners.

Consultant shall be responsible for identifying any private right of way that may be affected by the Project. Consultant shall coordinate with property owners and County to acquire any required right of way in a timely fashion. Consultant shall plan right of way acquisitions so that all right of way acquisitions are complete by the time final plans are delivered to the County. At that time, the Consultant shall prepare and obtain a Right of Way Certification per Caltrans guidelines and deliver it to the County.

Consultant shall be responsible for appraisal, appraisal review, acquisition/negotiation, and if necessary, relocation assistance. The County is seeking consultants who are

able to perform and coordinate all of these tasks.

Right of way services shall be all inclusive. This means it will be Consultant responsibilities to negotiate with any property owners and to keep records (minutes) of those negotiations.

## **PLANS, SPECIFICATIONS, AND ESTIMATE (PS&E)**

### **Plans:**

- Project plans prepared by the Consultant shall be submitted to the County at the 30%, 60%, 90%, and 100% level. All identified and affected existing utilities shall be accurately indicated on the plans. Plans at 60% should be of sufficient level to start right-of-way acquisition after environmental determination is achieved. The Consultant shall coordinate each submittal with County, Caltrans and any other agency that might have a stake in the project.
- The CAD files, including all topographical data, topographical surfaces, points, alignments, sites, corridors, and pipe networks must be prepared using AutoCAD Civil 3D 2010 format. Standard Caltrans abbreviations shall be strictly used throughout. For the 100% PS&E: One bond copy stamped and signed of plans, one Mylar copy stamped and signed, and all digital CAD files in appropriate County format shall be submitted the County.

### **Specifications:**

Consultant shall prepare Special Provisions relevant to the Project that will be used by the County to advertise and construct the project. Three hard copies and one electronic copy on a CD of Special Provisions shall be delivered to the County after 100% plans are ready and signed by the engineer.

### **Estimate:**

Project estimate prepared by the Consultant shall use Caltrans standard bid item descriptions wherever possible. Three hard copies and one electronic copy on a CD of final signed and stamped engineer's estimate shall be delivered to the County after 100% plans are signed by the engineer.

## **BIDDING AND CONSTRUCTION SUPPORT**

As part of the proposal, Consultant shall include bid support services that consist of assisting the County in responding to all Requests for Information (RFI) during the Project advertisement phase.

As part of the proposal, Consultant shall include services for limited engineering construction support. These services include responding to all Requests for Information (RFI), altering project plans to address any design flaws or inconsistencies, attendance of the pre-construction meeting, review of demolition plans, review of false work and

shop drawings, and consultation for the construction contractor.

The Consultant shall modify final Mylar plans to show final location and layout of all mechanical, electrical and instrumentation equipment, piping and conduits, structures, and other facilities. As-built record drawings shall reflect change orders, accommodations, and adjustments to all improvements constructed. Final updated Mylar as-built plans must be delivered to the County in a timely manner once the construction is complete.

## **PROPOSAL REQUIREMENTS**

A Detail Scope of Services may be attached as an appendix at the end of the proposal. The Detail Scope of Services shall not show any fees. The proposal should contain a detailed scope of work that demonstrates the requisite knowledge and experience, and addresses anticipated requirements. The proposal should include all required tasks, as either proposed or optional services. The proposal should describe the methodology to be used, specific work to be performed, outcomes, and work products. The proposal shall include a risk matrix for the project.

The proposal shall not exceed 20 pages (double sided is acceptable), not including resumes, no more than one sheet per resume, except for the principals, which may not exceed 2 pages each and no more than 3 principals may be listed (i.e. Project Engineer, Bridge Engineer/Architect, Principal in charge), including a cover letter. Any attachments/appendixes (such as Detail Scope of Services) will not be counted as part of the 20-page proposal limit. A digital copy of the proposal, in PDF format, shall be included with the original proposal.

The proposal should be succinct. The submitted material should focus on technical content that demonstrates experience and understanding in the environmental process, bridge design and the availability and commitment of the firm and its team. Elaborate or glossy proposals are neither expected nor desired.

In its proposal to the County for doing all-inclusive (turnkey) consulting work for the Project, the consultant will provide the County with an outline of all tasks. Suggested outline is Caltrans WBS format. The outline will not be counted as part of the page limit.

- The Consultant shall follow Caltrans Local Agency Procedure Manual (LAPM) for Federal Aid projects.
- As relevant studies are developed for this project, it is possible that discoveries might be made that would require the consultant to perform additional work for this project. Therefore, with this proposal, the consultant is to include a risk matrix that identifies potential risks and analyzes them as to cost, scope, and schedule impacts. The Risk Matrix will not be counted as part of the 20-page limit.
- In terms of environmental work, the Consultant is to submit a proposal based on the level of environmental assessment anticipated to be required by Caltrans environmental review for the Project. For the purposes of this proposal, the Consultant is to make reasonable assumption as to the level of environmental assessment and provide an explanation of their choice regarding the level of anticipated environmental assessment. The environmental sub-consultant shall follow the Caltrans Standard Environmental Reference (see [www.dot.ca.gov/ser](http://www.dot.ca.gov/ser)).
- The Consultant must include in their proposal a preliminary engineering construction cost estimate for budgeting purposes for all anticipated proposed construction alternatives.

**DBE Requirements:**

- The agency has established a DBE goal for this contract of 12.50%.
- Use attachment(s) 3, 4, 5, etc.

## **SELECTION PROCEDURE**

The County shall select the Consultant based on the following procedure:

- Receive and evaluate the proposal and develop a short list.
- Check consultant' DBE participation.
- If necessary, select and notify consultants to be interviewed.
- Develop final ranking of Consultants.
- Notify Consultants of the results.
- Conduct project-scoping meeting with top ranked Consultant.
- Negotiate Contract with top ranked Consultant. If an agreement on the scope of services and compensation cannot be reached, negotiations with the top ranked Consultant will be closed, and negotiations with the next-highest ranked Consultant will be opened. The process is repeated until a contract is successfully negotiated.
- The selection process will follow Public Works' procedures for consultant selection, which generally follow Caltrans procedures. Consultants are chosen based on qualifications and the quality of the proposal as shown in Attachment 7 - Suggested Evaluation Sheet.



## **PROPOSAL SUBMITTAL**

Only that information specifically requested shall be submitted. If a Consultant recognizes a more efficient method of accomplishing specific tasks or items, the Consultant's fees shall reflect the County's requested work, and the cost increase/savings for the more efficient method shall be noted separately.

**If you wish to be considered for this project, submit three (3) hard copies of your proposal to this office by 5:00 p.m., on May 30, 2014 to:**

Sambath Chrun, Associate Civil Engineer  
Stanislaus County Department of Public Works  
1716 Morgan Road  
Modesto, CA 95358

Also, provide an electronic copy of your proposal (not including contents inside sealed Fee Schedule envelope) in PDF format. Include with the proposal, in a **SEPARATE, SEALED ENVELOPE**, your fee proposal. The fee proposal must separate the project into functional tasks, (Project Management, Environmental/Permits, Civil, Traffic/Electrical, Right of Way/Public Relations, etc.), and provide the associated fees (not to exceed amount) that define the work to be accomplished. The fee proposal shall include hourly rates for staff and unit prices for various tasks for this project. Sub-consultant fees must be clearly indicated (if applicable).

The successful firm shall be required to enter into a Professional Design Services Agreement with Stanislaus County for the work to be performed. A sample Professional Design Services Agreement is included with this Request for Proposal. The consultant shall state in the submitted proposal that the firm has reviewed the Sample Professional Design Services Agreement, will meet all of the terms and conditions if selected by the County for the requested services, and be able to sign the agreement as-is with no changes.

A copy of this Request for Proposal is available for viewing and download on the Modesto Reprographics website at [www.modestopianroom.com](http://www.modestopianroom.com). Please contact Modesto Reprographics at (209) 544-2400 for assistance using the website if needed. All questions regarding the RFP must be submitted **in writing**. Questions shall be submitted to Sambath Chrun at [chruns@stancounty.com](mailto:chruns@stancounty.com). Addendums, if necessary, will be posted on the Modesto Reprographics website.

**Attachment A1**  
**Sample Fee Proposal**

This is a "sample" for consultant's fees. The task shown below are for example purposes only and are not to be use to define project scope.

Total cost for listed resources in \$

NO.	Task Description	Name of Prime Consultant						Sub-Consultant 1			Optional Services			Grand Total Hours	Other Direct Costs	Grand Total Cost	Optional Cost	
		Name Title	Name Title	Name Title	Name Title	Total Hours	Direct Costs	Total Cost	Total Hours	Direct Costs	Total Cost	Total Hours	Direct Costs					Total Cost
		\$	\$	\$	\$													
1	Project Management																	
	1.1																	
	1.2																	
2	Topographic Survey																	
	1.1																	
	1.2																	
3	Geotechnical Investigation																	
	1.1																	
	1.2																	
4	Environmental / Permitting																	
	1.1																	
	1.2																	
5	Public Outreach																	
	1.1																	
	1.2																	
6	Right of Way																	
	1.1																	
	1.2																	
7	PS&E																	
	1.1																	
	1.2																	
8	Construction Support																	
	1.1																	
	1.2																	
	TOTAL HOURS																	
	TOTAL COST																	

\*Other Direct Costs such as material reproduction, travel and project specific materials, etc shall be included in overhead rate and not charged separately

## **Attachment A2**

### **Exhibit 10-I**

#### **Notice to Proposers DBE Information**

**EXHIBIT 10-I NOTICE TO PROPOSERS DBE INFORMATION**

The Agency has established a DBE goal for this Contract of \_\_\_\_\_%

OR

The Agency has not established a goal for this Contract. However, proposers are encouraged to obtain DBE participation for this contract.

**1. TERMS AS USED IN THIS DOCUMENT**

- The term “Disadvantaged Business Enterprise” or “DBE” means a for-profit small business concern owned and controlled by a socially and economically disadvantaged person(s) as defined in Title 49, Code of Federal Regulations (CFR), Part 26.5.
- The term “Agreement” also means “Contract.”
- Agency also means the local entity entering into this contract with the Contractor or Consultant.
- The term “Small Business” or “SB” is as defined in 49 CFR 26.65.

**2. AUTHORITY AND RESPONSIBILITY**

- A. DBEs and other small businesses are strongly encouraged to participate in the performance of Contracts financed in whole or in part with federal funds (See 49 CFR 26, “Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs”). The Consultant must ensure that DBEs and other small businesses have the opportunity to participate in the performance of the work that is the subject of this solicitation and should take all necessary and reasonable steps for this assurance. The proposer must not discriminate on the basis of race, color, national origin, or sex in the award and performance of subcontracts.
- B. Proposers are encouraged to use services offered by financial institutions owned and controlled by DBEs.

**3. SUBMISSION OF DBE INFORMATION**

If there is a DBE goal on the contract, Exhibit 10-O1 *Consultant Proposal DBE Commitment* must be included in the Request for Proposal. In order for a proposer to be considered responsible and responsive, the proposer must make good faith efforts to meet the goal established for the contract. If the goal is not met, the proposer must document adequate good faith efforts. All DBE participation will be counted towards the contract goal; therefore, all DBE participation shall be collected and reported.

Exhibit 10-O2 *Consultant Contract DBE Information* must be included with the Request for Proposal. Even if no DBE participation will be reported, the successful proposer must execute and return the form.

**4. DBE PARTICIPATION GENERAL INFORMATION**

It is the proposer’s responsibility to be fully informed regarding the requirements of 49 CFR, Part 26, and the Department’s DBE program developed pursuant to the regulations. Particular attention is directed to the following:

- A. A DBE must be a small business firm defined pursuant to 13 CFR 121 and be certified through the California Unified Certification Program (CUCP).

- B. A certified DBE may participate as a prime consultant, subconsultant, joint venture partner, as a vendor of material or supplies, or as a trucking company.
- C. A DBE proposer not proposing as a joint venture with a non-DBE, will be required to document one or a combination of the following:
  - 1. The proposer is a DBE and will meet the goal by performing work with its own forces.
  - 2. The proposer will meet the goal through work performed by DBE subconsultants, suppliers or trucking companies.
  - 3. The proposer, prior to proposing, made adequate good faith efforts to meet the goal.
- D. A DBE joint venture partner must be responsible for specific contract items of work or clearly defined portions thereof. Responsibility means actually performing, managing, and supervising the work with its own forces. The DBE joint venture partner must share in the capital contribution, control, management, risks and profits of the joint venture commensurate with its ownership interest.
- E. A DBE must perform a commercially useful function pursuant to 49 CFR 26.55, that is, a DBE firm must be responsible for the execution of a distinct element of the work and must carry out its responsibility by actually performing, managing and supervising the work.
- F. The proposer shall list only one subconsultant for each portion of work as defined in their proposal and all DBE subconsultants should be listed in the bid/cost proposal list of subconsultants.
- G. A prime consultant who is a certified DBE is eligible to claim all of the work in the Contract toward the DBE participation except that portion of the work to be performed by non-DBE subconsultants.

## 5. RESOURCES

- A. The CUCP database includes the certified DBEs from all certifying agencies participating in the CUCP. If you believe a firm is certified that cannot be located on the database, please contact the Caltrans Office of Certification toll free number 1-866-810-6346 for assistance.
- B. Access the CUCP database from the Department of Transportation, Office of Business and Economic Opportunity Web site at: <http://www.dot.ca.gov/hq/bep/>.
  - 1. Click on the link in the left menu titled *Disadvantaged Business Enterprise*;
  - 2. Click on Search for a DBE Firm link;
  - 3. Click on *Access to the DBE Query Form* located on the first line in the center of the page.

Searches can be performed by one or more criteria. Follow instructions on the screen.

## 6. MATERIALS OR SUPPLIES PURCHASED FROM DBES COUNT TOWARDS THE DBE GOAL UNDER THE FOLLOWING CONDITIONS:

- A. If the materials or supplies are obtained from a DBE manufacturer, count 100 percent of the cost of the materials or supplies. A DBE manufacturer is a firm that operates or maintains a factory, or establishment that produces on the premises the materials, supplies, articles, or equipment required under the Contract and of the general character described by the specifications.
- B. If the materials or supplies purchased from a DBE regular dealer, count 60 percent of the cost of the materials or supplies. A DBE regular dealer is a firm that owns, operates or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a DBE regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the

purchase and sale or lease of the products in question. A person may be a DBE regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone or asphalt without owning, operating or maintaining a place of business provided in this section.

- C. If the person both owns and operates distribution equipment for the products, any supplementing of regular dealers' own distribution equipment shall be, by a long-term lease agreement and not an ad hoc or Agreement-by-Agreement basis. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not DBE regular dealers within the meaning of this section.
- D. Materials or supplies purchased from a DBE, which is neither a manufacturer nor a regular dealer, will be limited to the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on the job site, provided the fees are reasonable and not excessive as compared with fees charged for similar services.

## **Attachment A3**

### **Exhibit 10-J**

# **Standard Agreement for Sub-Consultants/DBE Participation**



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**EXHIBIT 10-J STANDARD CONTRACT PROVISIONS FOR SUBCONSULTANT/DBE PARTICIPATION****1. Subconsultants**

- A. Nothing contained in this Contract or otherwise, shall create any contractual relation between the Agency and any subconsultants, and no subcontract shall relieve the Consultant of his/her responsibilities and obligations hereunder. The Consultant agrees to be as fully responsible to the Agency for the acts and omissions of its subconsultants 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 Consultant. The Consultant's obligation to pay its subconsultants is an independent obligation from the Agency's obligation to make payments to the Consultant.
- 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 subconsultants.
- C. Consultant shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to the Consultant by the Agency.
- D. Any substitution of subconsultants must be approved in writing by the Agency's Contract Administrator in advance of assigning work to a substitute subconsultant.

**2. Disadvantaged Business Enterprise (DBE) Participation**

- A. This Contract 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.
- B. If the contract has a DBE goal, the Consultant must meet the 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. A DBE is a firm meeting the definition of a DBE as specified in 49 CFR.
- C. DBEs and other small businesses, as defined in 49 CFR, Part 26 are encouraged to participate in the performance of contracts financed in whole or in part with federal funds. The Consultant or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. 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 Contract, which may result in the termination of this Contract or such other remedy as the local agency deems appropriate.
- D. Any subcontract entered into as a result of this Contract shall contain all of the provisions of this section.
- E. A DBE may be terminated only with prior written approval from the local agency and only for the reasons specified in 49 CFR 26.53(f). Prior to requesting local agency consent for the termination, the prime consultant must meet the procedural requirements specified in 49 CFR 26.53(f).

**3. Performance of DBE Consultant and other DBE Subconsultants/Suppliers**

- A. A DBE performs a commercially useful function when it is responsible for execution of the work of the Contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible with respect to materials and supplies used on the Contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, evaluate the amount of work subcontracted, industry practices; whether the amount the firm is to be paid under the Contract is commensurate with the work it is actually performing; and other relevant factors.
- B. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, Contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, examine similar transactions, particularly those in which DBEs do not participate.
- C. If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its Contract with its own work force, or the DBE subcontracts a greater portion of the work of the Contract than would be expected on the basis of normal industry practice for the type of work involved, it will be presumed that it is not performing a commercially useful function.

**4. Prompt Payment of Funds Withheld to Subconsultants**

- A. Any subcontract entered into as a result of this Contract shall contain all of the provisions of this section.  
*(Local agency to include either B, C, or D below; delete the other two.)*
- B. No retainage will be withheld by the Agency from progress payments due the prime Consultant. Retainage by the prime Consultant or subconsultants is prohibited, and no retainage will be held by the prime Consultant from progress due subconsultants. Any violation of this provision shall subject the violating prime Consultant or subconsultants to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the prime Consultant or subconsultant in the event of a dispute involving late payment or nonpayment by the prime Consultant or deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime Consultants and subconsultants.
- C. No retainage will be held by the Agency from progress payments due the prime Consultant. Any retainage held by the prime Consultant or subconsultants from progress payments due subconsultants shall be promptly paid in full to subconsultants within 30 days after the subconsultant's work is satisfactorily completed. Federal law (49 CFR26.29) requires that any delay or postponement of payment over the 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 consultant, deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime consultant and subconsultants.

- D. 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 consultant 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 Consultant, deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime consultant and subconsultants.

#### **5. DBE Records**

- A. The Consultant shall maintain records of materials purchased or supplied from all subcontracts entered into with certified DBEs. The records shall show the name and business address of each DBE or vendor and the total dollar amount actually paid each DBE or vendor, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all firms. DBE prime consultants shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.
- B. Upon completion of the Contract, a summary of these records shall be prepared and submitted on the form entitled, "Final Report-Utilization of Disadvantaged Business Enterprise (DBE), First-Tier Subconsultants," CEM-2402F (Exhibit 17-F, Chapter 17, of the LAPM), certified correct by the Consultant or the Consultant's authorized representative and shall be furnished to the Contract Administrator with the final invoice. Failure to provide the summary of DBE payments with the final invoice will result in 25 percent 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 Subconsultants" is submitted to the Contract Administrator.

#### **6. DBE Certification and Decertification Status**

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

## **Attachment A4**

### **Exhibit 10-O1**

**Consultant Proposal DBE Commitment  
(\*Required to be submitted with proposal)**

**EXHIBIT 10-01 CONSULTANT PROPOSAL DBE COMMITMENT**

(Inclusive of all DBEs listed at bid proposal. Refer to instructions on the reverse side of this form)

<b>Consultant to Complete this Section</b>			
1. Local Agency Name: _____			
2. Project Location: _____			
3. Project Description: _____			
4. Consultant Name: _____			
5. Contract DBE Goal %: _____			
<b>DBE Commitment Information</b>			
6. Description of Services to be Provided	7. DBE Firm Contact Information	8. DBE Cert. Number	9. DBE %
<b>Local Agency to Complete this Section</b>		10. Total % Claimed	%
16. Local Agency Contract Number: _____			
17. Federal-aid Project Number: _____			
18. Proposed Contract Execution Date: _____			
Local Agency certifies that all DBE certifications are valid and the information on this form is complete and accurate:		11. Preparer's Signature _____	
19. Local Agency Representative Name (Print) _____		12. Preparer's Name (Print) _____	
20. Local Agency Representative Signature _____		13. Preparer's Title _____	
21. Date _____		14. Date _____	
22. Local Agency Representative Title _____		15. (Area Code) Tel. No. _____	
23. (Area Code) Tel. No. _____			

**Distribution:** (1) Original – Consultant submits to local agency with proposal  
 (2) Copy – Local Agency files

**INSTRUCTIONS - CONSULTANT PROPOSAL DBE COMMITMENT****Consultant Section***The Consultant shall:*

1. **Local Agency Name** - Enter the name of the local or regional agency that is funding the contract.
2. **Project Location** - Enter the project location as it appears on the project advertisement.
3. **Project Description** - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc.).
4. **Consultant Name** - Enter the consultant's firm name.
5. **Contract DBE Goal %** - Enter the contract DBE goal percentage, as it was reported on the Exhibit 10-1 *Notice to Proposers DBE Information* form. See LAPM Chapter 10.
6. **Description of Services to be Provided** - Enter item of work description of services to be provided. Indicate all work to be performed by DBEs including work performed by the prime consultant's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
7. **DBE Firm Contact Information** - Enter the name and telephone number of all DBE subcontracted consultants. Also, enter the prime consultant's name and telephone number, if the prime is a DBE.
8. **DBE Cert. Number** - Enter the DBEs Certification Identification Number. All DBEs must be certified on the date bids are opened. (DBE subcontracted consultants should notify the prime consultant in writing with the date of the decertification if their status should change during the course of the contract.)
9. **DBE %** - Percent participation of work to be performed or service provided by a DBE. Include the prime consultant if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.
10. **Total % Claimed** - Enter the total DBE participation claimed. If the Total % Claimed is less than item "6. Contract DBE Goal", an adequately documented Good Faith Effort (GFE) is required (see Exhibit 15-11 *DBE Information - Good Faith Efforts* of the LAPM).
11. **Preparer's Signature** - The person completing this section of the form for the consultant's firm must sign their name.
12. **Preparer's Name (Print)** - Clearly enter the name of the person signing this section of the form for the consultant.
13. **Preparer's Title** - Enter the position/title of the person signing this section of the form for the consultant.
14. **Date** - Enter the date this section of the form is signed by the preparer.
15. **(Area Code) Tel. No.** - Enter the area code and telephone number of the person signing this section of the form for the consultant.

**Local Agency Section:***The Local Agency representative shall:*

16. **Local Agency Contract Number** - Enter the Local Agency Contract Number.
17. **Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
18. **Contract Execution Date** - Enter date the contract was executed and Notice to Proceed issued. See LAPM Chapter 10, page 23.
19. **Local Agency Representative Name (Print)** - Clearly enter the name of the person completing this section.
20. **Local Agency Representative Signature** - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Consultant Section of this form is complete and accurate.
21. **Date** - Enter the date the Local Agency Representative signs the form.
22. **Local Agency Representative Title** - Enter the position/title of the person signing this section of the form.
23. **(Area Code) Tel. No.** - Enter the area code and telephone number of the Local Agency representative signing this section of the form.

## **Attachment A5**

### **Exhibit 10-O2**

**Consultant Contract DBE Information  
(\*Required to be submitted with proposal)**

**EXHIBIT 10-O2 CONSULTANT CONTRACT DBE INFORMATION**

(Inclusive of all DBEs listed at contract award. Refer to instructions on the reverse side of this form)

<b>Consultant to Complete this Section</b>			
1. Local Agency Name: _____			
2. Project Location: _____			
3. Project Description: _____			
4. Total Contract Award Amount: \$ _____			
5. Consultant Name: _____			
6. Contract DBE Goal %: _____			
7. Total Dollar Amount for <u>all</u> Subconsultants: \$ _____			
8. Total Number of <u>all</u> Subconsultants: _____			
<b>Award DBE/DBE Information</b>			
9. Description of Services to be Provided	10. DBE/DBE Firm Contact Information	11. DBE Cert. Number	12. DBE Dollar Amount
<b>Local Agency to Complete this Section</b>		13. Total Dollars Claimed \$ _____	14. Total % Claimed _____ %
20. Local Agency Contract Number: _____			
21. Federal-aid Project Number: _____		Local Agency certifies that all DBE certifications are valid and the information on this form is complete and accurate:	
22. Contract Execution Date: _____			
23. Local Agency Representative Name (Print) _____		15. Preparer's Signature _____	
24. Local Agency Representative Signature _____	25. Date _____		
26. Local Agency Representative Title _____		16. Preparer's Name (Print) _____	
27. (Area Code) Tel. No. _____		17. Preparer's Title _____	
<b>Caltrans to Complete this Section</b>			
Caltrans District Local Assistance Engineer (DLAE) certifies that this form has been reviewed for completeness:			
28. DLAE Name (Print) _____	29. DLAE Signature _____	18. Date _____	
30. Date _____	19. (Area Code) Tel. No. _____		

**Distribution:** (1) Copy – Email a copy to the Caltrans District Local Assistance Engineer (DLAE) within 30 days of contract award. Failure to send a copy to the DLAE within 30 days of contract award may result in delay of payment.  
 (2) Copy – Include in award package sent to Caltrans DLAE  
 (3) Original – Local agency files



**INSTRUCTIONS - CONSULTANT CONTRACT AWARD DBE INFORMATION****Consultant Section***The Consultant shall:*

1. **Local Agency Name** – Enter the name of the local or regional agency that is funding the contract.
2. **Project Location** - Enter the project location as it appears on the project advertisement.
3. **Project Description** - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc).
4. **Total Contract Award Amount** - Enter the total contract award dollar amount for the prime consultant.
5. **Consultant Name** - Enter the consultant's firm name.
6. **Contract DBE Goal %** - Enter the contract DBE goal percentage, as it was reported on the Exhibit 10-J *Notice to Proposers DBE Information* form. See LAPM Chapter 10.
7. **Total Dollar Amount for all Subconsultants** – Enter the total dollar amount for all subcontracted consultants. SUM = (DBE's + all Non-DBE's). Do **not** include the prime consultant information in this count.
8. **Total number of all subconsultants** – Enter the total number of all subcontracted consultants. SUM = (DBE's + all Non-DBE's). Do **not** include the prime consultant information in this count.
9. **Description of Services to be Provided** - Enter item of work description of services to be provided. Indicate all work to be performed by DBEs including work performed by the prime consultant's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
10. **DBE Firm Contact Information** - Enter the name and telephone number of all DBE subcontracted consultants. Also, enter the prime consultant's name and telephone number, if the prime is a DBE.
11. **DBE Cert. Number** - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened. (DBE subcontracted consultants should notify the prime consultant in writing with the date of the decertification if their status should change during the course of the contract.)
12. **DBE Dollar Amount** - Enter the subcontracted dollar amount of the work to be performed or service to be provided. Include the prime consultant if the prime is a DBE, and include DBEs that are not identified as subconsultants on the Exhibit 10-O1 *Consultant Proposal DBE Commitment* form. See LAPM Chapter 9 for how to count full/partial participation.
13. **Total Dollars Claimed** – Enter the total dollar amounts for column 13.
14. **Total % Claimed** – Enter the total DBE participation claimed for column 13. SUM = (item "14. Total Participation Dollars Claimed" divided by item "4. Total Contract Award Amount"). If the Total % Claimed is less than item "6. Contract DBE Goal", an adequately documented Good Faith Effort (GFE) is required (see Exhibit 15-H *DBE Information - Good Faith Efforts* of the LAPM).
15. **Preparer's Signature** – The person completing this section of the form for the consultant's firm must sign their name.
16. **Preparer's Name (Print)** - Clearly enter the name of the person signing this section of the form for the consultant.
17. **Preparer's Title** - Enter the position/title of the person signing this section of the form for the consultant.
18. **Date** - Enter the date this section of the form is signed by the preparer.
19. **(Area Code) Tel. No.** - Enter the area code and telephone number of the person signing this section of the form for the consultant.

**Local Agency Section:***The Local Agency representative shall:*

20. **Local Agency Contract Number** - Enter the Local Agency Contract Number.
21. **Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
22. **Contract Execution Date** - Enter the date the contract was executed and Notice to Proceed issued. See LAPM Chapter 10, page 23.
23. **Local Agency Representative Name (Print)** - Clearly enter the name of the person completing this section.
24. **Local Agency Representative Signature** - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Consultant Section of this form is complete and accurate.
25. **Date** - Enter the date the Local Agency Representative signs the form.
26. **Local Agency Representative Title** - Enter the position/title of the person signing this section of the form.
27. **(Area Code) Tel. No.** - Enter the area code and telephone number of the Local Agency representative signing this section of the form.

**Caltrans Section:***Caltrans District Local Assistance Engineer (DLAE) shall:*

28. **DLAE Name (Print)** - Clearly enter the name of the DLAE.
29. **DLAE Signature** – DLAE must sign this section of the form to certify that it has been reviewed for completeness.
30. **Date** - Enter the date that the DLAE signs this section the form.

## **Attachment A6**

### **Sample Design Services Agreement and Addendum to Professional Design Services**

# SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

## STANISLAUS COUNTY PROFESSIONAL DESIGN SERVICES AGREEMENT

This Agreement is made and entered into by and between the County of Stanislaus, a political subdivision of the State of California, hereinafter referred to as "County" and hereinafter referred to as "Consultant".

**NOW, THEREFORE**, for and in consideration of the mutual covenants and conditions contained herein, the parties hereby agree as follows:

### 1.0 PROFESSIONAL SERVICES TO BE PROVIDED BY CONSULTANT

1.1. Scope of Services: Consultant shall provide the professional services described in the County's Request for Proposal ("RFP") attached hereto as Exhibit "A" and incorporated herein by reference and Consultant's Response to County's RFP (the "Response"). A copy of said Response is attached hereto as Exhibit "B" and incorporated herein by this reference.

1.2. Professional Practices: All professional services to be provided by Consultant pursuant to this Agreement shall be provided by personnel experienced in their respective fields and in a manner consistent with the standards of care, diligence and skill ordinarily exercised by professional consultants in similar fields and circumstances in accordance with sound professional practices. Consultant also represents that it is familiar with all laws that may affect its performance of this Agreement and shall advise County of any changes in any laws that may affect Consultant's performance of this Agreement.

1.3. Representations: Consultant represents that it has reviewed the RFP and that in its professional judgment the services to be performed under this Agreement can be performed within the maximum fee set forth herein below and within the time specified in the Project Schedule attached hereto. Consultant represents that it is qualified to perform the professional services required by this Agreement and possesses the necessary licenses and permits required to perform said services. Consultant represents that it has no interest and shall not acquire any interest direct or indirect which conflicts, or has the appearance of conflicting, in any manner or degree with the performance of the work and services under this Agreement.

1.4. Compliance with Laws. Consultant agrees that it shall perform the services required by this Agreement in compliance with all applicable Federal and California laws including, but not limited to, those laws related to minimum hours and wages; occupational health and safety; fair employment and employment practices; workers' compensation insurance and safety in employment; and all other Federal, State and local laws and ordinances applicable to the services required under this Agreement.

1.5. Non-Discrimination. During the performance of this Agreement, Consultant and

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

its officers, employees, agents, representatives or subcontractors shall not unlawfully discriminate in violation of any federal, state or local law, rule or regulation against any employee, applicant for employment or person receiving services under this Agreement because of race, religion, color, national origin, ancestry, physical or mental disability, medical condition (including genetic characteristics), marital status, age, political affiliation, sex or sexual orientation. Consultant and its officers, employees, agents, representatives or subcontractors shall comply with all applicable Federal, State and local laws and regulations related to non-discrimination and equal opportunity, including without limitation the County's nondiscrimination policy; the Fair Employment and Housing Act (Government Code sections 12900 et seq.); California Labor Code sections 1101, 1102 and 1102.1; the Federal Civil Rights Act of 1964 (P.L. 88-352), as amended; and all applicable regulations promulgated in the California Code of Regulations or the Code of Federal Regulations.

1.6. Non-Exclusive Agreement. Consultant acknowledges that County may enter into agreements with other consultants for services similar to the services that are subject to this Agreement or may have its own employees perform services similar to those services contemplated by this Agreement.

1.7. Delegation and Assignment. This is a personal service contract, and the duties set forth herein shall not be delegated or assigned to any person or entity without the prior written consent of County. Consultant may engage a subcontractor(s) as permitted by law and may employ other personnel to perform services contemplated by this Agreement at Consultant's sole cost and expense.

1.8. Covenant Against Contingent Fees. 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 local agency 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.

## 2.0 COMPENSATION AND BILLING

2.1. Compensation. Consultant shall be paid in accordance with the fee schedule set forth in Exhibit "C", attached hereto and made a part of this Agreement (the "Fee Schedule"). Consultant's compensation shall in no case exceed \_\_\_\_\_ . Consultant will be compensated on a time and materials basis, based on the hours worked by the Consultant's employees or subcontractors at the hourly rates specified in the Fee Schedule. The Fee Schedule rates include direct salary costs, employee benefits, and overhead. The rates stated

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

in the Fee Schedule are not adjustable during the term of this Agreement. The County may retain ten percent of all periodic or progress payments made to the Consultant until completion and acceptance of all work tasks and County shall have right to withhold payment from Consultant for any unsatisfactory service until such time service is performed satisfactorily.

2.2. Reimbursements. In addition to the aforementioned fees, Consultant will be reimbursed for any expenses specifically set forth in each Project Scope of Work. All such reimbursement amounts are limited to those costs and expenses that are reasonable, necessary and actually incurred by the Consultant in connection with the services provided. The County shall not pay a mark up on any item of reimbursement. The County shall not pay for any item of overhead such as telephone, facsimile, postage, etc. All requests for reimbursement shall be accompanied by a copy of the original invoice.

2.3. Additional Services. Consultant shall not receive compensation for any services provided outside the scope of services specified in Exhibits A and B unless the County or the Project Manager for this Project, prior to Consultant performing the additional services, approves such additional services in writing. It is specifically understood that oral requests and/or approvals of such additional services or additional compensation shall be barred and are unenforceable.

2.4. Method of Billing. Consultant may submit invoices to County's Project Manager for approval on a progress basis, but no more often than once each calendar month. Said invoice shall be based on the total of all Consultants' services that have been completed to County's sole satisfaction. County shall pay Consultant's invoice within forty-five (45) days from the date County receives said invoice. Each invoice shall describe in detail, the services performed and the associated percentage of tasks completed. Any additional services approved and performed pursuant to this Agreement shall be designated as "Additional Services" and shall identify the number of the authorized change order, where applicable, on all invoices.

2.5. Records and Audits. Records of Consultant's services relating to this Agreement shall be maintained in accordance with generally recognized accounting principles and shall be made available to County or its Project Manager for inspection and/or audit at mutually convenient times for a period of three (3) years from the termination of this Agreement.

### **3.0 TIME OF PERFORMANCE**

3.1. Commencement and Completion of Work. The professional services to be performed pursuant to this Agreement shall commence within five (5) days after County delivers its Notice to Proceed. Said services shall be performed in strict compliance with the Project Schedule approved by County as set forth in Exhibit "D", attached hereto and incorporated herein by this reference. The Project Schedule may be amended by mutual agreement of the parties. Failure to commence work in a timely manner and/or diligently pursue work to

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

completion may be grounds for termination of this Agreement.

3.2. Excusable Delays. Neither party shall be responsible for delays or lack of performance resulting from acts beyond the reasonable control of the party or parties. Such acts shall include, but not be limited to, acts of God, fire, strikes, material shortages, compliance with laws or regulations, riots, acts of war, or any other conditions beyond the reasonable control of a party.

### **4.0 TERM OF CONTRACT AND TERMINATION**

4.1. Term. This Agreement shall commence upon approval by the County's Board of Supervisors and continue until the work required herein is completed, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

4.2. Notice of Termination. The County reserves and has the right and privilege of canceling, suspending or abandoning the execution of all or any part of the work contemplated by this Agreement, with or without cause, at any time, by providing written notice to Consultant. The termination of this Agreement shall be deemed effective upon receipt of the notice of termination. In the event of such termination, Consultant shall immediately stop rendering services under this Agreement unless directed otherwise by the County.

4.3. Compensation. In the event of termination, County shall pay Consultant for reasonable costs incurred and professional services satisfactorily performed up to and including the date of County's written notice of termination. Compensation for work in progress shall be prorated as to the percentage of work completed as of the effective date of termination in accordance with the fees set forth in Exhibit "C". In ascertaining the professional services actually rendered hereunder up to the effective date of termination of this Agreement, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents pertaining to the services contemplated herein whether delivered to the County or in the possession of the Consultant.

4.4. Documents. In the event of termination of this Agreement, all documents prepared by Consultant in its performance of this Agreement including, but not limited to, finished or unfinished design, development and construction documents, data studies, drawings, maps and reports, shall be delivered to the County within ten (10) days of delivery of termination notice to Consultant, at no cost to County. Any use of uncompleted documents without specific written authorization from Consultant shall be at County's sole risk and without liability or legal expense to Consultant.

### **5.0 INSURANCE REQUIREMENTS**

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

5.1. Minimum Scope and Limits of Insurance. Consultant, at its sole cost and expense, for the full term of this Agreement (and any extensions thereof), shall obtain and maintain, at minimum, compliance with all of the following insurance coverage(s) and requirements. If Consultant normally carries insurance in an amount greater than the minimum amount listed below, that greater amount shall become the minimum required amount of insurance for purposes of this Agreement. The insurance listed below shall have a retroactive date of placement prior to, or coinciding with, the date services are first provided that are governed by the terms of this Agreement:

- (a) Comprehensive general liability, including premises-operations, products/completed operations, broad form property damage, blanket contractual liability, independent contractors, personal injury with a policy limit of not less than One Million Dollars (\$1,000,000), combined single limits, per occurrence and aggregate. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to any act or omission by Consultant under this Agreement or the general aggregate limit shall be twice the required occurrence limit.
- (b) Automobile liability for owned vehicles, hired, and non-owned vehicles, with a policy limit of not less than One Million Dollars (\$1,000,000), combined single limits, per occurrence and aggregate.
- (c) Workers' compensation insurance as required by the State of California.
- (d) Professional errors and omissions ("E&O") liability insurance with policy limits of not less than One Million Dollars (\$1,000,000), combined single limit for each occurrence. If Consultant cannot provide an occurrence policy, Consultant shall provide insurance covering claims made as a result of performance of Work on this Project and shall maintain such insurance in effect for not less than three years following Final Completion of the Project.

5.2. Endorsements. The Consultant shall obtain a specific endorsement to all required insurance policies, except Professional Liability insurance and Workers Compensation insurance, naming the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers as additional insureds for at least three years after the completion of the work to be performed under this Agreement, but, to the extent that any insurance issued to Consultant in effect after the expiration of three years provides additional insured coverage to parties Consultant agreed in writing to name as an additional insured, then Consultant shall have the obligation under this contract to obtain such additional insured coverage for the County, under any and all policies Consultant has regarding:

- (a) Liability arising from or in connection with the performance or omission to perform any term or condition of this Agreement by or on behalf of the Consultant, including the insured's general supervision of its subcontractors;
- (b) Ongoing services, products and completed operations of the Consultant;
- (c) Premises owned, occupied or used by the Consultant; and

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

- (d) Automobiles owned, leased, hired or borrowed by the Consultant.
- (e) For Workers' Compensation insurance, the insurance carrier shall agree to waive all rights of subrogation against the County, its officers, officials and employees for losses arising from the performance of or the omission to perform any term or condition of this Agreement by the Consultant.

5.3. Deductibles: Any deductibles, self-insured retentions or named insureds must be declared in writing and approved by County. At the option of the County, either: (a) the insurer shall reduce or eliminate such deductibles, self-insured retentions or named insureds, or (b) the Consultant shall provide a bond, cash, letter of credit, guaranty or other security satisfactory to the County guaranteeing payment of the self-insured retention or deductible and payment of any and all costs, losses, related investigations, claim administration and defense expenses. The County, in its sole discretion, may waive the requirement to reduce or eliminate deductibles or self-insured retentions, in which case, the Consultant agrees that it will be responsible for and pay any self-insured retention or deductible and will pay any and all costs, losses, related investigations, claim administration and defense expenses related to or arising out of the Consultant's defense and indemnification obligations as set forth in this Agreement.

5.4. Certificates of Insurance: At least ten (10) days prior to the date the Consultant begins performance of its obligations under this Agreement, Consultant shall furnish County with certificates of insurance, and with original endorsements, showing coverage required by this Agreement, including, without limitation, those that verify coverage for subcontractors of the Consultant. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements shall be received and, in County's sole and absolute discretion, approved by County. County reserves the right to require complete copies of all required insurance policies and endorsements, at any time.

5.5. Non-limiting: Nothing in this Section or the insurance described herein shall be construed as limiting in any way, the indemnification provisions contained in this Agreement, or the liability of Consultant and Consultant's officers, employees, agents, representatives or subcontractors for payments of damages to persons or property.

5.6. Primary Insurance: The Consultant's insurance coverage shall be primary insurance regarding the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers. Any insurance or self-insurance maintained by the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers shall be excess of the Consultant's insurance and shall not contribute with Consultant's insurance. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the County or its officers, officials and employees. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability. Any and all insurances carried by it shall be deemed liability coverage for any and all actions it performs in connection with this Contract.



## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

5.7. Cancellation of Insurance: Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party except after thirty (30) days prior written notice has been given to County. The Consultant shall promptly notify, or cause the insurance carrier to promptly notify, the County of any change in the insurance policy or policies required under this Agreement, including, without limitation, any reduction in coverage or in limits of the required policy or policies. Consultant shall maintain such coverage in effect for three (3) years after substantial completion of the project to the extent it is commercially available at reasonable rates.

5.8. California Admitted Insurer: Insurance shall be placed with California admitted insurers (licensed to do business in California) with a current rating by Best's Key Rating Guide of no less than A-:VII; provided, however, that if no California admitted insurance company provides the required insurance, it is acceptable to provide the required insurance through a United States domiciled carrier that meets the required Best's rating and that is listed on the current List of Eligible Surplus Line Insurers maintained by the California Department of Insurance.

5.9. Subcontractors: Consultant shall require that all of its subcontractors are subject to the insurance and indemnity requirements stated herein, or shall include all subcontractors as additional insureds under its insurance policies.

### **6.0 INDEMNIFICATION**

6.1. Indemnification: To the fullest extent allowed by law, Consultant shall defend, indemnify, and hold harmless the County and its officers, directors, officials, agents, employees, volunteers and representatives (collectively, "Indemnitee") from and against any and all claims, suits, actions, losses, injuries, damages or expenses of every name, kind, and description, including litigation costs and reasonable attorney's fees incurred, (collectively, "losses") which are founded upon, arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the alleged negligence, recklessness, or willful misconduct of Consultant, its officers, agents, employees, volunteers, representatives, contractors and subcontractors, excluding, however, such liabilities caused in part by the sole negligence, active negligence or willful misconduct of the County, its agents, employees, and representatives. These indemnification obligations shall not be limited by any assertion or finding that (1) the person or entity indemnified is liable by reason of non-delegable duty, or (2) the losses were caused in part by the negligence of, breach of contract by, or violation of law by Indemnitee. Nothing in this Agreement, including the provisions of this paragraph, shall constitute a waiver or limitation of any rights which Indemnitee may have under applicable law, including without limitation, the right to implied indemnity.

6.2. Duty to Defend: The duty of Consultant to indemnify and save harmless as set

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

forth herein, shall include both the duty to indemnify and at Consultant's own cost and expense the duty to defend as set forth in Section 2778 of the California Civil Code and as limited in section 2782.8 of the California Civil Code. This duty to defend arises immediately when such claim is made and shall be independent of any finding of negligence and shall arise regardless of any claim or assertion that Indemnitee caused or contributed to the Losses. Consultant shall provide legal counsel acceptable to the County.

6.3. Duty to Cooperate: Each party shall notify the other party within ten (10) days in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Consultant shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

6.4. Patent Rights: Consultant represents that professional services provided by Consultant pursuant to this Agreement does not infringe on any other copyrighted work. Consultant shall defend, indemnify and hold harmless the County from all loss, cost, damage, expense, liability or claims, including attorneys' fees, court costs, litigation expenses and expert consultant or witness fees, that may at any time arise for any infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person or persons in consequence of the use by the County of any articles or services supplied under this agreement.

6.5. The foregoing provisions shall survive the term and termination of this Agreement.

### **7.0 GENERAL PROVISIONS**

7.1. Entire Agreement: This Agreement constitutes the entire Agreement between the parties with respect to any matter referenced herein and supersedes any and all other prior writings and oral negotiations. This Agreement may be modified only in writing, and signed by the parties in interest at the time of such modification. The terms of this Agreement shall prevail over any inconsistent provision in any other contract document appurtenant hereto, including exhibits to this Agreement.

7.2. Representatives. The Director of the Stanislaus County Department of Public Works, or his designee, shall be the representative of County for purposes of this Agreement and may issue all consents, approvals, directives and agreements on behalf of the County, called for by this Agreement, except as otherwise expressly provided in this Agreement. Consultant shall designate a representative for purposes of this Agreement who shall be authorized to issue all consents, approvals, directives and agreements on behalf of Consultant called for by this Agreement, except as otherwise expressly provided in this Agreement.

**SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000**

7.3. Project Managers. County shall designate a Project Manager to work directly with Consultant in the performance of this Agreement. Consultant shall designate a Project Manager who shall represent it and be its agent in all consultations with County during the term of this Agreement. Consultant or its Project Manager shall attend and assist in all coordination meetings called by County.

7.4. Designated Personnel: A material covenant of this agreement is that the Consultant shall assign the individuals designated below to perform the functions designated so long as they continue in the employ of the Consultant. The designated individuals shall, so long as their performance continues to be acceptable to County, remain in charge of the services for the Project from beginning through completion of services.

- a. Project Manager: \_\_\_\_\_
- b. Lead/Manager: \_\_\_\_\_

7.5. Removal of Personnel or Sub-Consultants: If the County, in its sole discretion at any time during the term of this agreement, desires the removal of any person or sub-consultant assigned by Consultant to perform services, then the Consultant shall remove such person or consultant immediately upon receiving notice from the County.

7.6. Notices: Any notices, documents, correspondence or other communications concerning this Agreement or the work hereunder may be provided by personal delivery, facsimile or mail and shall be addressed as set forth below. Such communication shall be deemed served or delivered: a) at the time of delivery if such communication is sent by personal delivery; b) at the time of transmission if such communication is sent by facsimile; and c) 48 hours after deposit in the U.S. Mail as reflected by the official U.S. postmark if such communication is sent through regular United States mail.

**If to County:**  
[Insert Contact & Address]

**If to Consultant:**  
[Insert Contact & Address]

7.7. Attorneys' Fees: In the event that litigation is brought by any party in connection with this Agreement, the prevailing party shall be entitled to recover from the opposing party all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party in the exercise of any of its rights or remedies hereunder or the enforcement of any of the terms, conditions, or provisions hereof.

7.8. Governing Law: This Agreement shall be governed by and construed under the laws of the State of California without giving effect to that body of laws pertaining to conflict of laws. In the event of any legal action to enforce or interpret this Agreement, the parties hereto agree that the sole and exclusive venue shall be a court of competent jurisdiction located in Stanislaus County, California.

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

7.9. Assignment: Consultant shall not voluntarily or by operation of law assign, transfer, sublet or encumber all or any part of Consultant's interest in this Agreement without County's prior written consent. Any attempted assignment, transfer, subletting or encumbrance shall be void and shall constitute a breach of this Agreement and cause for termination of this Agreement. Regardless of County's consent, no subletting or assignment shall release Consultant of Consultant's obligation to perform all other obligations to be performed by Consultant hereunder for the term of this Agreement.

7.10. Independent Contractor: Consultant is and shall be acting at all times as an independent contractor and not as an employee of County. Consultant shall secure, at his expense, and be responsible for any and all payment of Income Tax, Social Security, State Disability Insurance Compensation, Unemployment Compensation, and other payroll deductions for Consultant and its officers, agents, and employees, and all business licenses, if any are required, in connection with the services to be performed hereunder. Consultant hereby indemnifies and holds County harmless from any and all claims that may be made against County based upon any contention by any third party that an employer-employee relationship exists by reason of this Agreement.

7.11. Confidentiality: The Consultant agrees to keep confidential all information obtained or learned during the course of furnishing services under this Agreement and to not disclose or reveal such information for any purpose not directly connected with the matter for which services are provided, unless such disclosure is required by law.

7.12. Ownership of Documents: Any interest, including copyright interests, of Consultant or its contractors or subconsultants in studies, reports, memoranda, computational sheets, drawings, plans or any other documents, including electronic data, prepared in connection with the Services, shall be the property of County. To the extent permitted by law, work product produced under this Agreement shall be deemed works for hire and all copyrights in such works shall be the property of the County. In the event that it is ever determined that any works created by Consultant or its subconsultants under this Agreement are not works for hire, Consultant hereby assigns to County all copyrights to such works. With the County's prior written approval, Consultant may retain and use copies of such works for reference and as documentation of experience and capabilities.

7.13. Reuse of Design Documents: Should the County desire to reuse the documents specified above and not use the services of the Consultant, then the County agrees to require the new consultant to assume any and all obligations for the reuse of the documents, and the County releases Consultant and its subconsultants from all liability associated with the reuse of such documents.

7.14. Public Records Act Disclosure: Consultant has been advised and is aware that all reports, documents, information and data including, but not limited to, computer tapes, discs or files furnished or prepared by Consultant, or any of its subcontractors, and provided to County

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

may be subject to public disclosure as required by the California Public Records Act (California Government Code Section 6250 et. seq.). Exceptions to public disclosure may be those documents or information that qualifies as trade secrets, as that term is defined in the California Government Code Section 6254.7, and of which Consultant informs County of such trade secret. The County will endeavor to maintain as confidential all information obtained by it that is designated as a trade secret. The County shall not, in any way, be liable or responsible for the disclosure of any trade secret including, without limitation, those records so marked if disclosure is deemed to be required by law or by order of the Court.

7.15. Responsibility for Errors: Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

7.16. Order of Precedence: In the event of an inconsistency in this Agreement and any of the attached Exhibits, the terms set forth in this Agreement shall prevail. If, and to the extent this Agreement incorporates by reference any provision of the RFP or the Response, such provision shall be deemed a part of this Agreement. Nevertheless, if there is any conflict among the terms and conditions of this Agreement and those of any such provision or provisions so incorporated by reference, this Agreement shall govern over both the Response and the RFP and the Response shall govern over the RFP.

7.17. Costs: Each party shall bear its own costs and fees incurred in the preparation and negotiation of this Agreement and in the performance of its obligations hereunder except as expressly provided herein.

7.18. No Third Party Beneficiary Rights: This Agreement is entered into for the sole benefit of County and Consultant and no other parties are intended to be direct or incidental beneficiaries of this Agreement and no third party shall have any right in, under or to this Agreement.

7.19. Construction: The parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement, this Agreement shall be construed as if drafted jointly by the parties and in accordance with its fair meaning. There shall be no presumption or burden of proof favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

7.20. Amendments: This Agreement may be amend only by a writing executed by the parties hereto or their respective successors and assigns.

## SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000

7.21. Waiver: The delay or failure of either party at any time to require performance or compliance by the other of any of its obligations or agreements shall in no way be deemed a waiver of those rights to require such performance or compliance. No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the party against whom enforcement of a waiver is sought. The waiver of any right or remedy in respect to any occurrence or event shall not be deemed a waiver of any right or remedy in respect to any other occurrence or event, nor shall any waiver constitute a continuing waiver.

7.22. Severability: If any provision of this Agreement is determined by a court of competent jurisdiction to be unenforceable in any circumstance, such determination shall not affect the validity or enforceability of the remaining terms and provisions hereof or of the offending provision in any other circumstance. Notwithstanding the foregoing, if the value of this Agreement, based upon the substantial benefit of the bargain for any party is materially impaired, which determination as made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.

7.23. Counterparts: This Agreement may be executed in one or more counterparts, each of which shall be deemed an original. All counterparts shall be construed together and shall constitute one agreement.

7.24. Corporate Authority: The persons executing this Agreement on behalf of the parties hereto warrant that they are duly authorized to execute this Agreement on behalf of said parties and that by doing so, the parties hereto are formally bound to the provisions of this Agreement.

(SIGNATURES ON THE NEXT PAGE)

**SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000**

**IN WITNESS WHEREOF**, the parties hereto have caused this Agreement to be executed by and through their respective authorized officers:

**COUNTY OF STANISLAUS**

**[Insert Name]**

By: \_\_\_\_\_  
Matt Machado, Director  
Department of Public Works

By: \_\_\_\_\_

**APPROVED AS TO FORM:**  
John P. Doering  
County Counsel

By: \_\_\_\_\_  
Thomas E. Boze  
Deputy County Counsel

Board Resolution No.: \_\_\_\_\_

**SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000**

**EXHIBIT A**

**COUNTY'S REQUEST FOR PROPOSAL**



**SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000**

**EXHIBIT B**

**CONSULTANT'S RESPONSE TO COUNTY'S REQUEST FOR PROPOSAL**

**SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000**

**EXHIBIT C**

**CONSULTANTS FEE SCHEDULE**

**SAMPLE AGREEMENT FOR PROJECTS UNDER \$500,000**

**EXHIBIT D**

**PROJECT SCHEDULE**

**SAMPLE ADDENDUM**

**STANISLAUS COUNTY**  
Addendum to Professional Design Services Agreement  
for Federally Funded Projects over \$150,000

Consultant:

Project:

\*\*\*\*\*

In addition to, and notwithstanding, the requirements set forth in the Professional Design Services Agreement, CONSULTANT agrees to the following:

**1. CONFIDENTIALITY OF DATA**

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

**2. 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 agreement, or any ensuing COUNTY construction project. The CONSULTANT shall also list current clients who may have a financial

## SAMPLE ADDENDUM

interest in the outcome of this agreement, 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 agreement, 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 agreement, or on any agreement to provide construction inspection for any construction project resulting from this agreement. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.
- 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 agreement shall be eligible to bid on any construction agreement, or on any agreement to provide construction inspection for any construction project resulting from this agreement.

### **3. 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 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- C. Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by CONSULTANT to the COUNTY.

### **4. COST PROPOSAL**

The Cost Proposal is subject to an audit or Certified Public Accountant (CPA) Indirect Cost (Overhead) Audit Workpaper Review. The Cost Proposal shall be adjusted by the CONSULTANT and approved by the COUNTY's Contract Manager to conform to the Workpaper Review recommendations or audit

## SAMPLE ADDENDUM

recommendations. The CONSULTANT agrees that individual terms of cost identified in the audit report shall be incorporated into the Agreement by this reference if directed by the COUNTY at its sole discretion. Refusal by the CONSULTANT to incorporate the Workpaper Review recommendations or audit recommendations will be considered a breach of the Agreement terms and cause for termination of the Agreement.

### **5. 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.

### **6. EQUIPMENT PURCHASE**

- A. Prior authorization, in writing, by the COUNTY 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; 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 agreement is subject to the following: "The CONSULTANT shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a

## SAMPLE ADDENDUM

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 agreement, or if the agreement 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."

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

### **7. FUNDING REQUIREMENTS**

- A. It is mutually understood between the parties that this contract may have been written before ascertaining the availability of funds or appropriation of funds, for the mutual benefit of both parties, in order to avoid program and fiscal delays that would occur if the agreement were executed after that determination was made.
- B. This agreement is valid and enforceable only, if sufficient funds are made available to the COUNTY for the purpose of this contract. In addition, this agreement is subject to any additional restrictions, limitations, conditions, or any statute enacted by the Congress, State Legislature or COUNTY governing board that may affect the provisions, terms, or funding of this contract in any manner.
- C. It is mutually agreed that if sufficient funds are not appropriated, this contract may be amended to reflect any reduction in funds.
- D. The COUNTY has the option to void the contract under the 30-day cancellation clause, or by mutual agreement to amend the contract to reflect any reduction of funds.

### **8. INSPECTION OF WORK**

The CONSULTANT and any subcontractor shall permit the COUNTY, the state, and the FHWA if federal participating funds are used in this contract; to review and inspect the project activities and files at all reasonable times during the

# SAMPLE ADDENDUM

performance period of this contract including review and inspection on a daily basis.

## 9. **NONDISCRIMINATION**

- A. During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:
  
- B. Compliance with Regulations: The contractor shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, “DOT”) Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter “FHWA”) Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
  
- C. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color or national origin, sex, age, and disability/handicap and low income in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
  
- D. Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contract for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor’s obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap and low income.
  
- E. Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the COUNTY or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the COUNTY, or the FHWA as



## SAMPLE ADDENDUM

appropriate, and shall set forth what efforts it has made to obtain the information.

- F. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the COUNTY shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
- G. Withholding of payments to the contractor under the contract until the contractor complies, and/or
- H. Cancellation, termination or suspension of the contract, in whole or in part.
- I. Incorporation of Provisions: The contractor shall include the provisions of paragraphs 1 through 6 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the COUNTY or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that , in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the COUNTY to enter into such litigation to protect the interests of the COUNTY, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

### **10. PERFORMANCE PERIOD**

- A. This agreement shall go into effect on \_\_\_\_\_, contingent upon approval by the COUNTY, and the CONSULTANT shall commence work after notification to proceed by the COUNTY. The agreement shall end on \_\_\_\_\_, unless extended by agreement amendment.
- B. The CONSULTANT is advised that any recommendation for agreement award is not binding on the COUNTY until the agreement is fully executed and approved by the COUNTY.

### **11. PROHIBITION OF EXPENDING LOCAL AGENCY, STATE OR FEDERAL FUNDS FOR LOBBYING CLAUS**

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

## SAMPLE ADDENDUM

- B. 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.
  
- C. 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.
  
- D. 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.
  
- E. 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.

### **12. REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION (LOBBYING CLAUSE)**

- A. The CONSULTANT warrants that this agreement 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 agreement without liability; to pay only for the value of the work actually performed; or to deduct from the agreement price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

## SAMPLE ADDENDUM

### **13. REIMBURSEMENT OF TRAVEL & SUBSISTENCE**

COUNTY agrees to pay pre-approved travel and subsistence expenses per the COUNTY's Travel Policy.

### **14. RETENTION OF RECORDS/AUDIT**

A. For the purpose of determining compliance with Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of the contract pursuant to Government Code 8546.7; the CONSULTANT, subcontractors, and the COUNTY shall maintain all books, documents, papers, accounting records, and other evidence pertaining to the performance of the agreement, including but not limited to, the costs of administering the agreement. All parties shall make such materials available at their respective offices at all reasonable times during the agreement period and for three years from the date of final payment under the agreement. The state, the State Auditor, 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 agreement for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.

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

### **15. SALARY ESCALATION**

The CONSULTANT will be allowed salary increases as shown in EXHIBIT C.

### **16. STATE PREVAILING WAGE RATES**

A. The CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 177, 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.

**SAMPLE ADDENDUM**

**17. SUBCONTRACTING**

- A. The CONSULTANT shall perform the services with resources available within its own organization; and no portion of the work pertinent to this agreement shall be subcontracted without written authorization by the COUNTY, 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 agreement, shall contain all the provisions stipulated in this agreement to be applicable to subcontractors.
- C. Any substitution of subcontractors must be approved in writing by the COUNTY.

**IN WITNESS WHEREOF**, the parties hereto have caused this Addendum to be executed by and through their respective authorized officers:

COUNTY OF STANISLAUS

[INSERT COMPANY NAME]

By: \_\_\_\_\_  
Matt Machado, Director  
Department of Public Works

By: \_\_\_\_\_

APPROVED AS TO FORM:  
John P. Doering  
County Counsel

By: \_\_\_\_\_

By: \_\_\_\_\_  
Thomas E. Boze  
Deputy County Counsel

**(END OF ADDENDUM)**

**Attachment A7**

**Exhibit 10-B**

**Suggested Consultant Evaluation Sheet**

## EXHIBIT 10-B SUGGESTED CONSULTANT EVALUATION SHEET

SUGGESTED EVALUATION SHEET*		
Criteria	Maximum Points	Rating
Understanding of the work to be done	25	
Experience with similar kinds of work	20	
Quality of staff for work to be done	15	
Capability of developing innovative or advanced techniques	10	
Familiarity with state and federal procedures	10	
Financial responsibility	10	
Demonstrated Technical Ability	10	
Total	100	

## \*Notes:

1. To maintain the integrity of a competitive negotiation/qualifications based selection procurement, the total of all allowable non-qualifications based evaluation criterion (such as locality preference or DBE participation) cannot exceed ten (10) percent of the total evaluation criteria. The ten percent limitation applies only to non-qualifications based evaluation criterion and should not be considered as a limitation for specific DBE contract goals established by a contracting agency in accordance with its approved DBE program. (see [http://www.fhwa.dot.gov/programadmin/172qa\\_07.cfm](http://www.fhwa.dot.gov/programadmin/172qa_07.cfm)).
2. For projects other than "Architectural & Engineering" services, as defined in Section 10.1, cost is one of the criteria, or may be the sole criterion. DBE participation by the consultant shall not be used as one of those criteria listed above.
3. The evaluation criteria and suggested maximum points shown above are not mandatory, but are recommended in the interest of maintaining consistency among the hundreds of agencies utilizing federal or state funds.
4. The evaluation criteria and weighted value must be identified in the RFP. If the RFP has different evaluation criteria or weighed values then the information above would have to be changed to match.
5. Caltrans participation on the interview panel does not relieve the local agency of its responsibility to ensure that proper procurement procedures are followed and requirements are met.

Distribution: Local Agency Project Files

## **Attachment A8**

### **Exhibit 10-K**

# **Consultant Certification of Contract Cost and Financial Management System**

**EXHIBIT 10-K CONSULTANT CERTIFICATION OF CONTRACT COSTS AND FINANCIAL  
MANAGEMENT SYSTEM**

*(Note: If requesting to utilize the Safe Harbor Indirect Cost Rate submit Attachment 1 of  
DLA-OB 13-07 - Safe Harbor Indirect Cost Rate for Consultant Contracts found at  
[http://www.dot.ca.gov/hq/LocalPrograms/DLA\\_OB/DLA\\_OB.htm](http://www.dot.ca.gov/hq/LocalPrograms/DLA_OB/DLA_OB.htm) in lieu of this form.)*

**Certification of Final Indirect Costs:**

Consultant Firm Name: \_\_\_\_\_

Indirect Cost Rate: \_\_\_\_\_

Fiscal Period Covered for Indirect Cost Rate Developed (mm/dd/yyyy to mm/dd/yyyy): \_\_\_\_\_

Date of Proposal Preparation (mm/dd/yyyy): \_\_\_\_\_

I, the undersigned, certify that I have reviewed the proposal to establish final indirect cost rates for the fiscal period as specified above and to the best of my knowledge and belief:

1. All costs included in this proposal to establish final indirect cost rates are allowable in accordance with the cost principles of the Federal Acquisition Regulations (FAR) of Title 48, Code of Federal Regulations (CFR), Part 31.
2. This proposal does not include any costs which are expressly unallowable under the cost principles of the FAR of 48 CFR, Part 31.

All known material transactions or events that have occurred affecting the firm's ownership, organization, and indirect cost rates have been disclosed as of the date of proposal preparation noted above.

**Certification of Financial Management System:**

I, the undersigned, certify to the best of my knowledge and belief that our financial management system meets the standards for financial reporting, accounting records, internal and budget control as set forth in the FAR of Title 49, CFR, Part 18.20 to the extent applicable to Consultant.

**Certification of Dollar Amount for all A&E contracts:**

I, the undersigned, certify that the approximate dollar amount of all A&E contracts awarded by Caltrans or a California local agency to this firm within the last three (3) calendar years for all State DOT and Local Agencies is \$ \_\_\_\_\_ and the number of States in which the firm does business is \_\_\_\_\_.

**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 reasonable, allowable and allocable to the contract in accordance with the cost principles of the FAR of Title 48, CFR, Part 31. Allowable direct costs to a Government contract shall be:

1. Compliant with Generally Accepted Accounting Principles (GAAP) and standards promulgated by the Cost Accounting Standards Board (when applicable).



- 2. Compliant with the terms of the contract and is incurred specifically for the contract.
- 3. Not prohibited by 23 CFR, Chapter 1, Part 172 --Administration of Engineering and Design Related Service Contracts to the extent requirements are applicable to Consultant.

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files.

**Subconsultants (if applicable)**

Proposed Contract Amount (or amount not to exceed if on-call contract): \$ \_\_\_\_\_

**Prime Consultants (if applicable)**

Proposed **Total** Contract Amount (or amount not to exceed if on-call contract): \$ \_\_\_\_\_

Prime, list all subconsultants and proposed subcontract dollar amounts (attach additional page if necessary):

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

\* Consultant Certification Signature: \_\_\_\_\_

Consultant Certifying (Print Name and Title):

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Consultant Contact Information:

Email: \_\_\_\_\_

Phone number: \_\_\_\_\_

Date of Certification (mm/dd/yyyy): \_\_\_\_\_

\*An individual executive or financial officer of the consultant’s organization at a level no lower than a Vice President or Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the indirect cost rate proposal submitted in conjunction with the contract.

*Note: Per 23 U.S.C. 112(b)(2)(B), Subconsultants must comply with the FAR Cost Principles contained in 48 CFR, Part 31. 23 CFR Part 172.3 Definitions state: Consultant means the individual or firm providing engineering and design related services as a party to the contract. Therefore, subconsultants as parties of a contract must complete a certification and send originals to A&I and keep copies in Local Agency Project Files.*

**Distribution:** 1) Original to Caltrans Audits and Investigations  
2) Retained in Local Agency Project Files

**Attachment A9**

**Exhibit 10-F**

**Certification of Consultant, Commissions and  
Fees**

**EXHIBIT 10-F CERTIFICATION OF CONSULTANT, COMMISSIONS & FEES**

I HEREBY CERTIFY that I am the \_\_\_\_\_, and duly authorized representative of the firm of \_\_\_\_\_, whose address is \_\_\_\_\_, and that, except as hereby expressly stated, neither I nor the above firm that I represent have:

- (a) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above consultant) to solicit or secure this contract; nor
- (b) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract; nor
- (c) paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above consultant) any fee, contribution, donation, or consideration of any kind, for or in connection with, procuring or carrying out this contract.

I acknowledge that this Certificate is to be made available to the California Department of Transportation (Caltrans) in connection with this contract involving participation of federal-aid highway funds, and is subject to applicable state and federal laws, both criminal and civil.

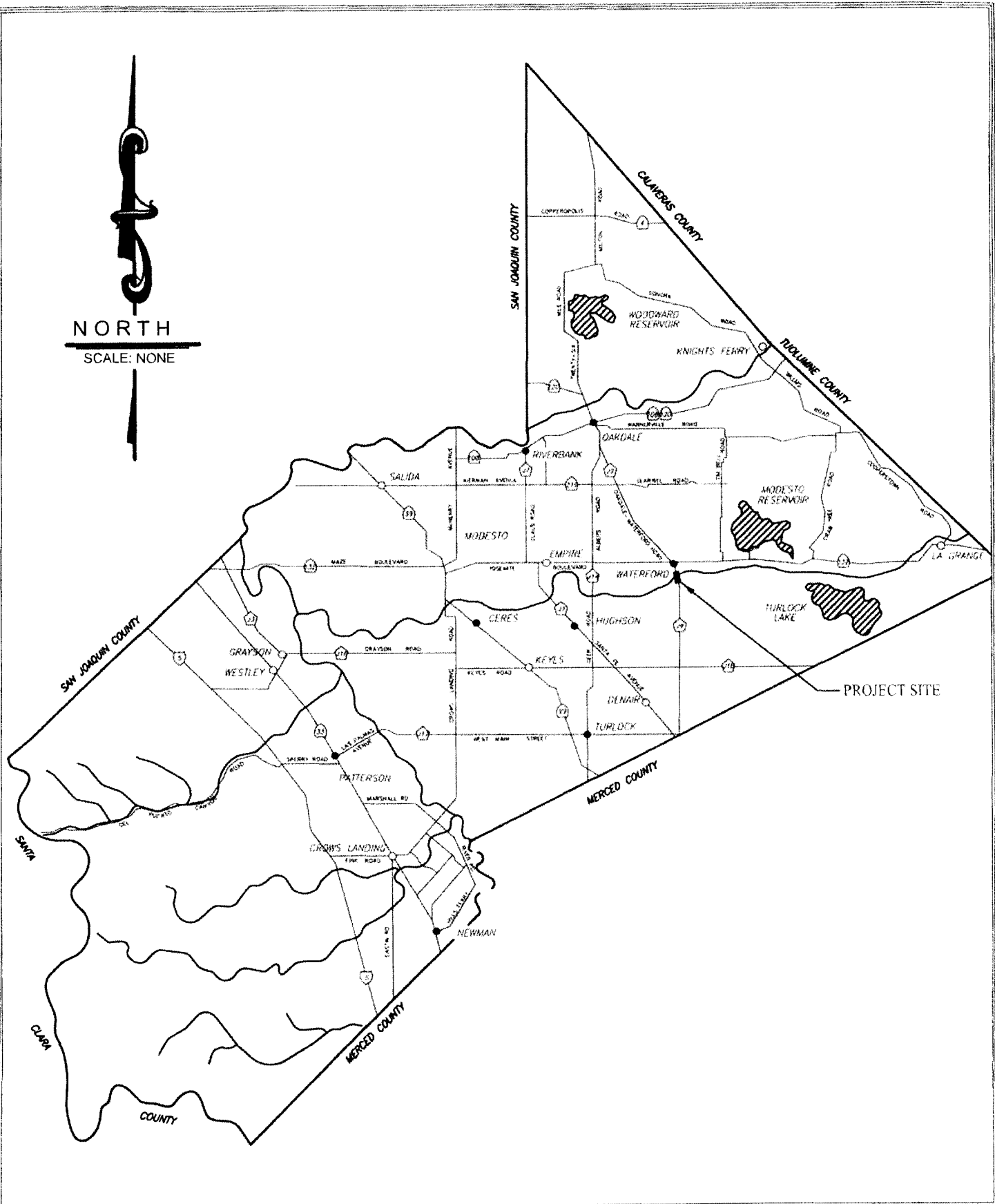
\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

**Distribution:** 1) Local Agency Project File (Original & Contract)  
2) DLAE (with contract copy)

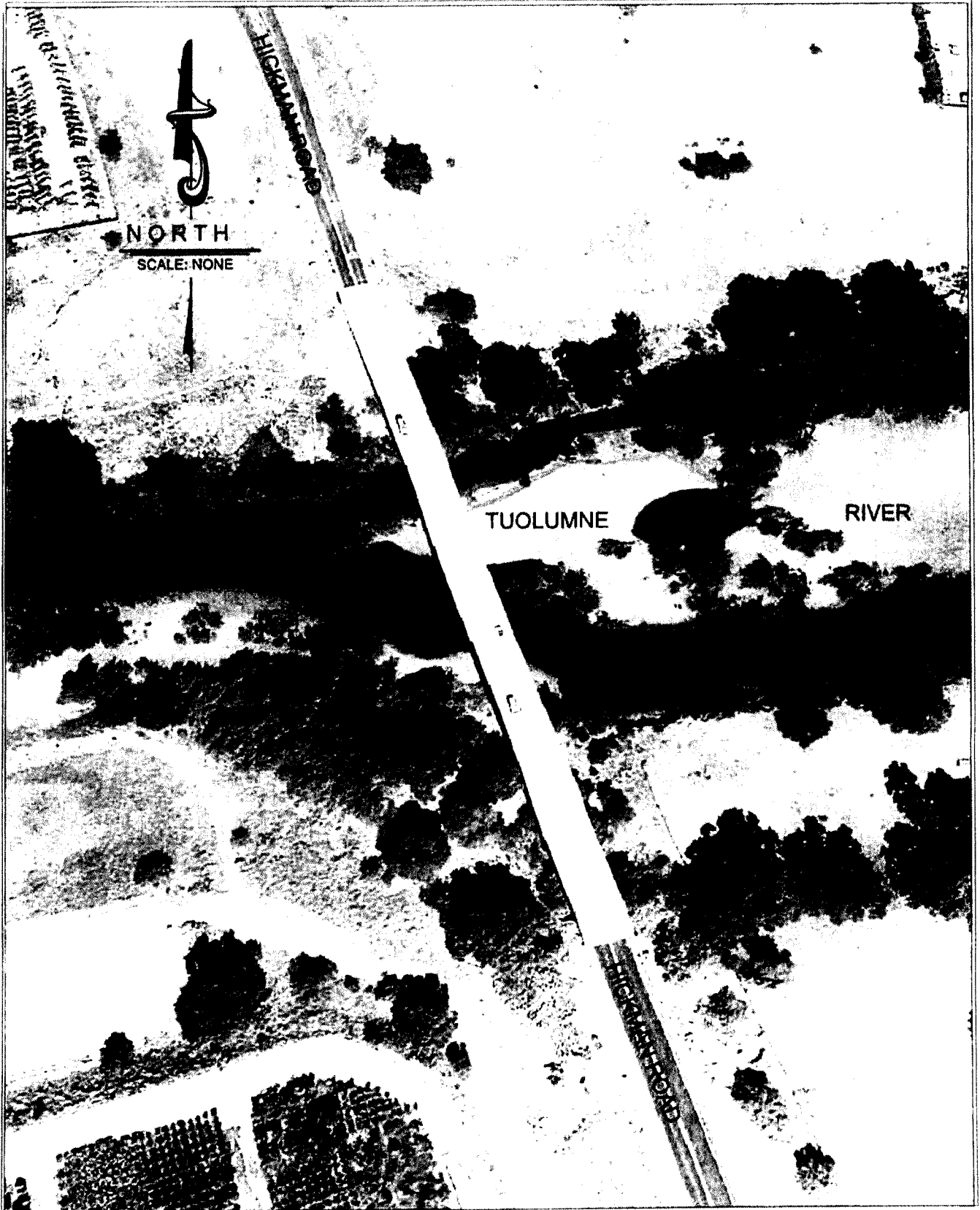
## **Attachment A10**

### **Project Vicinity Map and Location Map**



**STANISLAUS COUNTY**  
 DEPARTMENT OF PUBLIC WORKS  
 ENGINEERING AND OPERATIONS DIVISION  
 1716 MORGAN ROAD - MODESTO, CA 95358

PROJECT VICINITY MAP  
 HICKMAN ROAD OVER TUOLUMNE RIVER  
 BRIDGE PROJECT  
 STATE BRIDGE NO.: 38-C004



**STANISLAUS COUNTY**

DEPARTMENT OF PUBLIC WORKS  
ENGINEERING AND OPERATIONS DIVISION  
1716 MORGAN ROAD - MODESTO, CA 95358

PROJECT LOCATION MAP  
HICKMAN ROAD OVER TUOLUMNE RIVER  
BRIDGE REPLACEMENT PROJECT  
STATE BRIDGE NO.: 38C0004

# **Attachment A11**

## **Caltrans Bridge Report**



DEPARTMENT OF TRANSPORTATION  
Structure Maintenance & Investigations

Bridge Number : 38C0004  
Facility Carried: HICKMAN ROAD  
Location : 0.15 MI S STATE ROUTE 13  
City :  
Inspection Date : 10/08/2013

## Bridge Inspection Report

Inspection Type

Routine FC Underwater Special Other

**STRUCTURE NAME:** TUOLUMNE RIVER

### CONSTRUCTION INFORMATION

Year Built : 1964 Skew (degrees): 0  
Year Widened: N/A No. of Joints : 2  
Length (m) : 199 No. of Hinges : 2

Structure Description: RC continuous box girder (3 cell) on RC solid pier walls and RC winged abutments, all on steel piles.

Span Configuration : 1 @ 22.9 m, 5 @ 30.5 m, 1 @ 22.9 m

### SAFE LOAD CAPACITY AND RATINGS

Design Live Load: MS-18 OR HS-20  
Inventory Rating: RF=1.62 =>52.5 metric tons Calculation Method: LOAD FACTOR  
Operating Rating: RF=2.70 =>87.5 metric tons Calculation Method: LOAD FACTOR  
Permit Rating : PPPPP  
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

### DESCRIPTION ON STRUCTURE

Deck X-Section: 0.3 m r, 0.6 m sw, 8.5 m, 0.6 m sw, 0.3 m r  
Total Width: 10.2 m Net Width: 8.5 m No. of Lanes: 2 Speed: 35 mph  
Min. Vertical Clearance: Unimpaired  
Rail Code: 0000

Rail Type	Location	Length (ft)	Rail Modifications
Steel	Right/Left	1365	
Baluster			

### DESCRIPTION UNDER STRUCTURE

Channel Description: Unlined - earth and gravel. Upstream is at right.

### INSPECTION COMMENTARY

#### SCOPE AND ACCESS

At the time of this investigation, there was approximately up to 4 feet of flowing water in the main channel of Span 4. The water level was approximately 7 feet below the edge of the footing at Pier 4. The Pier 5 footing was at the edge of the channel. A complete inspection of all visible elements was performed.

#### MISCELLANEOUS

The routine roadway, elevation and underside photos were taken and are included in this report. See attached photos #1 through 5.

#### DECK AND ROADWAY

The bridge deck has 0.03 to 0.08 inch wide transverse and pattern cracks at 12 to 15 inches in density throughout, some as close as 6 inches in spacing. There are also several 0.04 inch wide diagonal cracks originating from the anchor blocks at both abutments. Based on a field comparison of the photos from the 10/2011 report, this



**INSPECTION COMMENTARY**

condition has not changed.

The Type A pourable joint seals on Hinges 2 and 6 have begun to lose adhesion along the joints. The joint gap at both hinges was 3 inches wide at an ambient temperature of 65 degrees Fahrenheit. Based on a field comparison of the photos from the 10/2011 report, this condition has not changed.

There is one 10 foot section of the right rail with an outward bend of approximately 3 inches near Abutment 8. Based on a field comparison of the photos from the 10/2011 report, this condition has not changed.

There are several edge spalls of up to 3 feet long x 4 inches wide x 1 inch deep along the right curb in Span 4. Based on a field comparison of the photos from the 10/2011 report, this condition has not changed.

**SUPERSTRUCTURE**

The RC box girder has no significant defects.

**SUBSTRUCTURE**

There is an erosion gully of approximately 3 feet wide x 5 feet deep along the right steep slope embankment at Abutment 8 due to roadway runoff. Based on a field comparison of the photos from the 10/2011 report, this condition has not changed.

There is moderate graffiti at the bottom of the column bents and abutments. Based on a field comparison of the photos from the 10/2011 report, this condition has not changed.

The scour protection at Piers 4 and 5 has deteriorated mostly in front and at the upstream (right) side of the footing with several up to 6 feet wide sections missing. There are areas of settlement and displacement observed at both piers, mostly visible at Pier 4. See attached photos #6 through 12.

A Bridge Scour Evaluation - Plan of Action, dated 12/01/2005 is on file. The Bridge Scour Evaluation includes a field evaluation, and recommends routine monitoring.

**SAFE LOAD CAPACITY**

A Load Rating Summary Sheet dated 11/33/2009 is on file for this structure. While this inspection does not include a check of that analysis, it does verify that the structural conditions observed during this inspection are consistent with those assumed in that analysis. The current rating is based on the BDS Frame Rate output dated 10/27/1978.

<b><u>ELEMENT INSPECTION RATINGS</u></b>									
Elem No.	Element Description	Env	Total		Qty in each Condition State				
			Qty	Units	St. 1	St. 2	St. 3	St. 4	St. 5
12	Concrete Deck - Bare	2	2030	sq.m.	2030	0	0	0	0
105	Reinforced Concrete Closed Webs/Box Girder	2	199	m.	199	0	0	0	0
210	Reinforced Conc Pier Wall	2	30	m.	30	0	0	0	0
215	Reinforced Conc Abutment	2	20	m.	20	0	0	0	0
220	Reinforced Conc Submerged Pile Cap/Footing	2	2	ea.	2	0	0	0	0

Elem No.	Element Description	Env	Total		Qty in each Condition State				
			Qty	Units	St. 1	St. 2	St. 3	St. 4	St. 5
225	Unpainted Steel Submerged Pile	2	1	ea.	1	0	0	0	0
301	Pourable Joint Seal	2	20	m.	0	20	0		
312	Enclosed/Concealed Bearing	2	2	ea.	2	0	0	0	0
330	Metal Bridge Railing - coated or uncoated	2	416	m.	416	0	0	0	
358	Deck Cracking	2	1	ea.	0	0	0	1	

**WORK RECOMMENDATIONS**

RecDate: 09/30/1999                      EstCost:                      Treat the bridge deck with methacrylate.  
 Action : Deck-Methacrylate              StrTarget: 2 YEARS  
 Work By: LOCAL AGENCY                  DistTarget:  
 Status : PROPOSED                        EA:

RecDate: 09/30/1999                      EstCost:                      Remove the source of erosion and repair  
 Action : Bridge-Misc                      StrTarget: 2 YEARS              the slope at Abutment 8.  
 Work By: LOCAL AGENCY                  DistTarget:  
 Status : PROPOSED                        EA:

Team Leader : Ronnie H. Le *Ronnie H. Le*  
 Report Author : Ronnie H. Le  
 Inspected By : RH.Le/B.Nekaien

*Bari Nekaien* 1-2-2014  
 Bari Nekaien (Registered Civil Engineer)      (Date)



**STRUCTURE INVENTORY AND APPRAISAL REPORT**

```

***** IDENTIFICATION *****
(1) STATE NAME- CALIFORNIA                069
(8) STRUCTURE NUMBER                      38C0004
(5) INVENTORY ROUTE(ON/OFFR)- ON         14000000
(2) HIGHWAY AGENCY DISTRICT              10
(3) COUNTY CODE 099 (4) PLACE CODE 00000
(6) FEATURE INTERSECTED- TUOLUMNE RIVER
(7) FACILITY CARRIED- HIGHWAY ROAD
(9) LOCATION- 0.15 MI S STATE ROUTE 132
(11) MILEPOINT/KILOMETERPOINT            0
(12) BASE HIGHWAY NETWORK- NOT ON NET    0
(13) LRS INVENTORY ROUTE & SUBROUTE
(16) LATITUDE 37 DEG 38 MIN 09 SEC
(17) LONGITUDE 120 DEG 45 MIN 32 SEC
(95) BORDER BRIDGE STATE CODE % SHARE %
(99) BORDER BRIDGE STRUCTURE NUMBER

***** STRUCTURE TYPE AND MATERIAL *****
(43) STRUCTURE TYPE MAIN-MATERIAL- CONCRETE CONT
      TYPE- BOX BEAM OR GIRDER - MULTI CODE 205
(44) STRUCTURE TYPE APPR-MATERIAL- OTHER/NA
      TYPE- OTHER/NA CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT 0
(46) NUMBER OF APPROACH SPANS 0
(107) DECK STRUCTURE TYPE- CIP CONCRETE CODE 1
(108) WEARING SURFACE / PROTECTIVE SYSTEM:
      A) TYPE OF WEARING SURFACE NONE CODE 0
      B) TYPE OF MEMBRANE- NONE CODE 0
      C) TYPE OF DECK PROTECTION- NONE CODE 0

***** AGE AND SERVICE *****
(27) YEAR BUILT 1964
(106) YEAR RECONSTRUCTED 0000
(42) TYPE OF SERVICE: ON- HIGHWAY 1
      UNDER- WATERWAY 5
(28) LANES ON STRUCTURE 02 UNDER STRUCTURE 00
(29) AVERAGE DAILY TRAFFIC 7696
(30) YEAR OF ADT 2006 (109) TRUCK ADT 48 %
(19) BYPASS, DETOUR LENGTH 25 KM

***** GEOMETRIC DATA *****
(48) LENGTH OF MAXIMUM SPAN 30.5 M
(49) STRUCTURE LENGTH 199.0 M
(50) CURB OR SIDEWALK: LEFT 0.6 M RIGHT 0.6 M
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 8.5 M
(52) DECK WIDTH OUT TO OUT 10.2 M
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 12.2 M
(33) BRIDGE MEDIAN- NO MEDIAN 0
(34) SKEW 0 DEG (35) STRUCTURE FLARED NO
(10) INVENTORY ROUTE MIN VERT CLEAR 29.99 M
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 8.5 M
(54) MIN VERT CLEAR OVER BRIDGE RDWY 59.58 M
(54) MIN VERT UNDERCLEAR REF- NOT H/RP 0.00 M
(55) MIN LAT UNDERCLEAR RT REF- NOT H/RP 0.0 M
(56) MIN LAT UNDERCLEAR LT 0.0 M

***** NAVIGATION DATA *****
(88) NAVIGATION CONTROL- NO CONTROL CODE 0
(111) PIER PROTECTION- CODE
(39) NAVIGATION VERTICAL CLEARANCE 0.0 M
(116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR 0
(40) NAVIGATION HORIZONTAL CLEARANCE 0.0 M

***** SUFFICIENCY RATING *****
SUFFICIENCY RATING = 64.7
STATUS STRUCTURALLY DEFICIENT
HEALTH INDEX 99.9
PAINT CONDITION INDEX = N/A

***** CLASSIFICATION ***** CODE
(112) NBIS BRIDGE LENGTH- YRS Y
(104) HIGHWAY SYSTEM- NOT ON NHS 0
(126) FUNCTIONAL CLASS- MAJOR COLLECTOR RURAL 07
(100) DEFENSE HIGHWAY- NOT STRAHNET 0
(101) PARALLEL STRUCTURE- NONE EXISTS 0
(102) DIRECTION OF TRAFFIC- 2 WAY 2
(103) TEMPORARY STRUCTURE-
(105) FED. LANDS HWY- NOT APPLICABLE 0
(110) DESIGNATED NATIONAL NETWORK - NOT ON NET 0
(20) TOLL- ON FREE ROAD 3
(21) MAINTAIN COUNTY HIGHWAY AGENCY 02
(22) OWNER- COUNTY HIGHWAY AGENCY 02
(37) HISTORICAL SIGNIFICANCE- NOT ELIGIBLE 5

***** CONDITION ***** CODE
(58) DECK 4
(59) SUPERSTRUCTURE 5
(60) SUBSTRUCTURE 7
(61) CHANNEL & CHANNEL PROTECTION 6
(62) CULVERTS N

***** LOAD RATING AND POSTING ***** CODE
(21) DESIGN LOAD- MS-18 OR HS-20 5
(63) OPERATING RATING METHOD- LOAD FACTOR 1
(64) OPERATING RATING- 87.5
(65) INVENTORY RATING METHOD- LOAD FACTOR 1
(66) INVENTORY RATING 50.5
(70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5
(41) STRUCTURE OPEN, POSTED OR CLOSED- A
      DESCRIPTION- OPEN, NO RESTRICTION

***** APPRAISAL ***** CODE
(67) STRUCTURAL EVALUATION
(68) DECK GEOMETRY 4
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL 0
(71) WATER ADEQUACY 4
(72) APPROACH ROADWAY ALIGNMENT 6
(36) TRAFFIC SAFETY FEATURES 0000
(113) SCORIS CRITICAL BRIDGES 3

***** PROPOSED IMPROVEMENTS *****
(75) TYPE OF WORK- SUP/SUB REHAB CODE 55
(76) LENGTH OF STRUCTURE IMPROVEMENT 199 M
(94) BRIDGE IMPROVEMENT COST $2,023,000
(95) ROADWAY IMPROVEMENT COST $404,600
(96) TOTAL PROJECT COST $3,398,600
(97) YEAR OF IMPROVEMENT COST ESTIMATE 2010
(114) FUTURE ADT 5219
(115) YEAR OF FUTURE ADT 2032

***** INSPECTIONS *****
(90) INSPECTION DATE 10/13/91, FREQUENCY 24 MO
(92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
      A) FRACTURE CRIT DETAIL- NO NO A1
      B) UNDERWATER INSP- NO MO B1
      C) OTHER SPECIAL INSP- NO MO C1 01/03

```

# TUOLUMNE RIVER

0.15 MI S STATE ROUTE 132

10/08/2013 [AAAJ]

38C0004

100 - PHOTO-Routine-Roadway View

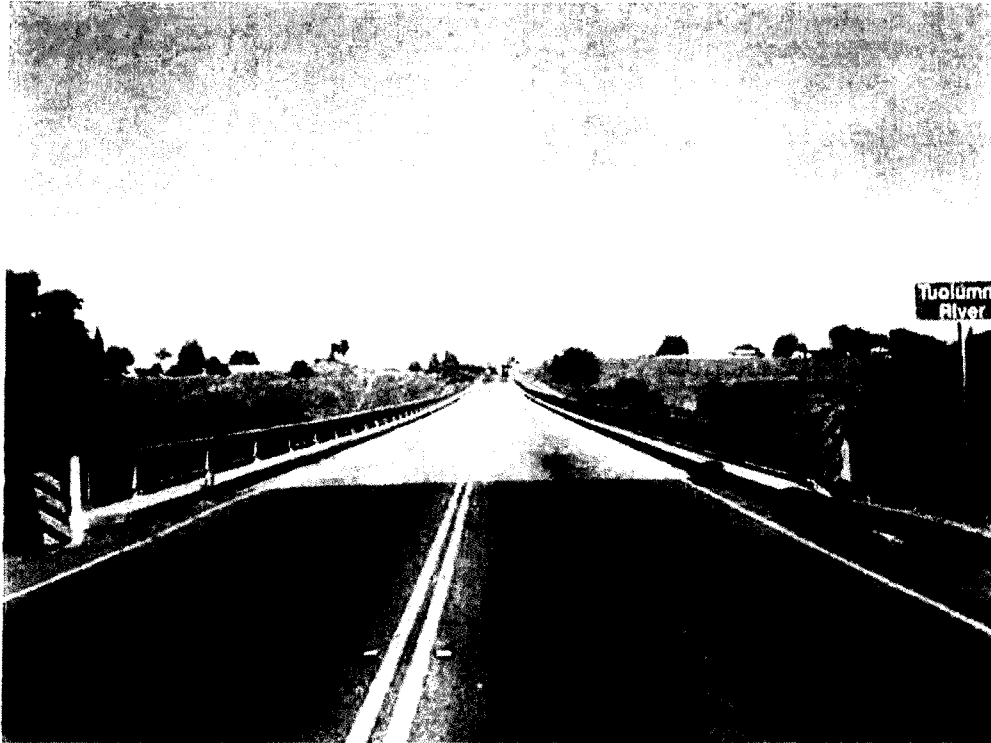


Photo No. 1

Deck view, looking north

101 - PHOTO-Routine-Elevation View

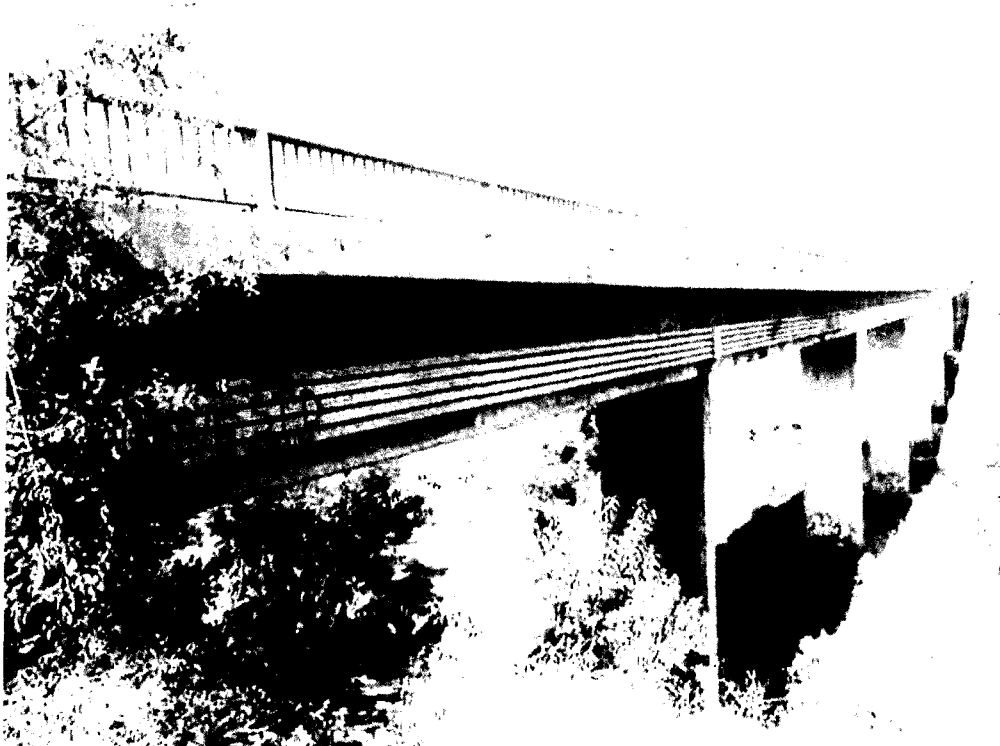


Photo No. 2

Right elevation from Abutment 1

# TUOLUMNE RIVER

0.15 MI S STATE ROUTE 132

10/08/2013 [AAAJ]

38C0004

101 - PHOTO-Routine-Elevation View

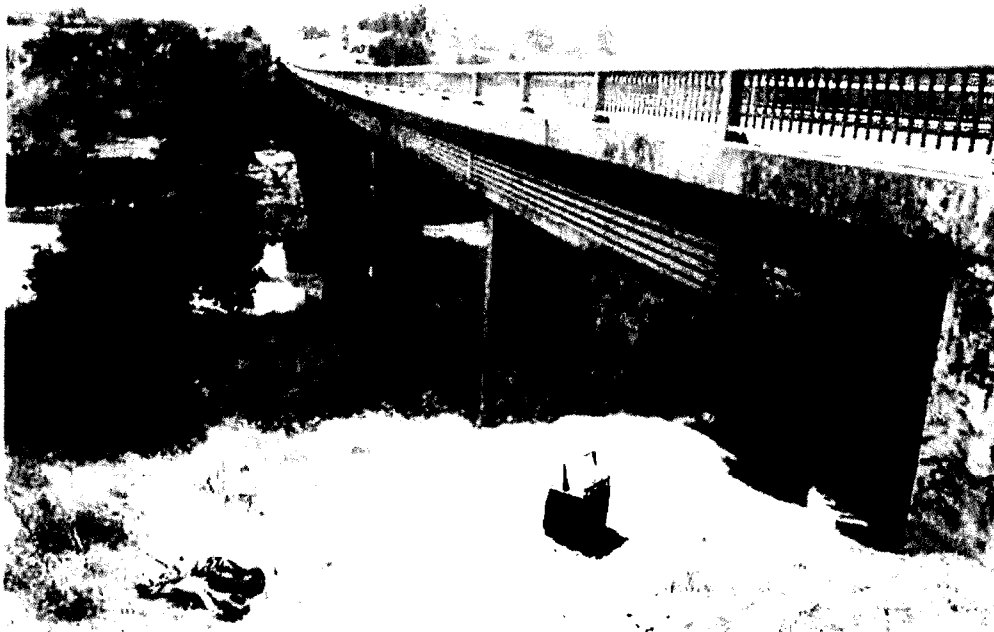


Photo No. 3  
Right elevation from Abutment 8

135 - PHOTO-Routine-Underside



Photo No. 4  
Underside from Abutment 1

# TUOLUMNE RIVER

0.15 MI S STATE ROUTE 132

10/08/2013 [AAAJ]

38C0004

135 - PHOTO-Routine-Underside



**Photo No. 5**  
**Underside from Abutment 8**

117 - PHOTO-Sub-Misc.



**Photo No. 6**  
**Span 4, looking south**

**TUOLUMNE RIVER**

**0.15 MI S STATE ROUTE 132**

**10/08/2013 [AAAJ]**

**38C0004**

**117 - PHOTO-Sub-Misc.**



**Photo No. 7**

**Right channel in Span 4, from top of deck**

**117 - PHOTO-Sub-Misc.**



**Photo No. 8**

**Right channel in Span 4, from top of deck**

**TUOLUMNE RIVER**

0.15 MI S STATE ROUTE 132

10/08/2013 [AAAJ]

38C0004

117 - PHOTO-Sub-Misc.



**Photo No. 9**

**Right side of Pier 4, from top of deck**

117 - PHOTO-Sub-Misc.



**Photo No. 10**

**Pier 4, looking from Pier 5**



**TUOLUMNE RIVER**

**0.15 MI S STATE ROUTE 132**

**10/08/2013 [AAAJ]**

**38C0004**

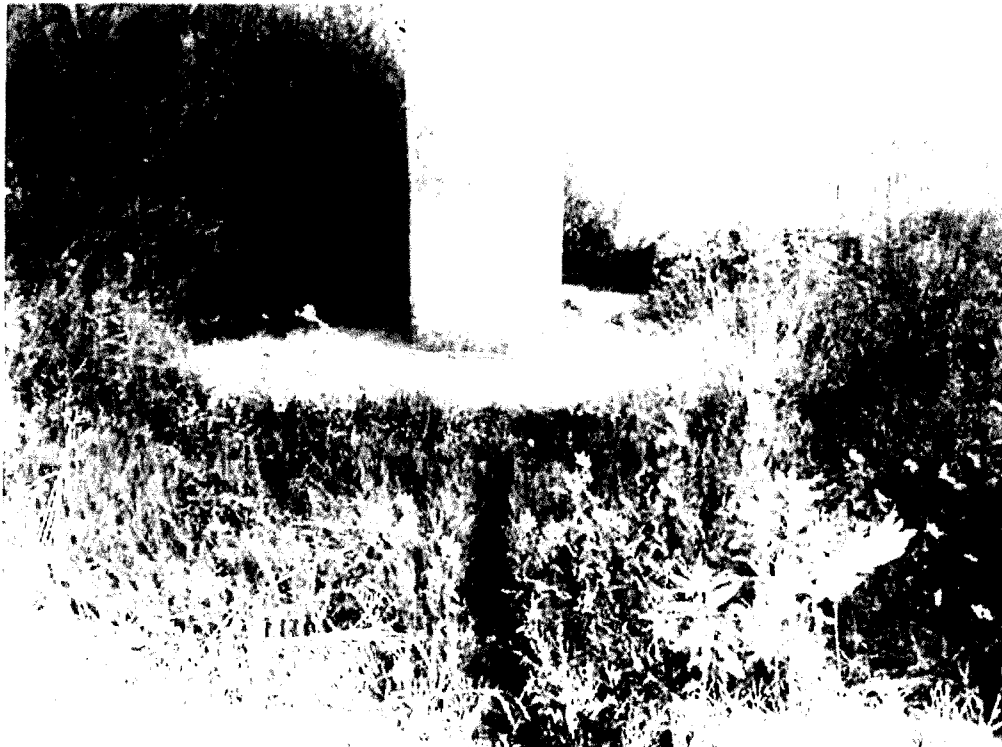
**117 - PHOTO-Sub-Misc.**



**Photo No. 11**

**Pier 4 in Span 4**

**117 - PHOTO-Sub-Misc.**



**Photo No. 12**

**Pier 6**

## **Attachment A12**

### **Existing Project Documents**

**Existing Retrofit Strategy Report  
(\*Report has not been approved by Caltrans)**

# Hickman Road Bridge Retrofit/Replacement



## Retrofit Strategy Report Hickman Road Bridge (Stanislaus County) Bridge No. 38C-0004

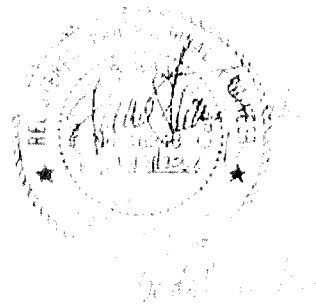
Prepared for  
Department of Public Works  
Stanislaus County  
1010 10<sup>th</sup> Street, Suite 3500  
Modesto, California 95354

Project Number 169157  
Task Order No. 1

Prepared by  
Hans Strandgaard  
Erika Emerick



CH2MHILL



September 12, 2002

2485 Natomas Park Drive, Suite 600  
Sacramento, California 95833

# Hickman Road Bridge (Stanislaus County)

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Bridge No. 38C-0004

## Executive Summary

A seismic analysis was performed on the existing Hickman Road Bridge, and it was determined that the structure has multiple failure mechanisms which could cause collapse including hinge unseating, overturning, scour, and pier failure due to moment ductility and shear capacity requirements. The structure qualifies as a Category 1 structure under the Seismic Safety Retrofit Program since it can collapse during an earthquake. During the course of this study, it was also determined that the structure is also scour-critical and might collapse during even a minor storm event.

The proposed retrofit includes retrofitting the abutments and all pier footings, adding 175-ton CIDH concrete piles to both abutments and 175-ton CISS piles to all piers, casing Piers 4, 5, and 6; strengthening Piers 2 and 7, and adding pipe seat extenders with restrainers to both hinges.

The estimated cost of the retrofit structure is \$6,000,000. The estimated cost for the replacement bridge is \$4,800,000 plus an additional \$1,100,000 for the associated roadway work necessary to relocate the alignment downstream for a total replacement cost of approximately \$5,900,000. Because of the multiple deficiencies of the existing structure, the cost of the retrofit is close to the cost of a new structure. For this reason, and because the existing structure is almost 40 years old, it is recommended that the bridge replacement be the selected alternative.

Evaluation of geotechnical and hydraulic constraints was performed with very limited data, since no new geotechnical borings were drilled, no rock/soil gradations were available, and the channel geometry data was not precise. However, while this might affect the estimated costs of foundation work, it is unlikely that the seismic deficiencies of the structure



identified in this study will change significantly. It is recommended that additional field investigations be performed before any further design work begins. If significant variations in subsurface conditions or hydraulic data are found during future investigations, the analyses performed and described within this report may no longer be applicable and the structure should be reevaluated.

# Hickman Road Bridge (Stanislaus County)

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Bridge No. 38C-0004

## Task Order 01 – Retrofit Strategy Report

CH2MHILL was contracted by the County of Stanislaus to analyze and eventually either retrofit or replace the existing Hickman Road Bridge over the Tuolumne River in Stanislaus County. Our agreement with the County is a Master Services Agreement (MSA) with individually authorized task orders. The first task order, Task 2001-01 signed January 25, 2002, is the Retrofit Strategy Analysis. Part of this task includes the completion of a Retrofit Strategy Report.

This Retrofit Strategy Report contains the following sections:

- **Structure Description** – including geotechnical and hydraulic assumptions used.
- **Seismic Analysis** – outline of procedures used for the seismic analysis of the existing and retrofit structures.
- **As-Built Structure Analysis Conclusions** – calculation results are summarized and discussed, followed by a brief summary of deficiencies to be addressed in the retrofit strategies.
- **Proposed Retrofit Strategy Description** – description of proposed retrofit.
- **Retrofit Structure Analysis Conclusions** – outlines the development of the proposed retrofit strategy and calculation results are summarized.
- **Bridge Replacement** – outlines development of the bridge replacement and list of assumptions.
- **General Plans** – retrofit and replacement structures.
- **Cost Estimates** – retrofit and replacement structures.
- **Conclusions and Recommendations**

## Structure Description

The Hickman Road Bridge at Tuolumne River is a three cell cast-in-place reinforced concrete box girder bridge built in 1963. The structure is owned and maintained by Stanislaus County. It is located approximately 0.241 km (0.15 miles) south of State Route 132. The structure carries two lanes of traffic, two sidewalks with steel tube barrier rails, and utilities.

The seven span structure has a constant superstructure depth of 1.83 m (6') and an out to out width of 10.21 m (33'-6"). Spans 1 and 7 are 22.86 m (75') long, and Spans 2 through 6 are 30.48 m (100') long. Both Span 2 and Span 5 each have a hinge with a 152 mm (6") seat.

The diaphragm type abutments consist of reinforced concrete winged cantilever abutments on vertical and battered steel piles. Each abutment has seven BP10x42 piles (alternating with 4 battered and 3 vertical), driven to carry a design load of 40.8 tonne (45 tons). The pile lengths are approximately 12.2 m (40') at Abutment 1 and 10.97 m (36') at Abutment 8.

There are six interior solid rectangular RC piers having a range of clear heights between 12.95 m (42.5') and 20.85 m (68.4') all supported on BP10x42 steel piles. The piles vary between 3.66 m (12') to 5.49 m (18') in length. Piers 2 and 7 are pin connected to the pile cap in the longitudinal direction by using #36 (#11) dowels that criss-cross through the joint between the pier and the pile caps at the centerline. These two piers each have 20 piles which frame into a 3.7 m x 5.5 m x 1.1 m (12' x 18' x 3'-9") pile cap. Piers 3 through 6 each contain 24 steel piles which frame into a 4.9 m x 7.3 m (16' x 24') pile cap of varying depths for each pier. Piers 3 through 6 are fixed to the caps in both the longitudinal and transverse directions.

The following material properties were used in the analyses:

Mild Reinforcement	$f_y = 303 \text{ Mpa (44 ksi)}$
Reinforced Concrete	$f'_c = 34 \text{ Mpa (5000 psi)}$

## Geotechnical Data

Causative Fault - Praire Creek-Spenceville-Dentman

Magnitude - 6.5

Style of Fault - Normal

Distance to causative Fault - ~ 32 km (19.9 mi)

Peak rock acceleration - 0.2g

Site Soil - Type D at abutments and piers

Use ARS curves in Figure B.7 corresponding to 0.2g.

Preliminary values for embankment fill stiffness provided by Seismic Design Criteria Section 7.8 is reasonable based on the loose to low medium dense granular backfill. This also assumes fairly good compaction of the abutment fill during initial construction.

Evaluation of geotechnical constraints was performed with very limited data, and a log of test borings taken 30 years ago. These boring do not have laboratory strength corrosion and compressibility data necessary to perform a complete geotechnical design for the selected retrofit option. It is recommended that additional field investigations be performed before any further design work begins. If significant variations in subsurface conditions are found during future investigations, the analyses performed and described within this report may no longer be applicable and the structure should be reevaluated using current geotechnical data.

#### Hydraulic Data

Location	Total Scour	
	Existing, m (ft)	Retrofit, m (ft)
Abutment 1	4.15 (13.6)	4.15 (13.6)
Pier 2	2.80 (9.2)	2.80 (9.2)
Pier 3	2.80 (9.2)	2.80 (9.2)
Pier 4	6.68 (21.9)	9.17 (30.1)
Pier 5	6.89 (22.6)	9.45 (31.0)
Pier 6	7.13 (23.4)	9.78 (32.1)
Pier 7	2.80 (9.2)	2.80 (9.2)
Abutment 8	0	0

Table 1: Total Scour - Existing Condition



These scour results are preliminary and are based on numerous assumptions, the most significant of which are the channel geometry used to develop the hydraulic parameters and the geotechnical data used for the scour calculations. Additional hydraulic and geotechnical work will be required to further refine the hydraulic impacts and scour depths. Such work includes:

- Preparation of a Bridge Hydraulic Site Survey Check List in accordance with Caltrans Guidelines.
- Preparation of a Bridge Hydrology Report and Review in accordance with State and Federal Requirements.
- Performing geotechnical borings at the proposed pier and abutment locations and developing soil gradations for each significant soil stratum encountered.
- Performing a survey of the channel invert both up- and downstream to more accurately assess historical aggradation/degradation.

If significant variations in hydraulic data are found during future investigations, the analyses performed and described within this report may no longer be applicable and the structure should be reevaluated.

## Seismic Analysis

The dynamic analysis of the structure was performed using SIESAB, Version 4.2.1.

### 1) Analysis Method

- Linear elastic response spectrum analysis. CQC modal combinations.
- ATC-32 ARS curve for soil profile type D, magnitude of 6.5, and 0.2g peak rock acceleration.

### 2) Load Combinations (Directional Effects)

- Case 1 & 2: 100% Longitudinal and 100% Transverse, respectively.
- Case 3: 100% Longitudinal + 30% Transverse
- Case 4: 30% Transverse + 100% Longitudinal

### 3) Section Properties

- Effective superstructure section properties determined according to SDC 2001 Section 5.6 (sectionproperties.xls).
- Effective column section properties developed from a moment-curvature analysis using XSection (ColCrackMomIner.xls), and from SDC Section 5.6.1.1.
- Effective section properties used for displacement ductility calculations. Uncracked column section properties used when calculating flexural moment ductility's (shorter periods are obtained with higher force levels).

### 4) Abutment Restraints

- Longitudinal Restraint: Springs developed in accordance with a maximum soil stress of 369 kPa (7.7 ksf).
- Transverse Restraint: Adjusted until the force represented the shear capacity of the wingwall.
- Retrofit structure follows procedure of Caltrans Memo "Alternative Method for Seismic Modeling of Abutments"

### 5) Pier Foundations

- BDA 14-3: 18.14 tonne (40 kips) per inch per pile.
- Springs applied at pile caps to obtain forces for existing structure. Although scour levels indicate Piers 4-6 will be unable to support even the dead load, the structure was modeled with springs at the pile caps to obtain results necessary to move forward with the analysis.
- Retrofit model – The retrofit piles were placed in model as freestanding members and original piles ignored due to scour levels.

### 6) P-Δ Effects – Negligible based on SDC Section 4.2 (P-Delta.xls).

The following analysis runs were performed:

- 1) SEISAB Tension Model – superstructure joints released, cracked and uncracked
- 2) SEISAB Compression Model – superstructure joints locked, cracked and uncracked
- 3) XSection models for all piers – transverse and longitudinal capacities determined

- 4) PCBridge plane frame model – obtain section properties and dead loads

## As-Built Structure Analysis Conclusions

### Seismic Results

Tables 2 and 3 show the seismic results using cracked and uncracked section properties for both the compression and tension models.

<b>CRACKED</b>						
<b>Compression Model</b>						
Period = 1.125						
Location	Max. Force (kips)		Max. Moment (kip-ft)		Top Displacement (in)	
	Longit.	Trans.	Longit.	Trans.	Longit.	Trans.
Abutment 1	2276.3	225.6	-	-	0.61	0.07
Pier 2	40.0	186.4	222	6603	0.78	0.36
Pier 3	71.0	291.1	1429	14376	0.85	2.84
Pier 4	76.1	372.4	1534	19097	0.89	4.31
Pier 5	78.4	340.7	1612	18386	0.89	4.82
Pier 6	65.6	245.9	1368	13573	0.85	3.84
Pier 7	56.5	239.1	212	8682	0.79	1.75
Abutment 8	2178.9	246.2	-	-	0.60	0.07
<b>Tension Model</b>						
Period = 1.925						
Location	Max. Force (kips)		Max. Moment (kip-ft)		Top Displacement (in)	
	Longit.	Trans.	Longit.	Trans.	Longit.	Trans.
Abutment 1	612.9	163.8	-	-	0.17	0.05
Pier 2	60.8	343.9	553	9552	0.20	1.56
Pier 3	243.8	411.6	6581	19290	4.88	3.73
Pier 4	195.4	181.1	5630	11458	4.88	2.83
Pier 5	149.9	177	4685	11623	4.88	3.36
Pier 6	140.2	336.4	4371	18675	4.90	5.22
Pier 7	80.6	327.3	979	9820	0.22	1.79
Abutment 8	621.2	167.3	-	-	0.17	0.05

Table 2: Seismic Results using Cracked Properties

<b>UNCRACKED</b>						
<b>Compression Model</b>						
Period = 0.710						
Location	Max. Force (kips)		Max. Moment (kip-ft)		Top Displacement (in)	
	Longit.	Trans.	Longit.	Trans.	Longit.	Trans.
Abutment 1	3068.8	300.8	-	-	0.84	0.10
Pier 2	92.2	474.3	2114	19672	1.06	0.84
Pier 3	141.6	597.7	3435	32419	1.14	2.20
Pier 4	135.4	818.8	3344	46358	1.19	2.20
Pier 5	121.7	762.5	3076	46321	1.20	4.39
Pier 6	108.0	525.2	2766	34000	1.15	3.55
Pier 7	84.4	712.0	1591	30881	1.07	1.54
Abutment 8	3037.4	304.6	-	-	0.84	0.10
<b>Tension Model</b>						
Period = 1.368						
Location	Max. Force (kips)		Max. Moment (kip-ft)		Top Displacement (in)	
	Longit.	Trans.	Longit.	Trans.	Longit.	Trans.
Abutment 1	829.4	166.1	-	-	0.23	0.05
Pier 2	52.4	602.1	445	21728	0.28	0.84
Pier 3	524.6	1145.3	14313	58195	5.30	3.80
Pier 4	409.1	443.7	12111	28549	5.32	2.44
Pier 5	310.6	364.8	10045	25469	5.32	2.60
Pier 6	273.7	688.4	9199	43012	5.33	4.39
Pier 7	59.2	607.2	325	23666	0.29	1.10
Abutment 8	816.2	177.6	-	-	0.23	0.06

Table 3: Seismic Results using Uncracked Properties

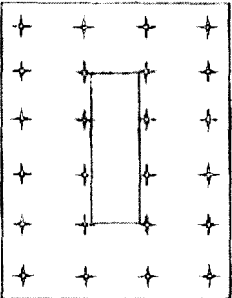
### Piles

The existing piles at the piers vary in length from 3.66 m to 5.49 m (12' to 18') in length based on specified tip elevations. According to BDS (2000) Section 4.4.5.2, 100% of the degradation scour shall be used in the analysis. According to BDS (1995) Section 4.4.2.2, 50% of the maximum anticipated scour shall be used in the analysis. The more conservative 50% of maximum anticipated scour are assumed for this structure for three reasons:

- 1) The scour opinion was not conclusive with regard to the amount of degradation scour that has occurred because of the lack of current topographical data. The most recent USGS survey was taken over 30 year ago.
- 2) Based on observed scour levels during field investigations and a video of the high velocity and volume of the flood of 1997, a more conservative approach is appropriate for this structure.
- 3) Piers 3, 4, 5, and 6 are in areas of potential liquefaction. Up to 2.13 m (7 ft) of piles may be embedded in liquefiable soil and cannot be considered fixed above this point.

50% of the maximum anticipated scour amounts to 1.52 m to 3.66 m (5' to 12'). Based on these anticipated scour depths of the existing condition, the piles at Piers 4 through 6 will not support even the dead load of the structure. In some cases, the scour elevations will be below the specified pile tip elevations. In addition, based on the As-Builts, the driven piles were ~8% shorter than the planned specified tip elevations. The piles are inadequate based on scour elevations and pile lengths. The bridge appears to be scour critical.

The piles of Piers 2, 3, and 7 are fully embedded and were investigated based on column overstrength values in the transverse and longitudinal directions (SDC V1.2 Section 7.7). Based on MTD 20-4 Attachment B, if the capacity of the existing piles is exceeded for either tension or compression, the piles must be ignored. Because there are no tension tie connections to the pile caps, the tensile capacity of the piles is zero. In the analysis, if it was determined that a pile was in tension, it was removed and the seismic demand was calculated for the reduced group. The results are summarized in Table 4. Where the ultimate pile capacities are exceeded overturning is likely.

STRONG DIRECTION			WEAK DIRECTION		
Pier	Pile Row	Axial Load (kips)	Pier	Pile Row	Axial Load (kips)
2	1	420.54	2	A	52.44
	2	287.28		B	52.44
	3	154.03		C	52.44
	4	20.77		D	52.44
	5	0.00	351.26		
	6	0.00	B	178.54	
3	1	604.86	C	0.00	
	2	399.79	D	0.00	
	3	194.72	7	A	53.60
	4	0.00		B	53.60
	5	0.00		C	53.60
	6	0.00		D	53.60
7	1	474.73			
	2	327.72			
	3	180.71			
	4	0.00			
	5	0.00			
	6	0.00			

Notes:



-  = Ignored (tension)
-  = Pile ultimate capacity exceeded (180 kips)  
(180 kips = 2 x 45 ton Service Capacity)

Table 4 - Pile Loads

### Pile Caps

Based on MTD 20-4, the footing and piles "should be able to support the vertical D.L., including seismic overturning axial load..." However, the pile caps do not contain any top mat reinforcement or shear reinforcement. Pile caps cannot resist seismic overturning moments and have the potential for brittle failure at the joints.

### Hinges

The expansion hinges have only a 152 mm (6") seat and were never retrofit with restrainers. The movement for temperature change is calculated to be approximately 51 mm (2") for moderate location (65 °F) with a temperature range of  $\pm 35$  °F. The opening of the joints, which measured 60 mm (2.375") @ 76°F during the field investigation, appears to have been originally cast at approximately 19 mm ( $\frac{3}{4}$ "). Based on a 152 mm (6") seat as shown on the As-Builts, the current seat length at certain times of the year could be as little as 80 mm (3.2") (as-constructed seat minus shortening minus thermal). Since the uncracked tension model results in a seismic movement of 135 mm (5.3"), which is greater than 80mm (3.2"), there is a potential for hinge unseating and collapse.

### Piers

The moment ductility's, shear capacity's, and displacement ductility's of the piers were investigated. Moment ductility and shear capacity analyses follow the procedures of Memo to Designers 20-4 March 1995, while the procedure for displacement ductility's follow SDC Version 1.2.

- **Moment Ductility**

Moment ductility is the ratio of moment demand based on earthquake and dead loads to nominal moment capacity. For poorly confined compression members the allowable maximum ductility demand  $\mu_r$  is 1.0 for rectangular single column bents (MTD 20-4, Figure 1). Table 5 summarizes the moment ductility's for the columns at top and bottom in the longitudinal and transverse directions. Based on these results, pins would form at the top and bottom of Piers 2-6 resulting in collapse of the structure.

Location	Moment Ductility			
	BOTTOM		TOP	
	Long	Trans	Long	Trans
Pier 2	0.0	1.9	0.4	0.2
Pier 2*		1.3		
Pier 3	1.6	2.3	1.5	0.2
Pier 4	1.3	1.8	1.3	0.2
Pier 5	1.1	1.8	1.1	0.1
Pier 6	1.0	1.7	1.0	0.2
Pier 7	0.0	2.4	0.3	0.3
Pier 7*		1.9		

\* At approximately 2.88' above the bottom pin-connection where the column reinforcement has developed full capacity.

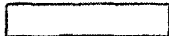
 - Indicates moment ductility greater than allowed.

Table 5 – Moment Ductility

Shear Capacity

Location	Shear Strength, $V_n$ (kips)		Plastic Shear, $V_p$ (kips) - XSection				Location
	BOT	TOP	BOT		TOP		
			WEAK	STRONG	WEAK	STRONG	
Pier 2	317	308	120	347	113	328	Pier 2
Pier 3	310	307	119	337	321	420	Pier 3
Pier 4	319	307	301	398	290	381	Pier 4
Pier 5	320	307	273	363	262	347	Pier 5
Pier 6	321	308	263	351	252	334	Pier 6
Pier 7	307	307	318	318	102	298	Pier 7

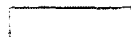
 - Indicates plastic shear greater than shear capacity.

Table 6 – Shear Results

Plastic shear is determined from XSection plastic moment, column height, and fixity. As can be seen in the results of Table 6, all of the piers fail to meet the required shear capacity.

Comments on Piers: All of the piers fail in shear at the bottom in the strong direction. All of the piers form moment plastic hinges at the bottom in both directions. Based on these results alone, the structure will collapse. Iterations on the As-Built models were not

performed with a new pin forming at each plastic hinge location because it is apparent that the piers do not have the capacity to carry any additional forces which would result from adding a pin to the model and reanalyzing.

- **Displacement Ductility (cracked properties)**

Displacement ductility's for both tension and compression models are shown in Tables 7, 8, and 9.

		TENSION MODEL							
		PERFORMANCE DUCTILITY - SDC Sec. 4.1				GLOBAL DUCTILITY - SDC Sec. 2.2.4			
		Demand / Capacity (ultimate)				Demand / Capacity (yield)			
Pier No	Load Case	Longitudinal		Transverse		Longitudinal		Transverse	
		Actual	Target	Actual	Target	Actual	Target	Actual	Target
2	1	0.007	< 1.0	0.000	< 1.0	0.030	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.233	< 1.0	0.000	< 4.0	0.872	< 4.0
	3	0.007	< 1.0	0.069	< 1.0	0.030	< 4.0	0.260	< 4.0
	4	0.002	< 1.0	0.233	< 1.0	0.000	< 4.0	0.872	< 4.0
3	1	0.216	< 1.0	0.000	< 1.0	0.966	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.382	< 1.0	0.000	< 4.0	1.039	< 4.0
	3	0.216	< 1.0	0.115	< 1.0	0.966	< 4.0	0.313	< 4.0
	4	0.069	< 1.0	0.382	< 1.0	0.209	< 4.0	1.039	< 4.0
4	1	0.182	< 1.0	0.000	< 1.0	0.820	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.246	< 1.0	0.000	< 4.0	0.664	< 4.0
	3	0.182	< 1.0	0.074	< 1.0	0.820	< 4.0	0.200	< 4.0
	4	0.054	< 1.0	0.246	< 1.0	0.245	< 4.0	0.664	< 4.0
5	1	0.152	< 1.0	0.000	< 1.0	0.673	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.248	< 1.0	0.000	< 4.0	0.663	< 4.0
	3	0.152	< 1.0	0.074	< 1.0	0.673	< 4.0	0.199	< 4.0
	4	0.046	< 1.0	0.248	< 1.0	0.202	< 4.0	0.663	< 4.0
6	1	0.140	< 1.0	0.000	< 1.0	0.599	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.357	< 1.0	0.000	< 4.0	0.952	< 4.0
	3	0.140	< 1.0	0.107	< 1.0	0.599	< 4.0	0.206	< 4.0
	4	0.042	< 1.0	0.357	< 1.0	0.180	< 4.0	0.952	< 4.0
7	1	0.005	< 1.0	0.000	< 1.0	0.025	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.223	< 1.0	0.000	< 4.0	0.832	< 4.0
	3	0.005	< 1.0	0.067	< 1.0	0.025	< 4.0	0.249	< 4.0
	4	0.002	< 1.0	0.223	< 1.0	0.007	< 4.0	0.832	< 4.0

Table 7 – Tension Model Performance and Global Displacement Ductility



**COMPRESSION MODEL**

Pier No.	Load Case	PERFORMANCE DUCTILITY - SDC Sec. 4.1				GLOBAL DUCTILITY - SDC Sec. 2.2.4			
		Demand / Capacity		(ultimate)		Demand / Capacity		(yield)	
		Longitudinal		Transverse		Longitudinal		Transverse	
		Actual	Target	Actual	Target	Actual	Target	Actual	Target
2	1	0.029	< 1.0	0.000	< 1.0	0.133	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.155	< 1.0	0.000	< 4.0	0.581	< 4.0
	3	0.029	< 1.0	0.047	< 1.0	0.133	< 4.0	0.176	< 4.0
	4	0.009	< 1.0	0.155	< 1.0	0.041	< 4.0	0.581	< 4.0
3	1	0.038	< 1.0	0.000	< 1.0	0.170	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.294	< 1.0	0.000	< 4.0	0.799	< 4.0
	3	0.036	< 1.0	0.088	< 1.0	0.170	< 4.0	0.240	< 4.0
	4	0.011	< 1.0	0.294	< 1.0	0.051	< 4.0	0.799	< 4.0
4	1	0.034	< 1.0	0.000	< 1.0	0.152	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.372	< 1.0	0.000	< 4.0	1.004	< 4.0
	3	0.034	< 1.0	0.112	< 1.0	0.152	< 4.0	0.302	< 4.0
	4	0.010	< 1.0	0.372	< 1.0	0.045	< 4.0	1.004	< 4.0
5	1	0.028	< 1.0	0.000	< 1.0	0.124	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.347	< 1.0	0.000	< 4.0	0.928	< 4.0
	3	0.028	< 1.0	0.104	< 1.0	0.124	< 4.0	0.278	< 4.0
	4	0.006	< 1.0	0.347	< 1.0	0.038	< 4.0	0.928	< 4.0
6	1	0.025	< 1.0	0.000	< 1.0	0.106	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.256	< 1.0	0.000	< 4.0	0.683	< 4.0
	3	0.025	< 1.0	0.077	< 1.0	0.106	< 4.0	0.205	< 4.0
	4	0.007	< 1.0	0.256	< 1.0	0.032	< 4.0	0.683	< 4.0
7	1	0.024	< 1.0	0.000	< 1.0	0.111	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.187	< 1.0	0.000	< 4.0	0.696	< 4.0
	3	0.024	< 1.0	0.056	< 1.0	0.111	< 4.0	0.209	< 4.0
	4	0.007	< 1.0	0.187	< 1.0	0.033	< 4.0	0.696	< 4.0

Table 8 – Compression Model Performance and Global Displacement Ductility

LOCAL DUCTILITY - SDC Sec. 3.1.4.1				
member capacity / member yield				
Pier No.	Longitudinal		Transverse	
	Actual	Target	Actual	Target
2	4.60	>3.0	3.76	>3.0
3	4.47	>3.0	2.72	>3.0
4	4.50	>3.0	2.70	>3.0
5	4.42	>3.0	2.68	>3.0
6	4.28	>3.0	2.67	>3.0
7	4.53	>3.0	3.72	>3.0

Notes:

- 1) Moment curvature analysis and ultimate displacement capacities from XSection
- 2) Displacement demands are from Seisab analysis (cracktens.rpt, crackcomp.rpt)

Load Cases:

- 1) Longitudinal
- 2) Transverse
- 3) 1.0\*Long + 0.3\*Trans
- 4) 0.3\*Long + 1.0\*Trans

Load Case 3 and Case 4 shall be used to determine earthquake demands based on SDC 2.1.2.

- Indicates local ductility not meeting minimum recommended target.

Table 9 – Local Displacement Ductility with Notes

As shown in the Table 8 above, Piers 3 through 6 do not meet the minimum recommended target local displacement ductility of  $\mu_c = 3$  as stated in SDC Section 3.1.4.1. This target ductility is for new columns and does not reflect a collapse mechanism for the existing structure, but is the standard to judge by when comparing new to old.

### Superstructure Joints

Calculations were performed for the superstructure/column joint of Pier 6, which is the worst case, but the dimensions and loading of all superstructure joints are very similar. Based on SDC 7.4.2 joints should be proportioned so that principal stresses satisfy minimum recommended requirements based on overstrength moments. The principal stresses of the joint fail the criteria for both compression and tension. The joint was also checked against the minimum requirements for joint shear reinforcement, which includes steel areas for vertical stirrups, horizontal stirrups, and horizontal side reinforcement. The joint does not

meet any of the recommended requirements for the three types of reinforcing; thus the joints may be subject to brittle failure.

### **As-Built Conclusions**

It is obvious that the structure was designed primarily for dead loads only. The structure has multiple failure mechanisms which separately, or together, could cause collapse including:

- Hinge unseating
- Overturning
- Superstructure joint shear
- Scour – can collapse with only dead load
- Piers fail – moment ductility and shear capacity

Since the bridge qualifies as a Category 1 structure under the Seismic Safety Retrofit Program, a retrofit or replacement of the structure should be considered. Since the bridge is also potentially scour critical, the retrofit or replacement should be expedited.

### **Suggested Retrofit Strategy**

#### **File Retrofit**

Based on the recommendations in the Preliminary Geotechnical Memorandum for the Hickman Road Bridge at Tuolumne River Project, prepared for Stanislaus County Department of Public Works and dated May 2, 2002, new 900 mm (36") diameter cast-in-steel-shell (CISS) piles will be added to the perimeter of all pier foundations. The new 175 ton CISS piles will have specified tip elevations that result in pile lengths varying from 13.7 to 18.6 m (45 to 61 ft). New piles will provide adequate strength considering column plastic hinging and ½ of the anticipated scour depth. The CISS piles provide excellent lateral resistance and should be used where poor soil conditions exist, such as soft bay mud deposits or loose sands. CISS piles are the preferred option where liquefaction or scour potential exists that cause long unsupported pile lengths. CISS piles also simplify CIDH construction where wet conditions exist.

### **Footing Retrofit**

The existing footings of all piers will be enlarged in plan dimensions and depth. The top overlay will provide sufficient confinement against pullout of column bars where column strengthening is necessary. New footings will have sufficient capacity to resist column plastic hinge forces of new columns, and provide the load path to the new piles. The pile caps will have enough reinforcement to resist seismic overturning moments and prevent brittle failure at the joints.

### **Abutment Retrofit**

Abutments will be stiffened to relieve the high seismic demands to the piers by increasing the width of both cantilever abutments and adding a row of 900 mm (36") diameter 175-ton CIDH piles. At each abutment, 1.52 m (5') will be added to the diaphragm supported on 6 piles. The selection of the 175 ton CIDH piles was based on recommendations in the Preliminary Geotechnical Memorandum dated May 2, 2002, and will have specified tip elevations resulting in pile lengths of 24.38 m (80 ft) at Abutment 1 and 21.34 m (70 ft) at Abutment 8. The new abutment diaphragms will be strong enough to mobilize the backfill for the full height of 3.32 m (10.9 ft).

### **Steel Column Casing**

Due to the oblong dimensions of the piers, the standard Caltrans column casing retrofit will not provide confinement for the piers. Instead, 20 mm (¾") steel plates will be placed against the long side of the piers and anchored with high strength rods cored through the existing piers for confinement. The plates will extend full height to resist shear stresses exceeding the allowable shear stresses outside of the plastic hinge region. Elliptical steel shells will be welded to the ends of the plates to smooth the noses of the piers, and 200 mm (8") of shotcrete will protect the steel of the whole pier. This retrofit occurs at Piers 4, 5, and 6 to enhance column ductility and improve shear capacity.

### **Column Strengthening**

The cross section dimensions of Piers 2, 3, and 7 will be enlarged for the full height and will contain additional longitudinal reinforcement to add strength to the piers. Piers 2 and 7 must be fixed to the new footings with the new longitudinal reinforcement. Pier 3 will be

strengthened at the new footing and also at the superstructure where the additional reinforcement must be cored through the soffit. This retrofit will provide the required strength to prevent plastic hinging, enhance column ductility, and improve shear capacity. The shape will match that of the shotcreted column casings.

### Pipe Seat Extender with Restrainers

The 150 mm (6") steel angle hinges will be retrofitted to avoid unseating with standard 200 mm (8") diameter double extra-strong pipe hinge seat extenders added to each cell at both hinges. The pipes are capable of resisting a 100-kip vertical dead load reaction at a 200 mm (8") extension, and can also be used as a transverse key. Long ductile Type 2 restrainer cables will be used in combination with the seat extender pipes to prevent spans from falling off their supports and to tie the frames together.

## Retrofit Structure Analysis Conclusions

### Seismic Results

Tables 10 and 11 show the seismic results using cracked and uncracked section properties for both the compression and tension retrofit models.

<b>CRACKED</b>						
<b>Tension Model</b>						
Period = 0.268						
Location	Max. Force (kips)		Max. Moment (kip-ft)		Top Displacement (in)	
	Longit.	Trans.	Longit.	Trans.	Longit.	Trans.
Abutment 1	997.9	410.7	-	-	0.50	1.32
Pier 2	146.8	577.8	2460	24139	0.52	1.66
Pier 3	698.8	565.6	19227	30874	3.92	1.61
Pier 4	370.3	646.2	10463	35299	3.94	3.06
Pier 5	289.7	644.9	8691	37557	3.95	3.70
Pier 6	257.3	457	8449	30525	3.96	2.75
Pier 7	145.7	401.4	2340	18610	0.50	1.38
Abutment 8	1044.2	420.4	-	-	0.48	0.83
<b>Compression Model</b>						
Period = 0.222						
Location	Max. Force (kips)		Max. Moment (kip-ft)		Top Displacement (in)	
	Longit.	Trans.	Longit.	Trans.	Longit.	Trans.
Abutment 1	2144.6	351.2	-	-	1.09	1.13
Pier 2	293.4	425.3	5715	18202	1.15	0.10
Pier 3	257.4	632	6473	31850	1.20	1.60
Pier 4	158.8	615.1	3559	33670	1.24	2.94
Pier 5	143.2	636.6	3129	36072	1.20	3.64
Pier 6	156.0	571.1	3570	34302	1.20	2.93
Pier 7	242.7	421.6	5083	22214	1.14	1.63
Abutment 8	2331.5	464.2	-	-	1.08	0.91

Table 10: Seismic Results using Cracked Properties

<b>UNCRACKED</b>						
<b>Tension Model</b>						
Period = 0.278						
Location	Max. Force (kips)		Max. Moment (kip-ft)		Top Displacement (in)	
	Longit	Trans.	Longit	Trans.	Longit	Trans.
Abutment 1	957.7	185.4	-	-	0.24	4.45
Pier 2	52.9	681.3	328	24505	0.29	1.81
Pier 3	608.8	643.0	16392	36170	5.23	2.23
Pier 4	436.5	743.4	12754	42477	5.23	3.89
Pier 5	333.0	738.8	10665	45408	5.24	4.75
Pier 6	312.8	652.1	10336	43278	5.26	4.18
Pier 7	53.9	951.4	392	37403	0.29	2.95
Abutment 8	834.3	134.1	-	-	0.23	3.22

<b>Compression Model</b>						
Period = 0.306						
Location	Max. Force (kips)		Max. Moment (kip-ft)		Top Displacement (in)	
	Longit	Trans.	Longit	Trans.	Longit	Trans.
Abutment 1	2009.5	368.0	-	-	1.02	1.18
Pier 2	417.6	560.2	8366	23862	1.08	1.14
Pier 3	395.5	792.2	10394	40498	1.13	1.16
Pier 4	183.7	594.4	4226	32518	1.16	2.32
Pier 5	157.2	646.9	3698	37615	1.16	2.99
Pier 6	192.2	647.7	4396	38526	1.14	2.42
Pier 7	355.1	571.1	7797	30050	1.08	1.40
Abutment 8	2204.7	438.9	-	-	1.02	0.86

Table 11: Seismic Results using Uncracked Properties

The retrofit model is stiffer than the As-Built model, and as a result the periods for the retrofit model are much smaller. The As-Built model periods vary between 0.71 - 1.925 depending on the model and whether cracked or uncracked properties were used, while for the retrofit model the periods only varied between 0.222 - 0.306.

Moment Ductility

Location	Moment Ductility, $\mu_F$			
	BOTTOM		TOP	
	Long	Trans	Long	Trans
Pier 2	0.58	0.91	1.34	0.25
Pier 3	1.25	0.76	1.06	0.08
Pier 4	1.43	1.31	1.48	0.07
Pier 5	1.18	1.46	1.17	0.06
Pier 6	1.18	1.43	1.12	0.10
Pier 7	0.54	0.91	1.20	0.38

Table 12 – Moment Ductility

As can be seen in Table 12, all flexural moment demand ratios are within allowable limits. According to MTD 20-4, a plastic hinge should be assumed to form in any region where the ductility demand is 1.5 or greater. In some cases it is okay to allow pins to form, as long as collapse is prevented. However, in this case, no plastic hinges are allowed to form because the moment ductility ratios are high at several locations. If a pin is allowed to form in one location, additional forces will distribute to the other members, which already have high moment demand ratios. This will cause another hinge to form and so on until multiple hinges form, and collapse occurs.

### Shear Capacity

Location	$V_n$ (kips)		$V_p$ (kips) - XSection				Location
	BOT	TOP	BOT		TOP		
			WEAK	STRONG	WEAK	STRONG	
Pier 2	1535	1475	511	422	113	328	Pier 2
Pier 3	1539	1462	838	803	773	739	Pier 3
Pier 4	10765	10680	344	467	290	381	Pier 4
Pier 5	10774	10680	310	423	262	347	Pier 5
Pier 6	10782	10684	293	402	252	334	Pier 6
Pier 7	1534	1468	431	420	102	298	Pier 7

Table 13 – Shear Results

As can be seen in Table 13, the shear capacities of all retrofitted columns are now larger than the plastic shear.

### Displacement Ductility

Displacement ductility's for both tension and compression models are shown in Tables 14, 15, and 16.

TENSION MODEL

Pier No	Load Case	PERFORMANCE DUCTILITY - SDC Sec. 4.1				GLOBAL DUCTILITY - SDC Sec. 2.2.4			
		Demand / Capacity		(ultimate)		Demand / Capacity		(yield)	
		Longitudinal		Transverse		Longitudinal		Transverse	
		Actual	Target	Actual	Target	Actual	Target	Actual	Target
2	1	0.012	< 1.0	0.000	< 1.0	0.100	0.000	0.000	< 4.0
	2	0.000	< 1.0	0.098	< 1.0	0.000	0.406	0.872	< 4.0
	3	0.012	< 1.0	0.030	< 1.0	0.100	0.124	0.250	< 4.0
	4	0.004	< 1.0	0.098	< 1.0	0.030	0.406	0.872	< 4.0
3	1	0.165	< 1.0	0.000	< 1.0	0.846	0.000	0.000	< 4.0
	2	0.000	< 1.0	0.100	< 1.0	0.000	0.372	1.039	< 4.0
	3	0.165	< 1.0	0.030	< 1.0	0.846	0.111	0.313	< 4.0
	4	0.049	< 1.0	0.100	< 1.0	0.253	0.372	1.039	< 4.0
4	1	0.091	< 1.0	0.000	< 1.0	0.743	0.000	0.000	< 4.0
	2	0.000	< 1.0	0.105	< 1.0	0.000	0.578	0.664	< 4.0
	3	0.091	< 1.0	0.032	< 1.0	0.743	0.175	0.200	< 4.0
	4	0.027	< 1.0	0.105	< 1.0	0.222	0.578	0.664	< 4.0
5	1	0.077	< 1.0	0.000	< 1.0	0.617	0.000	0.000	< 4.0
	2	0.000	< 1.0	0.105	< 1.0	0.000	0.578	0.663	< 4.0
	3	0.077	< 1.0	0.032	< 1.0	0.617	0.174	0.199	< 4.0
	4	0.023	< 1.0	0.105	< 1.0	0.186	0.578	0.663	< 4.0
6	1	0.071	< 1.0	0.000	< 1.0	0.569	0.000	0.000	< 4.0
	2	0.000	< 1.0	0.073	< 1.0	0.000	0.395	0.952	< 4.0
	3	0.071	< 1.0	0.022	< 1.0	0.569	0.119	0.286	< 4.0
	4	0.021	< 1.0	0.073	< 1.0	0.171	0.395	0.952	< 4.0
7	1	0.011	< 1.0	0.000	< 1.0	0.098	0.000	0.000	< 4.0
	2	0.000	< 1.0	0.081	< 1.0	0.000	0.338	0.832	< 4.0
	3	0.011	< 1.0	0.024	< 1.0	0.098	0.100	0.249	< 4.0
	4	0.004	< 1.0	0.081	< 1.0	0.030	0.338	0.832	< 4.0

Table 14 – Tension Model Performance and Global Displacement Ductility



**COMPRESSION MODEL**

Pier No	Load Case	PERFORMANCE DUCTILITY - SDC Sec. 4.1				GLOBAL DUCTILITY - SDC Sec. 2.2.4			
		Demand / Capacity (ultimate)				Demand / Capacity (yield)			
		Longitudinal		Transverse		Longitudinal		Transverse	
		Actual	Target	Actual	Target	Actual	Target	Actual	Target
2	1	0.026	< 1.0	0.000	< 1.0	0.223	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.074	< 1.0	0.000	< 4.0	0.306	< 4.0
	3	0.026	< 1.0	0.022	< 1.0	0.223	< 4.0	0.091	< 4.0
	4	0.008	< 1.0	0.074	< 1.0	0.067	< 4.0	0.306	< 4.0
3	1	0.050	< 1.0	0.000	< 1.0	0.259	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.099	< 1.0	0.000	< 4.0	0.369	< 4.0
	3	0.050	< 1.0	0.030	< 1.0	0.259	< 4.0	0.111	< 4.0
	4	0.015	< 1.0	0.099	< 1.0	0.078	< 4.0	0.369	< 4.0
4	1	0.029	< 1.0	0.000	< 1.0	0.233	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.101	< 1.0	0.000	< 4.0	0.556	< 4.0
	3	0.029	< 1.0	0.030	< 1.0	0.233	< 4.0	0.166	< 4.0
	4	0.009	< 1.0	0.101	< 1.0	0.070	< 4.0	0.556	< 4.0
5	1	0.024	< 1.0	0.000	< 1.0	0.193	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.104	< 1.0	0.000	< 4.0	0.568	< 4.0
	3	0.024	< 1.0	0.031	< 1.0	0.193	< 4.0	0.171	< 4.0
	4	0.007	< 1.0	0.104	< 1.0	0.058	< 4.0	0.568	< 4.0
6	1	0.022	< 1.0	0.000	< 1.0	0.172	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.077	< 1.0	0.000	< 4.0	0.421	< 4.0
	3	0.022	< 1.0	0.023	< 1.0	0.172	< 4.0	0.126	< 4.0
	4	0.006	< 1.0	0.077	< 1.0	0.052	< 4.0	0.421	< 4.0
7	1	0.026	< 1.0	0.000	< 1.0	0.221	< 4.0	0.000	< 4.0
	2	0.000	< 1.0	0.096	< 1.0	0.000	< 4.0	0.400	< 4.0
	3	0.026	< 1.0	0.029	< 1.0	0.221	< 4.0	0.121	< 4.0
	4	0.008	< 1.0	0.096	< 1.0	0.067	< 4.0	0.400	< 4.0

Table 15 – Compression Model Performance and Global Displacement Ductility

LOCAL DUCTILITY - SDC Sec. 3.1.4.1				
member capacity / member yield				
Pier No	Longitudinal		Transverse	
	Actual	Target	Actual	Target
2	8.58	>3.0	4.15	>3.0
3	5.51	>3.0	3.72	>3.0
4	8.12	>3.0	5.52	>3.0
5	8.03	>3.0	5.48	>3.0
6	7.98	>3.0	5.45	>3.0
7	9.58	>3.0	4.15	>3.0

Notes:

- 1) Moment curvature analysis and ultimate displacement capacities from XSection
- 2) Displacement demands are from Salsab analysis (crRetroT6.rpt, crRetroC6.rpt)

Load Cases:

- 1) Longitudinal
- 2) Transverse
- 3) 1.0\*Long + 0.3\*Trans
- 4) 0.3\*Long + 1.0\*Trans

Load Case 3 and Case 4 shall be used to determine earthquake demands based on SDC 2.1.2.

**Table 16 – Local Displacement Ductility with Notes**

As shown in Tables 14, 15, and 16 all of the piers now meet the required displacement ductility ratios.

Comments:

Different retrofit strategies were investigated and rejected based on certain deficiencies. The first strategy only involved retrofitting Piers 3 – 6 with steel casing. For this case Piers 2 and 7 were still failing based on transverse moment demands, and Piers 3 and 4 were still hinging. A row of large diameter CIDH piles was then added to each of the abutments in an attempt to relieve the large transverse loads going into the failing Piers 2 and 7. This strategy also did not prevent collapse. Finally, Piers 2 and 7 were retrofit to be strengthened and fixed longitudinally, and the number of additional piles added to the abutments was reduced. Pier 3 was still pinning at the top and bottom and other locations were close to failing, so it was determined that Pier 3 must be strengthened at top and bottom to avoid the plastic hinging that would shed loads to other members which did not have the capacity to take additional forces.

The final proposed retrofit structure meets all of the criteria for Memo to Designers 20-4, and the displacement ductility criteria for Seismic Design Criteria. During final design, attention should be paid to the superstructure joints. Although the joints currently do not meet the criteria of SDC Version 1.2, these criteria are for new structures and do not necessarily apply in this case.

### **Bridge Replacement**

Since the cost of the retrofit is significant for this structure due to its multiple deficiencies, an advanced planning level general plan and cost estimate was prepared for a replacement structure for comparison purposes. If retrofit costs for the existing structure approach the costs of a new structure, then it might not be worth while to try to retrofit a structure that is already almost 40 years old. In developing the replacement general plan and cost estimate the following assumptions were made:

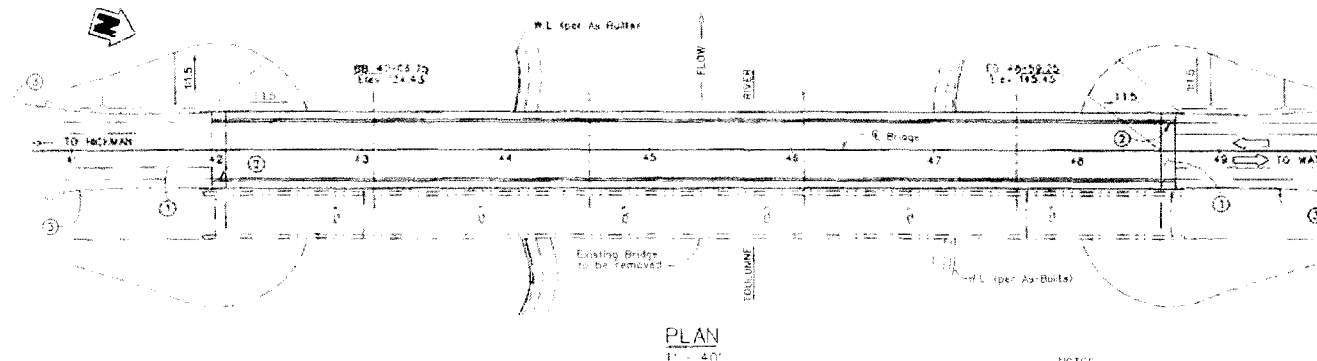
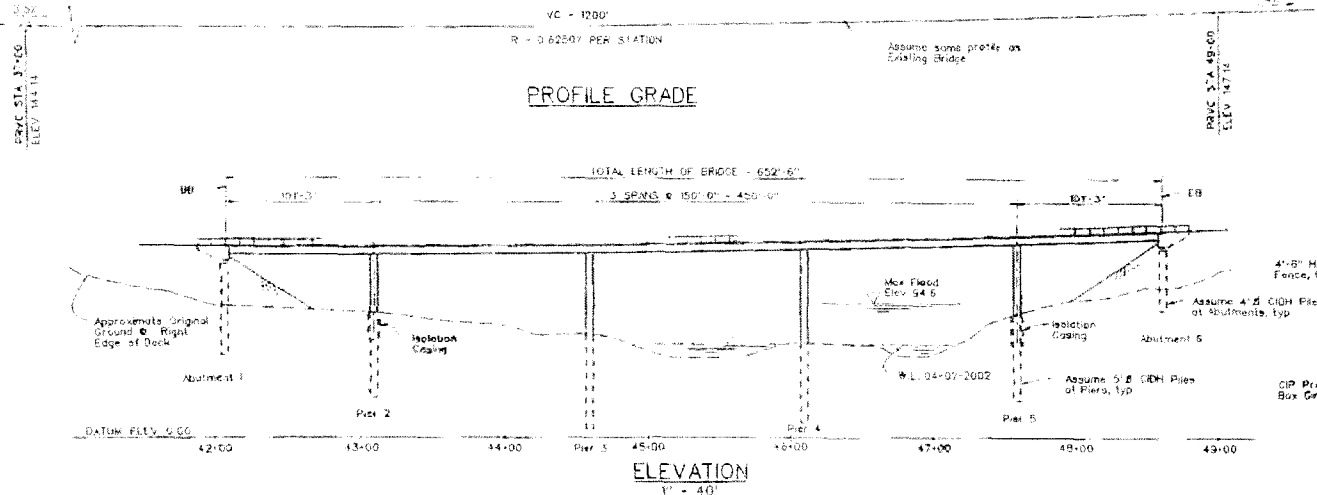
- The new structure must be built on a separate parallel alignment since it is not possible to close Hickman Road nor is it possible to partially demolish the existing bridge. Since significant County right-of-way exists downstream of the existing structure and since a new development is being constructed just upstream on the north bank, a downstream alignment was selected.
- A 5-span cast-in-place post-tensioned box-girder structure is proposed. There are several reasons for this including utilizing the same structure depth as the existing bridge (to minimize aesthetic/environmental impacts) and spans which should allow foundation construction out of the main low flow channel and the backwater channel.
- For simplicity, the vertical alignment of the replacement was assumed to be the same as that of the existing bridge. The existing sag vertical curve sight distance is adequate for a 65 mph design speed. On the existing profile the low point is on the structure and appears to have experienced some drainage problems, so if the replacement option is chosen, drainage issues should be addressed.
- The roadway work associated with the realignment will extend in each direction all the way to the nearest intersections. On the north end it is approximately 198 m (650 ft) to

the intersection with Route 132. On the southern end a local road crosses Hickman Road about 245 m (800 ft) away. For estimating purposes, the roadway width at the tie-ins of 9.75 m (32 ft) was assumed to taper linearly to the full bridge width of 16.46 m (54 ft).

- Based on County recommendations the replacement structure was assumed to be a two-lane structure with eight foot shoulders and a five foot sidewalk/bikeway on each side. On the bridge, a modified Type 736 concrete traffic barrier will separate the roadway shoulder from the pedestrian/bike traffic. The proposed structure width is 16.46 m (54'-0").
- Due to significant predicted scour and to avoid large cofferdam type excavations, large diameter drilled shafts continuous with the columns were estimated. Two columns per bent are required due to the structure width.
- Since the new bridge will be completely constructed before the old bridge is demolished, the Pac Bell and PG & E utilities on the existing bridge can be easily relocated.

## General Plans

PRVC STA 3+60  
ELEV 1471.1



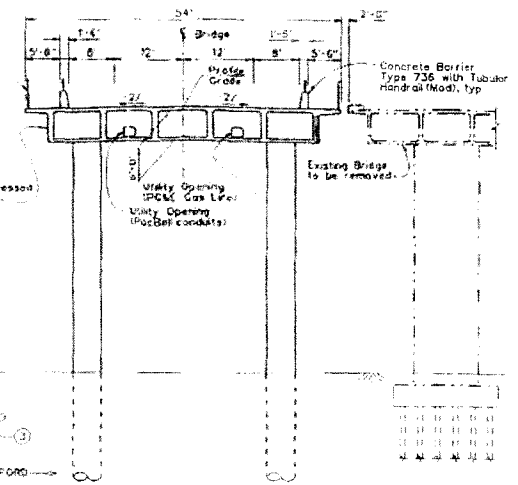
DIS. COUNTY	ROUTE	POST MILES	SHEET TOTAL
10 STA	HICKMAN ROAD	TOTAL PROJECT	NO. SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The County of Stanislaus or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

**CHAZMILL**  
2485 NATOMAS PARK DR, SUITE 600  
SACRAMENTO, CALIFORNIA 95833



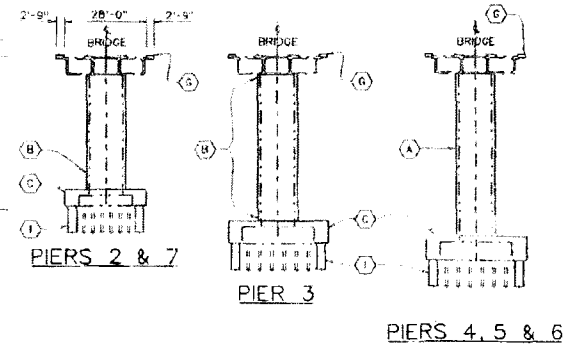
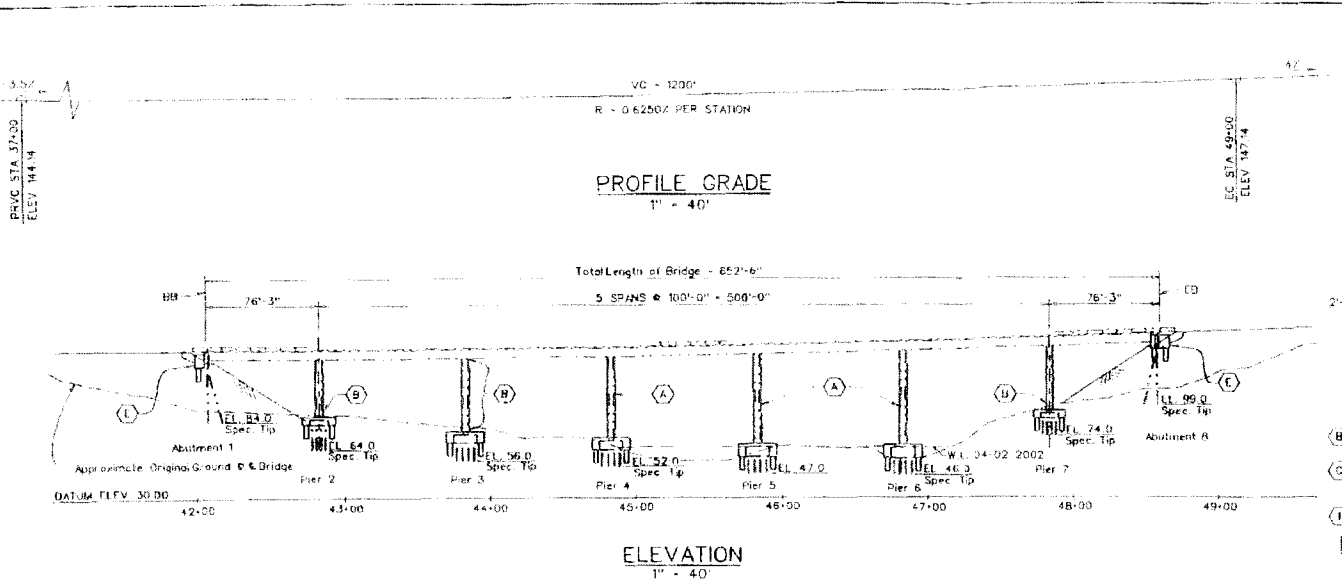
TYPICAL SECTION  
1" = 10"

DATE OF ESTIMATE	08-07-02
BRIDGE REMOVAL	+ \$250,000
STRUCTURE DEPTH	+ 6'-0"
LENGTH	+ 652'-6"
WIDTH	+ 34'
AREA	+ 35,235.50 sq ft
COST/ 50 FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	+ \$128/SF
TOTAL COST	+ \$4,800,000

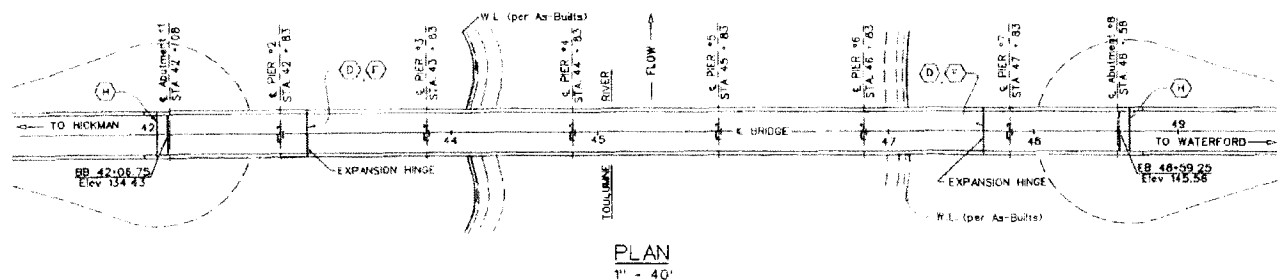
- NOTES
- 1 - --- DENOTES EXISTING STRUCTURE
  - 2 - --- DENOTES NEW CONSTRUCTION
  - ① Structure Approach Type 80 (10)
  - ② Post-Hickman Road Bridge, Bridge No. 300-004 and wear constructed.
  - ③ MBRR

Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DESIGN	H. STRANDGAARD	DESIGN	ERIKKA EMERICK	LOAD FACTOR	ERIKKA EMERICK	DATE	08-07-02	<b>PREPARED FOR</b> <b>STANISLAUS COUNTY</b> DEPARTMENT OF PUBLIC WORKS	HANS C. STRANDGAARD PROFESSIONAL ENGINEER	38C-0004 2001 MILE	<b>HICKMAN ROAD BRIDGE (REPLACE)</b> <b>GENERAL PLAN</b>
DETAILS	ED MALCHER	DESIGN	ERIKKA EMERICK	LAYOUT	ERIKKA EMERICK	DATE	01-AUG-2002				
QUANTITIES	H. STRANDGAARD	DESIGN	ERIKKA EMERICK	PERMITTING	ERIKKA EMERICK	DATE	01-AUG-2002				



TYPICAL SECTIONS  
1" = 20'



PLAN  
1" = 40'

RETROFIT LEGEND

- (A) COLUMN CASING (TYPE F) FULL HEIGHT
- (B) COLUMN STRENGTHENING
- (C) FOOTING RETROFIT
- (D) PIPE SEAT EXTENDERS & DIAPHRAGM HOLSTER
- (E) ABUTMENT RETROFIT
- (F) RESTRAINER RETROFIT
- (G) BARRIER REPLACEMENT
- (H) APPROACH SLAB RETROFIT, TYPE ED
- (I) 36" DIA CISS PILES

NOTES:

1. --- DENOTES EXISTING STRUCTURE
2. ——— DENOTES NEW CONSTRUCTION

DIST	COUNTY	ROUTE	POST MILES	SHEET	TOTAL SHEETS
10	SIA	HICKMAN ROAD			

REGISTERED CIVIL ENGINEER  
**HANS C. STRANDGAARD**  
 No. 46248  
 Exp. 12/31/02  
 CIVIL  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE

The County of Stanislaus or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

**CH2M-HILL**  
 2485 NATOMAS PARK DR, SUITE 600  
 SACRAMENTO, CALIFORNIA 95833

DATE OF ESTIMATE	08-09-02
BRIDGE REMOVAL	= \$0
STRUCTURE DEPTH	= 6'-0"
LENGTH	= 652'-6"
WIDTH	= 33.5'
AREA	= 21,859 SQ FT
COST / SQ FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= \$265/SF
TOTAL COST	= \$5,800,000

Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DESIGN BY ERIKA EMERICK				CHECKED BY H. STRANDGAARD				LOAD FACTOR DESIGN				LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD				PREPARED FOR STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS				PROJECT ENGINEER HANS C. STRANDGAARD				PROJECT NO. 380-0004				PROJECT TITLE: EARTHQUAKE UPGRADE PROJECT			
DESIGN BY ERIKA EMERICK				CHECKED BY H. STRANDGAARD				LAYOUT				SPECIFICATIONS				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				DISSEMINATION DATE: 05 AUG-2002				SHEET 01							

## **Cost Estimates**

The estimated cost of the required retrofit is \$6,000,000. The estimated cost of the replacement structure is \$4,800,000 plus an additional \$1,100,000 for the associated roadway work necessary to relocate the alignment downstream for a total replacement cost of approximately \$5,900,000. See the attached general plan estimate sheets. The estimates each include 10% mobilization and 25% contingency.

## **Conclusions and Recommendations**

A half-day field inspection took place on April 2, 2002 of the existing Hickman Road Bridge to investigate the condition of the structure, factors affecting possible retrofit construction, hydraulic issues, and other non-seismic deficiencies. At the time of the investigation there were numerous large transverse deck cracks for the whole length of the structure, more predominant at midspan locations and over the piers. The pourable joint seals had failed at both expansion hinges, and consequently the joints had filled with debris and vegetation. The east barrier rail north of Pier 4 had been damaged due to vehicular impact and was no longer functioning effectively at this location. Due to the failure of drainage facilities at the four approach corners, the fill slopes under the bridge at both abutments showed signs of significant erosion. Significant scour was evident at Piers 4, 5, and 6 with undermining at Pier 4.

A seismic analysis was performed on the existing Hickman Road Bridge, and it was determined that this bridge qualifies as a Category 1 structure under the Seismic Safety Retrofit Program since it may collapse in a seismic event and potentially threaten public safety. The structure has multiple failure mechanisms which separately, or together, could cause collapse including hinge unseating, overturning, scour, and pier failure due to moment ductility and shear capacity requirements. Based on the calculated scour depths of the existing condition, the piles at Piers 4 through 6 are completely undermined and will not support the structure. Based on preliminary hydraulic scour analysis the bridge appears to be scour critical, and may collapse during even a minor storm event.

Two choices exist, either to replace or to retrofit the existing structure. The proposed retrofit includes the following:

- Retrofitting the abutments and all pier footings.
- Adding 175-ton CIDH concrete piles at both abutments.
- Adding 175-ton CISS piles at all piers.
- Casing Piers 4, 5, and 6.
- Strengthening Piers 2 and 7.
- Adding pipe seat extenders with restrainers at both hinges.

The estimated cost of the retrofit structure is \$6,000,000. The estimated cost for the replacement bridge is \$4,800,000 plus an additional \$1,100,000 for the associated roadway work necessary to relocate the alignment downstream for a total replacement cost of approximately \$5,900,000. Because the cost of the retrofit is close to the cost of a new structure, and because the structure is almost 40 years old, it is recommended that the bridge replacement be the selected alternative. Additionally, the replacement structure will be wider and safer, with railing that conforms to current standards.

Evaluation of hydraulic constraints was performed with very limited data. The scour results in this report are preliminary and are based on numerous assumptions, the most significant of which are the channel geometry used to develop the hydraulic parameters and the geotechnical data used for the scour calculations. Additional hydraulic and geotechnical work will be required to further refine the hydraulic impacts and scour depths. Such work includes:

- Preparation of a Bridge Hydraulic Site Survey Check List in accordance with Caltrans Guidelines.
- Preparation of a Bridge Hydrology Report and Review in accordance with State and Federal Requirements.
- Performing geotechnical borings at the proposed pier and abutment locations and developing soil gradations for each significant soil stratum encountered.



- Performing a survey of the channel invert both up- and downstream to more accurately assess historical aggradation/degradation.

Evaluation of geotechnical constraints was performed with very limited data, and a log of test borings taken 30 years ago. These boring do not have laboratory strength corrosion and compressibility data necessary to perform a complete geotechnical design for the selected retrofit option.

While future field investigations may affect the estimated costs of foundation work (for example, estimated pile depths could be inaccurate due to lack of deep borings), it is unlikely that the deficiencies of the structure identified in this study will change. If significant variations in subsurface conditions or hydraulic data are found during the design phase, the conclusions of this report should be reevaluated.

Marginal Estimate

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

ISCELLANEOUS GENERAL PLAN ESTIMATE



OR PLANNING ESTIMATE



D 0017 (REV. 08/01/00)

STRUCTURE	BR. NO.	RCVD. BY		ESTIMATING GROUP	
Column River Bridge at Waterford (Replace)	38C-4			IN	
FE	DIST.	CO.	RTE	F.M.	OUT
P/PS CONCRETE BOX GIRDER	10	Sta	County Hickman Road		

LENGTH 653 FT X WIDTH 54 FT AREA 35235 SQ FT

DESIGN SECTION	QUANTITIES BY	H Strandgaard	DATE	07/18/2002	ESTIMATE NO	1	
PROJECT INCLUDES	1	STRUCTURE(S)	QUANTITIES CHECKD BY		DATE	PRICED BY	HCS
ROADWORK	0	ROADWORK	CHARGE UNIT AND EA			COST INDEX	2001

CONTRACT ITEMS		UNIT	QUANTITY	PRICE	AMOUNT
1	Structure Excavation (Bridge)	CY	230	45.00	\$ 10,350
2	Structure Backfill (Bridge)	CY	180	40.00	\$ 7,200
3	48" Cast-in-Drilled-Hole Concrete Pile	LF	528	550.00	\$ 290,400
4	60" Cast-in-Drilled-Hole Concrete Pile	LF	520	650.00	\$ 338,000
5	Structural Concrete, Bridge (Super)	CY	2,422	475.00	\$ 1,150,450
6	Bar Reinforcing Steel (Super)	LB	485,000	0.65	\$ 315,250
7	Structural Concrete, Bridge (Sub)	CY	491	425.00	\$ 208,675
8	Bar Reinforcing Steel (Sub)	LB	238,800	0.65	\$ 155,220
9	Prestressing	LB	141,000	2.00	\$ 282,000
10	Joint Seal Assembly (MR 101 mm - 160 mm)	LF	104	400.00	\$ 41,600
11	Struc. Con. App Slab (Type EO)	CY	40	450.00	\$ 18,000
12	Concrete Barrier, Type 736 (Mod)	LF	1,377	90.00	\$ 123,930
13	Metal Railing (54" high)	LF	1,377	150.00	\$ 206,550
14	Tubular Handrailing	LF	1,377	45.00	\$ 61,965
15	Isolation Casing (7" corrugated steel pipe)	LF	80	500.00	\$ 40,000
16					\$
17					\$
18					\$
19					\$
20					\$
<b>SUBTOTAL</b>					\$ 3,249,590
ROUTING	MOBILIZATION			10 %	361,066
DESIGN SECTION	SUBTOTAL STRUCTURE ITEMS				\$ 3,610,656
DESIGN A SUPERVISOR	CONTINGENCIES			25 %	\$ 902,664
DESIGN B SUPERVISOR	BRIDGE TOTAL \$ 128 /SQ FT				\$ 4,513,319
PLANNING	BRIDGE REMOVAL				\$ 250,000
	WORK BY RAILROAD OR UTILITY FORCES				\$
	<b>GRAND TOTAL</b>				\$ 4,763,319
	FOR BUDGET PURPOSES -- USE				\$ 4,500,000

DATETIME - LAST

COMMENTS: Doesn't include required approach roadwork

Marginal Estimate

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS GENERAL PLAN ESTIMATE

OR PLANNING ESTIMATE

DS-0 (01/7) (REV. 02/2000)

STRUCTURE		BR NO	REV'D BY		ESTIMATING GROUP	
Tuolumne River Bridge at Waterford (Replace)		38C-4			IN	
TYPE	DIST	CO.	RTE	P.M.	OUT	
Roadway Work	10	Sta	CountyHickman Road			
LENGTH	X WIDTH	AREA		0 SQ FT		
DESIGN SECTION		QUANTITIES BY	H Strandgaard	DATE	07/18/2002	ESTIMATE NO 1
PROJECT INCLUDES	0	STRUCTURE(S)		DATE		PRICED BY HCS
AND S	Yes	ROADWORK	CHARGE UNIT AND EA			COST INDEX 2001

CONTRACT ITEMS		UNIT	QUANTITY	PRICE	AMOUNT
1	REMOVE ASPHALT CONCRETE	CY	570	25.00	\$ 14,250
2	ASPHALT CONCRETE (TYPE B)	Ton	3,265	100.00	\$ 326,500
3	CLASS 2 AGGREGATE BASE	CY	2,400	30.00	\$ 72,000
4	CLASS 2 AGGREGATE SUBBASE	CY	2,400	20.00	\$ 48,000
5	IMPORTED BORROW	CY	23,000	10.00	\$ 230,000
6	PAINT TRAFFIC STRIPE (2-COAT)	LF	6,400	0.25	\$ 1,600
7	TEMPORARY RAILING (TYPE K)	LF	400	30.00	\$ 12,000
8	METAL BEAM GUARD RAILING	LF	250	35.00	\$ 8,750
9	24 INCH CORRUGATED STEEL PIPE DOWNDRAIN	LF	340	45.00	\$ 15,300
10	PLACE ASPHALT CONCRETE DIKE	LF	2,900	2.00	\$ 5,800
11					\$ .
12					\$ .
13					\$ .
14					\$ .
15					\$ .
16					\$ .
17					\$ .
18					\$ .
19					\$ .
20					\$ .
		<b>SUBTOTAL</b>			\$ 734,200
<b>ROUTING</b>		MOBILIZATION		10 %	81,578
1 DESIGN SECTION		<b>SUBTOTAL ROADWAY ITEMS</b>			\$ 815,778
2 DESIGN A SUPERVISOR		CONTINGENCIES		25 %	\$ 203,944
3 DESIGN B SUPERVISOR		<b>ROADWAY TOTAL</b>			\$ 1,019,722
4 PLANNING		MISC ITEMS			\$ 100,000
		WORK BY RAILROAD OR UTILITY FORCES			\$ .
		<b>GRAND TOTAL</b>			\$ 1,119,722
		FOR BUDGET PURPOSES -- USE			\$ 1,100,000

ESTIMATING - LASI

COMMENTS

Marginal Estimate

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS GENERAL PLAN ESTIMATE



OR PLANNING ESTIMATE



DD-0 (09/17) REV. 01/01/00

PROJECT TITLE Tuolumne River Bridge at Waterford (Retrofit)		RF NO 38C-4	HVLD. BY		ESTIMATOR GROUP	
TYPE REINFORCED CONCRETE BOX GIRDER	DIST 10	CO Sta	RTE County/Hickman Road	PM	IN	OUT
LENGTH	653 FT	X WIDTH	34 FT	= AREA	21859.50 FT	

DESIGN SECTION	QUANTITIES BY	Erika Emerck	DATE	08/06/2002	ESTIMATE NO	1
PROJECT INCLUDES	STRUCTURE(S)	QUANTITIES CHECKD BY	DATE		PRICED BY	ELE
AND \$	ROADWORK	CHARGE UNIT AND EA			COST INDEX	2001

CONTRACT ITEMS		UNIT	QUANTITY	PRICE	AMOUNT
1	Structure Excavation (Bridge)	CY	466	45.00	\$ 20,960
2	Structure Excavation (Type A)	CY	655	400.00	\$ 262,148
3	Structure Backfill (Bridge)	CY	268	40.00	\$ 10,729
4	Seal Course Concrete	CY	539	263.77	\$ 142,241
5	36" Cast-in-Drilled-Hole Concrete Pile (Abutments)	LF	900	350.00	\$ 315,000
6	Furnish 36" Cast-in-Steel-Shell Concrete Pile	LF	3,084	250.00	\$ 771,000
7	Drive 36" Cast-in-Steel-Shell Concrete Pile	EA	48	4,000.00	\$ 192,000
8	36" Cast-in-Drilled-Hole Concrete Pile (CIS5 piles)	LF	141	350.00	\$ 49,368
9	Structural Concrete, Bridge (Super)	CY	15	800.00	\$ 12,000
10	Bar Reinforcing Steel (Super)	LB	3,245	1.00	\$ 3,245
11	Structural Concrete, Bridge (Sub)	CY	1,227	525.00	\$ 644,175
12	Bar Reinforcing Steel (Sub)	LB	553,761	1.00	\$ 553,761
13	Miscellaneous Metal (Restrainer)	LB	3,418	10.00	\$ 34,180
14	Core Concrete (2")	LF	736	70.00	\$ 51,520
15	200 mm Welded Steel Pipe	LF	35	80.00	\$ 2,880
16	Drill and Bend Dowel	LF	2,726	15.00	\$ 40,890
17	Core Concrete (8")	LF	15	115.00	\$ 1,725
18	Drill and Grout Dowel	LF	2,756	14.06	\$ 38,750
19	Shotcrete	CY	151	600.00	\$ 90,711
20	Column Casing	LB	178,355	3.00	\$ 535,065
21	Core Concrete (3")	F	1,576	80.00	\$ 126,100
22	Access Trestle for Piers 4, 5	LS	LS	200,000.00	\$ 200,000
23	Access Road to Piers 2 and 3	LS	LS	50,000.00	\$ 50,000
24	Access Openings, Split	EA	18	1,500.00	\$ 27,000
25	Prestressing (High Strength Rods)	LB	10,711	2.50	\$ 26,778
<b>SUBTOTAL</b>					\$ 4,175,448
MOBILIZATION 10 %					463,939
<b>SUBTOTAL STRUCTURE ITEMS</b>					\$ 4,639,386
CONTINGENCIES 25 %					\$ 1,159,847
<b>BRIDGE TOTAL \$ 265 /SQ FT</b>					\$ 5,799,233
BRIDGE REMOVAL					\$ 250,000
WORK BY RAILROAD OR UTILITY FORCES					\$
<b>GRAND TOTAL</b>					\$ 6,049,233
FOR BUDGET PURPOSES -- USE					\$ 6,000,000

ESTIMATING - LAST

COMMENTS

**EXHIBIT B  
CONSULTANT'S RESPONSE**

# APPENDIX D | SCOPE OF SERVICES

Drake Haglan & Associates, Inc. (DHA) has prepared a detailed scope of services for the Hickman Road Bridge project, based in years of experience in providing management, engineering, and environmental services for HBP and LBSSRP funded projects. Our proposed scope includes all the required tasks to successfully implement, manage, engineer, and environmentally clear your project and take it to its successful fruition.

## Task 1: Project Implementation (WBS 100.15)

### Task 1.1: Management

DHA will perform the activities necessary to plan, direct, and coordinate the work of the design project. This work will include preparation of a project work plan, project schedule, and regular monthly project invoices that include percentage of project completion reports. In addition, as part of the project, DHA will establish and maintain a project filing system to keep records with all correspondence, communications, and submittals. Throughout the project, DHA will, document communications between the various parties involved including subconsultants.

### Task 1.2: Meetings

Following the Notice to Proceed, DHA will facilitate and attend a project initiation meeting to review the schedule and other project items, and to establish communication lines with Stanislaus County and the project team. In addition, DHA will attend three additional site field-reviews, or other project meetings as required to identify, address, or resolve other project issues as they arise. The DHA Project Manager will coordinate closely with Stanislaus County to ensure critical issues are raised and resolved at the meetings. Key DHA team staff will attend these meetings as needed.

### Task 1.3: Quality Assurance/Quality Control

Throughout the project, DHA will ensure project quality at all levels of design by incorporating our standardized Quality Assurance/Quality Control Plan for HBP and LBSSRP funded projects. This includes developing a project work plan manual, and conducting peer reviews and an independent bridge design check. We have referenced the various steps of our Quality Assurance/Quality Control Plan throughout our proposed project scope of work.

### Task 1.4: Project Progress Reports

On a monthly basis, DHA will provide letter-type progress reports to brief Stanislaus County on the project progress and, as necessary, hold Project Development Team (PDT) meetings. For the purposes of estimating of project fees, 24 meetings have been assumed.

### Task 1.5: Project Schedule

DHA will prepare a comprehensive project schedule and submit it to the County for review and approval. The detailed schedule will initially be based on the various work elements and tasks described in the project scope of work. The schedule will be strictly enforced and updated on a monthly basis to reflect any changes. The schedule updates will be included with the project progress reports for review by the County. DHA will develop the project schedule using Microsoft Project for Windows.

### Task 1.6: HBP and LBSSRP (Prop 1B) Funding Document Technical Assistance

Throughout the course of the project, DHA will assist Stanislaus County in the preparation of the HBP programming documents by providing technical data, draft HBP funding forms, narrative justifications,

and other information needed to update the project funding documents and prepare the Request for Authorization packages for the various steps of the; Preliminary Engineering, Utility Relocation, Right of Way, and Construction. If based on the selected preferred project strategy, revisions to the project scope, additional HBP funds, and/or an extension to the project time line is needed, DHA will also provide the necessary data and justification to Stanislaus County for the preparation of the required scope, cost, and schedule change requests.

DHA will also coordinate closely with Caltrans Headquarters (Local Seismic Retrofit Program) on the progress of the project so the Proposition 1B matching funds remain in place for the Hickman Road Bridge project. Initially DHA will revise the programming milestone dates currently listed in the “Caltrans FY 2013-14 First Quarter Seismic Program Project Delivery Report.” Subsequent to that, DHA will make periodic updates and project milestone updates to Caltrans Headquarters. DHA will also assist Stanislaus County in potentially seeking additional Proposition 1B funds to provide the full 11.47% match needed for the HBP funding

## Phase 1: Preliminary Engineering

### Task 2: Strategy Report (WBS 160.15)

#### Task 2.1: Draft Strategy Report

DHA will review the existing strategy report prepared by CH2M Hill dated September 12, 2002 and prepare an updated strategy report with a Caltrans Life Cycle Cost Analysis (LCCA) to compare the bridge retrofit and replacement options for the existing bridge.

- **Retrofit Alternative:** A seismic vulnerability was performed in 2002. Using the existing retrofit strategy, DHA will update the retrofit construction costs and perform a Caltrans LCCA.

- **Replacement Alternative:** The proposed structure type, span configuration, typical section, and features prepared for the 2002 strategy report will be used as basis for conducting a formal bridge type alternatives analysis and type selection effort (Task 4). The recommended bridge span configuration, typical section, type, and features determined by the type selection process along with the associated costs will be used as the replacement alternative for the LCCA.

DHA will prepare and submit to the County an administrative draft strategy report for review and comment prior to the project strategy meeting. The strategy report will include the following:

- A discussion of the approach road improvements, right of way implications including temporary easements, construction staging and access, utility relocations and accommodations, environmental considerations, anticipated design exceptions and anticipated future maintenance costs for each alternative.
- A list of pros and cons for each alternative.
- Preliminary quantities and estimated construction costs for each alternative.
- Results of the LCCA

Upon receipt of the County’s comments on administrative draft, DHA will address the comments and prepare a Draft Strategy Report for the County’s submittal to Caltrans Local Assistance for distribution and review.

#### Task 2.2: Strategy Meeting

After the Draft Strategy Report has been submitted to Caltrans, DHA will coordinate, schedule, and initiate a strategy meeting with Stanislaus County, Caltrans Local Assistance, Caltrans Office of Structures Local Assistance, and relevant members of the design team. The intent of this meeting is to discuss the content of the Draft Strategy Report and come to concurrence on the preferred project strategy; bridge replacement.

### Task 2.3: Final Strategy Report:

After the strategy meeting has occurred and comments have been received on the Draft Strategy Report, DHA will prepare the Final Strategy Report. The final report will be submitted to Stanislaus County and Caltrans Local Assistance for approval

Once the County and Caltrans approve the preferred project strategy, DHA will conduct preliminary engineering, environmental document, right of way services, final design, bid, and construction support for the project.

- **Deliverables:** Admin Draft, Draft, and Final Project Strategy Report

### Task 3: Public Outreach (WBS 100.10.99)

DHA in tandem with our public outreach subconsultant, Judith Buehe Communications (JBC) will perform the necessary public outreach effort for the Hickman Road Bridge project. The effort will occur concurrently with the development of the preferred project strategy and the development of the preferred bridge replacement alternative. Detailed tasks related to this effort are described below:

#### Task 3.1: Team Kickoff and Project Development Team Meetings

JBC will prepare for and participate in the team kickoff meeting and 23 additional meetings. JBC will prepare a community outreach plan with timelines to guide the outreach efforts. The community outreach plan will include developing a simple project logo for the project.

- **Deliverables:**
  - Participate in team kickoff meeting and 23 additional meetings.
  - Community Outreach Plan

#### Task 3.2: Identification of Stakeholders

JBC will work with Stanislaus County and DHA to identify a geographic area of interest. JBC will research and develop a stakeholder database of residents, property owners from Assessor Rolls, business owners, civic organizations, home owners associations, transit, first responders, and other potentially interested parties, which will be updated throughout the project with information from the project team and from telephone, e-mail and personal contacts. The stakeholder database, which will be designed to meet State CEQA Guidelines and requirements for noticing, will also be coded according to interest and ongoing involvement/interaction with the project. Groups in the stakeholder database will include, but not be limited to, the following:

- Stanislaus County Board of Supervisors, City Council members, Municipal Advisory Council members, Stanislaus Council of Governments, and other elected and appointed officials.
- Waterford
- Caltrans
- Riverpoint Community Association
- Residents and property owners nearby each project location
- Businesses and other establishments nearby each project location
- Nearby sand and gravel mines
- School districts
- Groups representing businesses and agriculture
- Civic, community, and environmental groups
- Emergency responders
- Transit
- Utility providers
- Pertinent County staff
- Other pertinent local, state and federal agencies and stakeholders
- **Deliverables:** Stakeholder database, which will include recent Assessor rolls of property owners, will be updated quarterly or as additions and/or changes occur; and will include notations of stakeholder activity/involvement.



### Task 3.3: Newsletter Notifications, Public Information Meeting, and Media

JBC will create notifications in a newsletter format to each stakeholder concerning the upcoming project. The notifications will describe the project purpose and need, overview of potential design alternatives, general description of proposed design evaluations and proposed environmental studies, anticipated construction schedule, and opportunities to comment. Included with each notification will be a short survey form where stakeholders can provide community and business-related information as well as express opinions they may have about the proposed project.

The newsletter will also serve as an invitation to a Public Information Meeting. Distribution of the newsletters/invitations will commence after sufficient alternative design information has been developed.

DHA and JBC will obtain prior approval of the County Public Information Officer (through the County's Project Manager) prior to any communications with public media pertaining to the project. Upon County approval, JBC will schedule the Public Information Meeting, make arrangements for facilities, and prepare an agenda, exhibits, and minutes that will be included in a detailed Public Information Meeting Summary report.

Public comments will be recorded, provided with an appropriate response, and be considered in the project design where appropriate. JBC will compile all comments and recommendations for administrative and public review. A detailed report of the notification process, Public Information Meeting, and results, including all comments and recommendations for administrative and public review, will also be prepared. Commensurate with the timing of the newsletter/invitation, a news release will be prepared and distributed to mainstream and alternative print and broadcast media.

- **Deliverables:**
  - Preparation of notification and survey.

- Project Mailers
- Report of comments/responses
- Detailed report of notification process and results
- News release

### Task 3.4: Individual Stakeholder Meetings

JBC will arrange for, facilitate, and prepare a report for up to four individual stakeholder meetings with businesses, property owners, and/or tenants. The stakeholder meetings will include the DHA and Stanislaus County project managers and may include the right of way consultant.

- **Deliverables:** Arrangements, facilitation, and report of up to four meetings with individual stakeholders.

### Task 3.5: Hotlines

JBC will publicize and staff telephone and electronic Hotlines. All comments will be recorded, tracked, and shared with the project team.

- **Deliverables:** Staffed Hotlines and contact log

## Task 4: Bridge Alternatives Analysis/Type Selection (WBS 160.15)

In Coordination with Stanislaus County and concurrent with the development of the project strategy report, DHA will provide the necessary alternative analyses and type selection services necessary to select the most appropriate bridge replacement type and prepare the Bridge Type Selection Report. Upon completion of our analysis, we will produce and submit a report recommending the preferred roadway alignment and bridge replacement type to Stanislaus County for your review, comment, and selection.

Conceptual roadway alignments that minimize right of way needs will be developed as part of this effort. An alignment upstream of the existing bridge and an

alignment downstream of the existing bridge will be developed for costing and comparison. The vertical alignment will also be adjusted to remove the bridge drainage problem and localized road surface flooding currently occurring at the south end of the existing bridge. To meet Central Valley Flood Protection Board requirements, the soffit of the replacement bridge will need to provide 3 feet of freeboard over the 200 year storm water surface elevation. DHA will prepare the road alignment based on the stated design speed of 60 mph.

DHA will analyze three bridge replacement types:

- Cast-In-Place Post Tensioned Box Girder
- Pre-Cast Pre-Stressed I-Girder
- Pre-Cast Pre-Stressed California Wide Flanged Girder

The substructure types anticipated are seat type abutment walls on pile foundations and drilled shafts of the pier supports. Span configurations will be determined by weighing hydraulic requirements against structure depth needs. The current thinking is to provide a 5 span structure with an approximate total length of 650 to 750 feet.

Additional bridge features will also be considered dependent on the information received from the project stakeholders from the outreach effort (Task3). Potential features could include:

- Separated pedestrian sidewalks across the length of the bridge
- Precast Span over the low flow channel of the Tuolumne River
- Bridge deck pedestrian outlooks
- Bridge lighting

DHA will weigh the advantages and disadvantages associated with each of these bridge types and features to determine the most appropriate bridge replacement type. A General Plan Sheet will be prepared to convey each alternative. The vertical profile and horizontal alignment of each bridge alternative will be based upon the alignment alternatives developed.

A narrative description and pertinent information concerning each alternative will be provided in the type selection report. A preliminary planning study cost estimate for each alternative will also be prepared. Costs will be preliminary and will be prepared in accordance with Caltrans Standard Planning Study Cost Estimating practices.

Upon completion of our alternative analysis, DHA will prepare a Bridge Type Selection Report. This report will include a General Plan Sheet for each of the bridge replacement alternatives, as well as a preliminary layout sheets showing the proposed roadway plan and profile alternatives.

A draft version of the Bridge Type Selection Report will be submitted to the County and Caltrans for review and comment. Upon receipt of the comments of the draft report, DHA will prepare a final Bridge Type Selection Report.

• **Deliverables:**

- Draft Bridge Type Selection Report:
- Final Bridge Type Selection Report

## Task 5: Geotechnical Investigation (WBS 240.80)

As a subconsultant to DHA, Taber Consultants (Taber) will provide the geotechnical services required for this project. Taber will acquire data that can be relied upon for design of either a foundation retrofit or a bridge replacement. Geotechnical analyses are expected to include: liquefaction, settlement, lateral spreading and foundation compression, tension and lateral capacity for new foundations.

Seismic shear wave velocity profiles will also be completed at the project site to evaluate the Vs30 shear wave velocity used for ARS Curve development and liquefaction analysis. Acquiring shear wave velocities using geophysical equipment will provide more reliable data compared to empirical correlations using blow count data.

Detailed tasks related to this effort are described below:

### **Task 5.1: Geotechnical Project Management/Meetings**

Taber will attend a kick-off meeting at the beginning of the project. Taber will also attend PDT meetings and conference calls as appropriate.

### **Task 5.2: Existing Available Geotechnical Data**

Taber completed the original geotechnical investigation for the Hickman Road Bridge and are able to rely heavily on the data they have in hand and the geotechnical reports that they have in their possession. The replacement structure will likely be supported on large diameter cast-in-drilled-hole (CIDH) piles which is similar to the Robert's Ferry Bridge Taber provided geotechnical services on that is upstream of the Hickman Road Bridge. At Robert's Ferry Bridge, Piers 2 and 3 were supported on 84 inch diameter CIDH piles. Tip elevations were at approximately elev. -24 with 1470 ton service loads. Similar or greater loads are anticipated based on the height of the bridge deck above the channel and the overturning moments that are likely to be realized during a seismic event. Additionally, from Taber's work at Robert's Ferry Bridge and notes in their Hickman Road Bridge archives, they know that artesian conditions exist across the channel and that these conditions will affect construction techniques used for CIDH pile foundations.

The underlying Merthen Formation will provide the bearing layer for this bridge based on existing data at both the Hickman Road Bridge and Robert's Ferry Bridge. These materials consist of silty gravely sand and sandy gravel that are variably cemented. This variability of the subsurface and the lateral demands on the piles will likely be the controlling factors for the structure foundations and will correspondingly affect Taber's recommendations and the anticipated construction considerations. Existing data is also limited in depth and pile tip elevations will likely be deeper than the current boring data. For these

reasons, Taber is proposing to conduct borings to significant depths at the proposed support locations. The additional data will provide information for the contractor about subsurface conditions and the anticipated artesian conditions in the channel.

### **Task 5.3: Field Studies**

#### **Task 5.3.1: Site Review and Seismic Lines**

Taber will perform a site review for rig access and will perform seismic shear wave velocity testing. The shear wave velocity profiles will be used in liquefaction analysis and to provide a design ARS Curve for the project site. Seismic shear wave profiles will be completed along the bridge in the channel. This data will supplement the subsurface information collected in the boreholes.

#### **Task 5.3.2: Permits**

Taber will acquire the permits necessary for exploration in the channel and on County right of way. Permits will include:

- California Fish and Wildlife (CAFW) Streambed Alteration permit
- Central Valley Flood Protection Board (CVFPB) Encroachment Permit
- US Army Corps of Engineers (USACE) Nationwide Permit 6 for Survey Activities
- County Environmental Health Permit
- County Encroachment Permit

Taber will provide the necessary information to support achieving right of entry on private properties. DHA will lead and work with Stanislaus County to achieve the rights of entry. Taber anticipates that the encroachment permit will be a no fee permit.

#### **Task 5.3.3: Mark USA**

The site will be marked out for Underground Service Alert prior to field exploration. Taber will coordinate this task with the site visit and seismic lines to minimize mobilizations to the site.

#### **Task 5.3.4: Coordination of Drill Rig Access**

Access for the drill rig will be a consideration for drilling at proposed new foundation supports. Access is available on the south side of the bridge near the nursery. It is assumed that access can be provided along the dirt road on the west side of Hickman Road down to the channel. The crawler-mounted drill will access south bank drill locations via existing gravel bars on the south side of the river channel.

On the north side of the channel, grading will be needed to reach the channel gravel bar on the upstream side of existing Piers 5 and 6. Grading with an excavator or bulldozer will be required to reach the channel down a 1.5h:1v (or steeper) slope. Actual access locations and allowances for ingress/egress to the channel will be dictated by the California Department of Fish and Wildlife and the US Army Corps of Engineers permit requirements. Estimated costs associated with channel access are based on disturbance of bank vegetation by grading activities, access through the wetted portion of the channel using crawler drill rig equipment (crawling through the water), and minor re-vegetation of the slope using hydroseed (or similar), straw and straw wattles to minimize soil erosion. Importing gravel for channel work is not included for rig access.

Additionally, if proposed supports are located on the channel bank near existing Pier 7, minor grading would be required to develop a drill pad for access. Seeding of the channel bank would also be required in this area.

Allowances have been made for time and costs associated with developing rig access but requirements dictated by regulatory agencies are variable from district to district and also change over time. This could affect schedule and costs for this project.

Access to the proposed bore locations will be through the adjacent private properties. Because access and field exploration will be completed on private property, traffic control with lane closures will not be required.

#### **Task 5.3.5: Field Exploration**

Taber will perform field explorations to characterize the subsurface soil conditions and to identify geotechnical design parameters for the proposed bridge. Subsurface exploration to adequately define earth materials and foundation conditions for the preliminary study is expected to include five (5) sampled and logged test borings to 120 ft depth at each proposed new foundation support. This exploration program should be sufficient to provide data for design of new foundations and characterize the subsurface for construction conditions.

The scope of Taber's proposed services specifically excludes sampling and testing for the presence or distribution of hazardous materials within the boreholes. If hazardous materials are identified during field exploration, work will be stopped at that location and the client notified and a modified scope of services may be required.

#### **Task 5.4: Laboratory Testing**

Laboratory testing of soil samples recovered through mud-rotary drilling will be conducted to verify soil classification, as well as derive design parameters and criteria including groundwater conditions, a corrosivity (pH/minimum Resistivity/sulfate/chloride content), and index testing (moisture content, density, gradation, Atterberg Limits, etc.). Taber will also collect two near surface soil samples at the approach ramp locations to perform Resistance-Value (R-Value) testing. The results of this testing will be used in the design of the approach pavement sections using traffic index (TI) values provided by client.

#### **Task 5.5: Engineering Analysis**

Analysis will include liquefaction, settlement and pile capacity analyses. Seismic criteria for use in structure design (peak bedrock acceleration, soils profile type, etc.) will be provided in accordance with typical Caltrans practice (using ARS online), including an evaluation of the potential for seismically induced liquefaction and ground instability.

Taber will perform pile analyses to develop final design recommendations for new bridge foundations. Analyses will be applied to the specific bridge foundation type, loading, and geometry, scour, any lateral spreading effects and liquefaction/ settlement criteria including downdrag. Channel bank slope stability analyses (including pile lateral loading from lateral spreading) will be incorporated into the analyses as appropriate.

A driveability analysis (for temporary foundation casing, permanent casing or driven piles) will be completed for the foundations located in the channel. This will develop criteria for pile strikes per day required for regulatory compliance for the proposed foundations, foundation casing or temporary supports. It is expected that the driveability analysis will be performed for three different pile diameters anticipated during construction.

### **Task 5.6: Foundation Report Preparation**

Taber will prepare a Foundation Report in accordance with Caltrans guidance documents. The report will provide a summary of findings of the subsurface exploration, results from the laboratory testing program, as well as final design geotechnical recommendations for new foundations. Discussions and findings will include liquefaction, settlement and pile capacity analyses. A driveability analysis and discussion of impacts will be included in the report.

Seismic criteria for use in structure design (peak bedrock acceleration, soils profile type, etc.) will be provided in accordance with typical Caltrans practice (using ARS online), including an evaluation of the potential for seismically induced liquefaction and ground instability.

The Foundation Report will also include recommendations for earthwork, pavement sections, and construction considerations for the anticipated earthwork and foundation construction. The Foundation Report will include the following:

- Properties of the soils encountered
- Log of Testing Borings sheets
- Assessment of geologic hazards
- Caltrans Standard Seismic discussion and Input
- Foundation recommendations and geotechnical design parameters
- Type, tip elevation, and lateral, compression and tension capacity of foundation elements
- Slope stability
- Commentary on scour protection and scour vulnerability of channel materials
- Cut and fill recommendations
- Earthwork recommendations
- Driveability analysis
- Construction considerations
- **Deliverables:**
  - Draft Foundation Report
  - Final Foundation Report
  - Log of Testing Borings sheets

### **Task 6: Topographical Survey (WBS 160/185/220)**

As a subconsultant to DHA, North Star Engineering Group, Inc. (North Star) will perform the topographic and property boundary surveys needed for this project. DHA and North Star will work in close coordination with the County. All Surveying and Mapping will comply with the provisions of the Professional Land Surveyors Act, Sections 8700 to 8805 Business and Professions Code, the provisions of the California Coordinate System, Sections 8801 through 8819 of the Public Resources Code and any other applicable code in the State of California.

#### **Task 6.1: Record Research (WBS 160.05)**

North Star will perform record research at Stanislaus County to locate recorded control maps, right of way maps, records of survey, corner records, and other official maps of records.

### **Task 6.2: Record Calculations (WBS 185.10)**

North Star will calculate record right of way lines and property lines located within the project limits in accordance with record maps, record deeds, and documents as required to calculate field search positions for existing right-of way monuments, street survey monuments, and parcel corner monuments.

### **Task 6.3: Right of Way and Control Field Survey (WBS 185.10)**

North Star will perform a Topographic and Right of Way Survey to provide design control and right of way mapping for the project. North Star will set horizontal and vertical control points for project mapping in accordance with Stanislaus County horizontal and vertical control requirements. All surveying and mapping will be in compliance with the provisions of the Professional Land Surveyors Act, Sections 8700 to 8805 Business and Professions Code; the provisions of the California Coordinate System, Sections 8801 to 8819 of the Public Resources Code; and any other applicable code in the State of California. The horizontal datum will be based on the North American Datum 1983 (NAD 83). The vertical datum shall be based on the North American Vertical Datum of 1988 (NAVD 88) and closed network bench loops will be run through the control monuments. Perform a field survey to search and locate existing survey monuments and physical evidence required to establish existing rights-of-way and property lines at those locations where any portion of the project infringes upon the required setback limits or lies within 50 feet of project improvements, work areas, storage, and staging areas. Perform calculations for the right of ways based on the found monumentation and lines of occupation located with the field survey.

### **Task 6.4: Topographic Survey (WBS 185.10)**

North Star will perform a detailed field survey of the existing roadways, physical improvements, river and access roads, structures, visible utilities, and

drainage features. Cross-sections and tie-in surveys at the conform lines will ensure an accurate design and smooth transitions from existing roadway and infrastructure features. All work and files will be based on project coordinate control in accordance with Stanislaus County requirements for the preparation of documents and maps. Topographic Field Survey will locate existing site improvements and visible utilities including, but not limited to: trees, ground shots, Hickman Road cross sections, striping, bridge structure (limited to edge of deck, railing, centerline, curb, abutments, and piers), headwalls and wingwalls, fences, driveways, pavement elevations, guard rails, Tuolumne River cross sections, utilities, irrigation pipeline and structures, and other miscellaneous visible features. Cross-sections will be taken at 50 foot intervals along Hickman Road except in areas of vertical curves where cross-sections will be taken on 25 foot intervals. Hickman Road cross-sections will include the roadway beginning at Yosemite Boulevard (Highway 132) and extending to S. Appling Road.

For hydraulic modeling purposes, existing river cross-sections will be taken at each side of the existing bridge crossing and at distances 100 feet, 200 feet, and 400 feet upstream and downstream from the edge of existing structure. River cross-sections will extend to 50 feet outside the top of bank. DHA will coordinate with property owners to gain "right of entry" during the field survey.

- **Deliverables:** Topographic and Boundary Data and Base Mapping

### **Task 6.5: Right of Way Mapping Services (WBS 220.15/20)**

North Star will prepare a Right of Way Constraints Map based on the identified right of way requirements for the project. The Right of Way Constraints Map will show all existing right of way, easements, land dedications, and property acquisitions required. It appears that a total of seven properties may require right of way dedications and/or construction easements based on a review of the Stanislaus County Assessor's Maps.

North Star will prepare an Easement Requirements Map based on identified easement requirements for the project. North Star will set preliminary right of way stakes for right of way and easement negotiations with Property Owners.

North Star will prepare appropriate right-of-way and easement legal descriptions and exhibits for seven parcels. As part of this effort North Star will:

- Order Preliminary Title Reports for each property affected by right of way acquisition (seven Title Reports - fees to be paid by Stanislaus County).
- Prepare legal descriptions and plats for temporary construction easements, staging areas, and disposal areas for excess soil generated by project construction.
- Specify existing and proposed right of way, land dedications, and easement agreements.
- Verify property lines at those locations where any portion of the project infringes upon the required setback limits or lies within 50 feet of project improvements, work areas, storage, and staging areas.
- Prepare and file a Record of Survey for any new right of way required and/or for any other triggers specified in the Professional Land Surveyors Act. Set monumentation for new right of way as shown on the record of survey
- Prepare final right-of-way map and legal descriptions for acquisition of all necessary parcels and easements.
- **Deliverables:**
  - Plat Maps and Legal Descriptions for Right of Way takes
  - Plat Maps and Legal Descriptions for Temporary Construction Easements

## Task 7: Environmental (WBS 165/205)

Since the project is federally funded and the funding will be administered by Caltrans, the project is subject to FHWA and Caltrans requirements. Thus, the DHA environmental team will follow the Caltrans Local Assistance Procedures Manual (LAPM) and Standard Environmental Reference (SER) guidelines.

It is anticipated that the NEPA environmental documentation will be a Categorical Exclusion (CE) supported by technical studies if no significant environmental impacts are determined to result from the proposed project. This scope assumes Caltrans will prepare the NEPA document (i.e., CE) based on the technical studies prepared by the DHA environmental team. If an adverse effect is identified, an Environmental Assessment (EA) may be required to satisfy NEPA.

The County will be the lead CEQA agency during the preparation of the CEQA environmental document. It is anticipated that the necessary environmental document will be an Initial Study/Mitigated Negative Declaration (IS/MND). The DHA environmental team will prepare the environmental document based on the technical studies previously prepared for Caltrans and to meet all requirements under CEQA and local regulations.

### Task 7.1: Environmental Project Management (WBS 165.05)

This task includes project management by the DHA environmental team for a project schedule of up to two years from the Notice to Proceed. If the project schedule exceeds two years, the scope and budget may need to be modified accordingly.

The DHA Environmental Project Manager will attend a project initiation meeting to discuss the project description, schedule, issues, and impacts of the project. The DHA Environmental Project Manager will attend up to five meetings during the

course of the two-year project schedule, including and early coordination meeting with regulatory agencies (USFWS, NMFS, ACOE, and CDFW). In addition, the DHA Environmental Project Manager will attend monthly conference calls during the Project, as scheduled.

### **Task 7.2: Purpose and Need and Project Description (WBS 165.10)**

The County is the lead agency under CEQA for all discretionary actions related to the proposed Hickman Road Bridge Replacement Project. Caltrans has project oversight linked to the project funding with federal monies. The DHA environmental team will prepare a purpose and need statement that addresses the discretionary actions for both lead agencies. The purpose and need will provide the basis for the appropriate regulatory and guidance documentation for compliance with both NEPA and CEQA. In coordination with the County, the DHA environmental team will also draft a project description that complies with the Type Selection Report and will be used in the following technical studies and the CEQA clearance documentation.

- **Deliverables:** DRAFT and FINAL Purpose/Need and Project Description

### **Task 7.3: Preliminary Environmental Study (WBS 165.10)**

This form is used to scope the environmental work, which will be performed in the Environmental Studies and Reports phase. DHA completed a draft PES (Appendix D) form based on preliminary record searches and a site visit. The DHA environmental team will finalize this draft version of the PES form at a field review with the County and Caltrans.

### **Task 7.4: Technical Studies (WBS 165.10)**

The following outline of technical studies is based on the draft PES form completed by the DHA environmental team for this proposal (Appendix B).

#### **Task 7.4.1: Hazardous Waste ISA**

The DHA environmental team will conduct a Phase 1 ISA in accordance with Caltrans' procedures. The ISA will contain a description of the work performed, any deviations from normal ISA procedures, a summary of findings, the opinions of the preparer regarding the property or site, data gaps, additional investigation and services recommended, conclusions, and recommendations.

#### **Task 7.4.2: Water Quality Assessment Technical Memorandum**

The DHA environmental team will conduct a Water Quality Assessment Report in accordance with Caltrans guidelines and requirements. The report will evaluate potential short-term and long-term water quality impacts on the Tuolumne River. Potential project impacts associated with construction activities, maintenance activities, and roadway runoff will be evaluated. Potential causes of erosion, and siltation, and sources of pollutants and the effects of these substances on the quality of receiving waters will be evaluated. Mitigation measures, including Best Management Practices specified in Caltrans' Storm Water Quality Handbook - Planning and Design Guide, will be identified for any significant water quality impacts that may occur during construction and/or operation of the new bridge structure.

#### **Task 7.4.3: Natural Environment Study (NES)**

The DHA environmental team will prepare a NES to document biological resources for the Project. The DHA environmental team will prepare the NES in accordance to the most recent Caltrans guidance template provided in the Caltrans SER.

The DHA environmental team will conduct a focused presence/absence survey to evaluate the presence of biological resources present in the Project area, and to determine Project effects to those resources. Prior to conducting this survey, the DHA environmental team will query the CNDDDB, United States Fish and Wildlife Service (USFWS), CNPS Online Databases and any other literature and database resources



pertaining to biological resources in the project area.

The results of the biological surveys will be documented in the NES and will include an assessment of project impacts on the biological resources present. Avoidance and minimization measures will be included where appropriate. The NES will include a discussion of Project compliance with the following federal laws, acts, and Executive Orders (EOs):

- EO 11990 - Protection of Wetlands
- EO 11988 - Floodplains
- EO 13112 - Invasive Species
- Migratory Bird Treaty Act
- Section 7 of the Federal Endangered Species Act

#### **Task 7.4.4: Biological Assessment (BA)**

The DHA environmental team will prepare the BA in accordance to the most recent Caltrans guidance template provided in the Caltrans SER.

The BA will evaluate project effects to federally listed species and identify appropriate avoidance and minimization measures. All sensitive resources documented in the field will be provided in detailed maps to clearly illustrate species' occurrences and sensitive habitat limits. The BA will be used to conduct Section 7 consultation with the USFWS and/or National Marine Fisheries Service (NMFS). Caltrans will initiate consultation with the USFWS and NMFS.

#### **Task 7.4.5: Wetland Delineation**

A Wetland Delineation will be prepared by The DHA environmental team due to the occurrence of wetlands/water of the US within the project area. The Wetland Delineation will include a wetland delineation/jurisdictional determination according to the Corps requirements, mapping of jurisdictional areas at the project site, impact assessment, recommendations on the significance of the impacts, and potential mitigation measures. The Wetland Delineation will be incorporated in and appended to the NES.

#### **Task 7.4.6: Section 4(f) De minimis**

Construction activities that encroach on parkland will require a Section 4(f) De minimis evaluation. The DHA environmental team will work with Caltrans to provide information for the de minimis documentation, including a detailed description of the Section 4(f) property, construction methods and avoidance measures. The DHA environmental team will also coordinate the public circulation of the de minimis documentation with Caltrans and the County.

#### **Task 7.4.7: Visual Impact Assessment**

The DHA environmental team will prepare a minor-level visual impact assessment for the project. The report will follow methodology and protocol developed by FHWA and adopted by Caltrans and will include a discussion of the methodology, terms, and thresholds for significance; an overview of applicable local, state, and federal policies and guidelines regarding visual resources (including the general plan and state scenic highway guidelines); a description of the regional visual character and area-specific landscape view shed units (which comprise the baseline conditions for assessing aesthetic impacts); a characterization of viewer groups and their responses to changes in views; an impact analysis which will focus on changes in key views, overall visual character, nighttime light, and daytime glare; and recommendations and mitigation measures to lessen potential project impacts.

#### **Task 7.4.8: Area of Potential Effect Map**

Base maps and plans, depicting the area proposed for impacts (e.g., construction, staging, and construction access areas) will be assembled and a draft APE will be created by The DHA environmental team for the project area. The map will be plotted on an aerial photograph at a scale of approximately 1"=100' or 1"=200', with a bar scale. The map will depict the existing and proposed right of way and clearly labeled roads, and the APE for both archaeological and historic resources. The APE map will have a signature and date block for "Principal Investigator - Prehistoric

Archaeologist” and “Caltrans Local Assistance Engineer.” The APE map will be submitted to FHWA/Caltrans for approval and adoption.

#### **Task 7.4.9: Historic Property Survey Report**

The DHA environmental team will prepare the Historic Property Survey Report (HPSR) that will summarize the results of the ASR. The document will conform to Caltrans specifications detailed in the July 2001 Caltrans Environmental Handbook, Volume 2. Copies of the draft report will be submitted for review and comment to the County and Caltrans. Upon receipt of written comments on the draft report from the County and/or Caltrans, the DHA environmental team will revise the draft HPSR report into a final report, which will include the ASR as an attachment. The DHA environmental team will submit one copy of the report to the CCIC

#### **Task 7.4.10: Archaeological Survey Report**

The DHA environmental team proposes to complete cultural resources documents for the project pursuant to Caltrans requirements and Section 106 of the NHPA and CEQA. The results of the archaeological study will be presented in an Archaeological Survey Report (ASR). The document will conform to Caltrans specifications detailed in the July 2001 (and current updates) Caltrans Environmental Handbook, Volume 2, and the 2014 Caltrans/ACOE Programmatic Agreement.

As the preliminary APE contains high sensitivity for the presence of buried geoarchaeological resources (Rosenthal and Meyer 2004: Map 1), the DHA environmental team will consult with Caltrans after completing the field survey to determine if an Extended Phase 1 (XPI) Study (2-part process; XPI Proposal and XPI Report) will need to be prepared to address the potential for encountering geoarchaeological cultural resources. If an XPI Study is required, The DHA environmental team will prepare a budget augment for an XPI Proposal and XPI Report.

- **Deliverables:** DRAFT and FINAL Technical Studies to County and Caltrans standards

### **Task 7.5: Initial Study and Mitigated Negative Declaration (WBS 165.25)**

Based on our recent experience with similar bridge replacement projects, the DHA environmental team anticipates the necessary environmental clearance document will include preparation of an Initial Study/ Mitigated Negative Declaration (IS/MND) under CEQA and Categorical Exclusion (CE) under NEPA, with Caltrans preparing the CE once all technical studies and CEQA document are finalized.

#### **Task 7.5.1: Prepare and Circulate Draft IS/MND**

The DHA environmental team will prepare an Initial Study (IS) for the project. It is the goal of the IS to support adoption of a Mitigated Negative Declaration (MND) by the County. Several technical memorandums will be prepared during this phase of the project to support the conclusions of the IS/MND. To ensure that the final product is acceptable to the County, an outline of the document will be submitted to the project team for review before document preparation begins.

After review and approval by the County, the DHA environmental team will prepare a screen check IS/ MND for final approval before public circulation and review. DHA will deliver five copies of the screen check for review and approval. We are assuming a total of 30 copies of the public review IS/MND will be sent to the County for distribution.

- **Deliverables:**

- Administrative DRAFT IS/MND
- Screen Check DRAFT IS/MND
- Public Circulation DRAFT IS/MND
- NOC to file with the State Clearing House

#### **Task 7.5.2: Prepare and Submit Final IS/MND and Mitigation Monitoring and Reporting Program**

At the conclusion of the 30-day public comment period, the DHA environmental team will meet with the project development team to discuss the comments received and the preparation of the final document. In addition, a Mitigation Monitoring and Reporting

Program (MMRP) for CEQA will be prepared as part of the final document.

After the project development team has reviewed the administrative final IS/MND and draft MMRP, the DHA environmental team will incorporate the necessary revisions into the document and submit the Final IS/MND and MMRP

• **Deliverables:**

- Final IS/MND
- Draft and Final MMRP
- NOD to file with the State Clearing House

### **Task 7.6: Regulatory Permitting (WBS 205.10)**

The proposed project may affect wetlands or other jurisdictional/navigable waters in the Tuolumne River that may be under the jurisdiction of the ACOE, RWQCB, and/or CDFW. Impacts to jurisdictional waters may require permits from the regulatory agencies, as described below.

#### **Task 7.6.1: Nationwide Permit Verification (Clean Water Act, Section 404)**

The proposed project may result in discharge of material into waters of the U.S. In the event this occurs, the project will require authorization from the ACOE. It is likely that any discharge resulting from this project can be authorized using one or more Nationwide Permits (NWP). The DHA environmental team will prepare a Preconstruction Notification (PCN) to submit to the ACOE requesting verification that the project can be authorized using the specified NWP(s). The DHA environmental team will also submit a Preliminary Jurisdictional Delineation (as discussed above) and request concurrence by the ACOE.

#### **Task 7.6.2: Navigable Waters Authorization (Rivers and Safe Harbors Act, Section 10)**

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the Secretary of the Army, acting through the ACOE, for the construction of any

structure in or over any navigable water of the United States. The DHA environmental team will prepare a Section 10 permit application for submittal to the ACOE.

#### **Task 7.6.3: Water Quality Certification (Clean Water Act, Section 401)**

A Water Quality Certification may be required from the RWQCB for the proposed project, if it will affect wetlands or other waters of the State, to certify that the project is consistent with water quality goals and objectives. The DHA environmental team will prepare an application package for submittal to the RWQCB. A processing fee must be included with the submittal (to be provided by the County, amount to be determined).

#### **Task 7.6.4: Streambed Alteration Agreement (Fish and Game Code, Section 1602)**

The proposed project may require notification of proposed streambed alteration to the CDFW if the project will have an effect on waters in the Tuolumne River. The DHA environmental team will prepare an application package for submittal to CDFW. A processing fee must be included with the submittal (to be provided by the County, amount to be determined).

#### **Task 7.6.5: Application for Lease of State Lands (California State Lands Commission)**

As a navigable waterway, the Tuolumne River is considered a sovereign land by the State of California, and is therefore under the jurisdiction of the California State Lands Commission (CSLC). Projects that may involve new construction, reconstruction or modification of improvements on lands under the jurisdiction of the CSLC would require an application for lease of State Lands. The DHA team will prepare an application for the lease of State lands for submittal to the CSLC. This application would include proof of project compliance with CEQA, a detailed purpose/need/project description, photographs and engineering drawings and a legal description of the area to be leased from the State, tied to a monument or monuments of record. A filing fee must be included

with the submittal (to be provided by the County, amount to be determined).

## **Phase 2: Final Design and PS&E**

### **Task 8: Approach Roadway Design (WBS 250/260)**

#### **Task 8.1: Roadway Design**

DHA will perform the roadway design in accordance with the latest version of the Caltrans Highway Design Manual and County design standards, and prepare design plans for construction. The roadway design will include details for traffic control plans in accordance with the Caltrans Manual of Uniform Traffic Control Devices. Detailed earthwork calculations will be also performed and road drainage systems designed.

#### **Task 8.2: Street Lighting Design**

As a subconsultant to DHA, Y&C Transportation Consultants (Y&C) will provide the necessary street lighting design services for this project. Y&C will meet with the County and City of Waterford to select the lighting pole and fixture types to be used for the project. Once the lighting pole and fixture are selected, Y&C will use VISUAL software to prepare lighting analysis and layout road and bridge lighting poles. Based on the result of lighting analysis, Y&C will prepare lighting plans, specifications, and estimates (PS&E). Y&C will also coordinate with PG&E in identifying electrical service point location.

### **Task 9: Utility Design and Coordination (WBS 220.25)**

The DHA team will locate all existing utilities in the project area with the topographical survey and determine all potential conflicts. Once all existing utilities are identified in the field, DHA will contact all corresponding utility companies and coordinate the relocation of all affected utilities. DHA's utility

coordination assistance will occur in three basic steps.

The first step will be to develop a project limit drawing to send to all of the potentially affected utility companies and request information related to location of their existing facilities. Once information is obtained from each utility, the existing utilities will then be plotted by DHA on the preliminary roadway plans and resubmitted to the utility companies, for verification, review of any required relocations, and for the determination of additional facilities that should be provided for future utility services. Finally, once the utility information has been incorporated into the plans, DHA will resubmit the plans to the utility companies for final review and approval

### **Task 10: Bridge Structural Design (WBS 250/260)**

DHA will perform structural and seismic design investigations, analysis, computations, and prepare detailed structural design plans for the proposed replacement bridge in accordance with the latest Caltrans bridge design techniques including a Foundation Study and Report and a Location Hydraulic Study.

DHA will prepare a full structural design on the selected bridge alternative identified in the Project Strategy Report and Bridge Type Selection Report. The design will be conducted in accordance with:

- Caltrans Bridge Design Manuals
- AASHTO LRFD Bridge Design Specifications with 2006 Interims and Caltrans Addenda (Blue Sheets)
- Caltrans Seismic Design Criteria

Standard construction materials will be used in the design of the proposed bridge replacement wherever possible. Where specialized non-standard construction/building materials are required, DHA will first obtain approval from the County prior to incorporating them into the design. A detailed description of DHA's bridge design subtasks follows:

- **Superstructure Design:** The superstructure will be designed to meet LRFD requirements specified by Caltrans. Vertical loads will include HL-93, Permit, and Alternative Vehicle live loads as well as prescribed dead loads. The seismic design will adhere to the requirements specified in the Caltrans Seismic Design Criteria and the Caltrans Memo to Designers Manual. The analysis of the bridge superstructure will utilize the CT Bridge computer program for live loads, used by Caltrans.
- **Substructure Design:** The support reactions from the superstructure will be used to design the substructure components. The substructure system will incorporate structure movement, drainage, structure approach, and seismic requirements. The substructure items will be designed in accordance with the Caltrans Bridge Design Specifications Manual for vertical loading and lateral loading.
- **Seismic Design:** After member sizes have been determined during the Superstructure and Substructure designs, DHA will analyze the bridge for seismic loading. Information that will be used to determine the design seismic loads includes the maximum ground acceleration, and depth to bedrock. This information is to be supplied by Taber. Once DHA has obtained the site parameters, this information will be coupled with the structural parameters of the bridge to determine seismic loads and reactions. Requirements in the Caltrans Seismic Design Criteria and the Caltrans Memo to Designers Manual will be used to determine the loading.

## Task 11: Independent Bridge Design Check (WBS 250.50)

An independent bridge design check will be conducted at the 60% complete stage of the project. The independent design check will be performed by a senior level DHA engineer not involved in the initial design of the project, Tony Dubovik. It will consist of a thorough review of the Bridge Plans and Draft Special Provisions. The design checker for action or

response will prepare a list of issues to be addressed by the designer and a set of independent check calculations.

## Task 12: Hydraulics (WBS 165.10)

As a subconsultant to DHA, Avila and Associates (Avila) will perform the hydraulics engineering and analysis for this project.

### Task 12.1: Review Existing Hydraulic Information/Field Review Bridge Reach

Avila will obtain relevant project information including but not limited to the following:

- Caltrans and Stanislaus County information on the existing bridge such as:
  - Supplemental bridge maintenance reports
  - Scour analysis by Structure Hydraulics for the National Bridge Inventory System (NBIS) Item 113, Scour.
- Historic hydraulic reports for bridge analysis from Stanislaus County (if available).
- Hydrology estimates from Stanislaus County (if available)

Avila will also field review of the proposed bridge reach with the consultant team and Stanislaus County.

The Local Assistance Program Manual mandates that at least two methods can be used to estimate discharge. There are discharge estimates available from FEMA which will be the first method used for hydrology estimates. This will be checked with either a regional regression estimate or statistical analysis of the adjacent gage to determine if the estimates are reasonable and will serve as the other estimate to meet the requirement of the Local Assistance Program Manual (LAPM).

The bridge is located within the Central Valley Flood Protection Board (CVFPB), so since the potential backwater impacts are located within a population of 50,000 or more (City of Waterford), the 200-year flood

is the design flood for the CVFPB.

## **Task 12.2: Existing Bridge Hydraulic and Scour Analysis**

Hydraulic parameters (water surface elevations and velocity) will be obtained from the Army Corps of Engineers HEC-RAS (Hydraulic Engineering Center River Analysis System) model based on previous HEC-RAS models obtained from Stanislaus County. Avila will:

- Obtain and review any existing and proposed conditions HEC-RAS models from Stanislaus County (if available) and likely obtain the FEMA HEC-RAS model.
- Model the existing bridge to determine the potential water surface elevation and overtopping of the adjacent roadway. The model will also incorporate any encroachment from bridge approach fills.
- Model the proposed bridge alternatives to determine the potential water surface elevation and overtopping of the adjacent roadway. The model will also incorporate any encroachment from bridge approach fills.

### **Task 12.2.1: Determine Hydraulic Criteria**

Avila will determine the necessary freeboard. Chapter 800 of the Caltrans Highway Design Manual (HDM) delineates the hydraulic design criteria for bridges. The basic rule for hydraulic design is that bridges should be designed to pass the Q<sub>50</sub> with sufficient freeboard and convey the Q<sub>100</sub> without freeboard, exceptions may be granted if sufficient evidence is provided. The HDM notes that 2 feet of freeboard is often assumed for preliminary bridge designs but leaves the recommendation for freeboard to the judgment of the hydraulic engineer based primarily upon the debris anticipated at the bridge.

A permit will be required from the Central Valley Flood Protection Board (CVFPB) (California Code of Regulations Title 23, Article 8, Section 112) since the river is cited in Table 8.1. The “non-permissible work

period” is November 1 through July 15th. Therefore, a construction window that did not end until mid-November would require coordination and a variance from the State Reclamation Board. In addition, the CVFPB is now requiring 2 to 3 feet of freeboard over the 100- or 200-year discharge. Coordination with the CVFPB will be required to determine the criteria.

### **Task 12.2.2: Determine Drift Concerns**

Avila will research bridge maintenance records for existing bridges upstream and downstream of the proposed bridge to determine if any maintenance issues have occurred such as debris getting caught on the bridge piers. The bridge maintenance reports will be reviewed to insure adequate freeboard is provided at the bridge to pass debris while minimizing capture on the bridge piers to minimize maintenance by the County. This will be taken into account with the determination of the necessary freeboard, span lengths and bridge pier type to minimize debris capture and therefore future maintenance.

### **Assumptions:**

- It is assumed that there is an electronic version of the existing HEC model of the river available from FEMA or Stanislaus County. If any of the following conditions occur, a separate task order would be required:
  - If electronic HEC-RAS files are unavailable.
  - If the models supplied by the County include outdated or invalid topography. The topography will be checked using the information gained from the surveyed river cross sections described in the Hydraulic Model section above.
  - If a CHECK-2 or CHECK-RAS programs show significant errors in the HEC-RAS models.
  - If a conditional letter of map revision (CLOMR) is required by the local agency due to a change in water surface elevation caused by the new bridge a separate task order would be required. If a conditional letter of map revision (CLOMR) is required by the local agency due to an increase in water surface elevation caused by the proposed bridge.

- **Deliverables:** Water surface elevation, velocity estimates and hydrologic summary table variables will be incorporated in the Report to be provided under Task 12.4

### **Task 12.3: Estimate Scour for the Proposed Bridge Alternatives**

Avila will estimate degradation based on historic information at the existing bridge. Avila will also estimate contraction, abutment and pier scour using the methods described in the Federal Highway Administration (FHWA) Publication HEC-18, Evaluating Scour at Bridges for the proposed bridge alternatives.

Avila will update hydraulic and scour analysis based on the preferred bridge alternative. Calculations will be completed to determine the need for bank protection. If bank protection is required, parameters will be provided according to the Bank and Shore Protection Manual using a layered Caltrans Design.

#### **Assumptions:**

- Degradation estimates will be straight line extrapolation using best available data if no numeric sediment transport models are available
- Avila will prepare a letter for Stanislaus County to send to Caltrans requesting the historical photographs from the bridge maintenance department
- If hydraulic calculations show that bank protection is necessary, it is assumed that rock slope protection will be utilized as the bank protection, if alternative bank protection is requested, a separate task order will be necessary
- **Deliverables:** Scour estimates will be incorporated in the Report to be provided under Task 12.4.

### **Task 12.4: Prepare Draft and Final Reports**

Avila will prepare a Draft Hydraulic Report for review by the design team, Stanislaus County, and Caltrans. Avila will also prepare a Final Hydrology, Hydraulics and Scour Report incorporating the comments from the Draft Report.

#### **Deliverables:**

- PDF version of the Draft Report provided electronically
- Bound Hard Copies of the Final Report (signed and stamped)

### **Task 12.5: Location Hydraulic Study**

Using the HEC-RAS output data, Avila will complete a Location Hydraulic Study (Floodplain Encroachment Report) in accordance with 23 CFR 650.113. This report will be included in the Environmental documents for the bridge.

#### **Assumptions:**

It is assumed that the proposed bridge will not change the water surface elevation between the existing and proposed conditions, will have no adverse impact on the upstream or downstream structures and will not cause a significant encroachment into the floodplain. If the bridge changes the water surface elevation, adversely impacts upstream or downstream structures or causes a significant encroachment in the floodplain, a separate task order will be necessary.

- **Deliverables:** Location Hydraulic Study to be included as an Appendix to the Final Report to be provided under Task 11.4.

### **Task 12.6: Central Valley Flood Protection Board Coordination and Permitting**

Avila will assist DHA with the Central Valley Flood Protection Board (CVFPB) coordination including preparation of submittals for the CVFPB encroachment /construction permit applications (DWR Form 3615 and DWR Form 3615a).

## Task 13: Right of Way Services (WBS 225.50)

As a subconsultant to DHA, Overland Pacific & Cutler (OPC) will perform the necessary right of way appraisal and acquisition services. OPC will also assist DHA with the required Rights of Entry agreements.

For the purpose of this scope of work, and in order to adequately and conservatively identify all potential impacts, OPC and DHA have assumed that temporary construction easements will be required from each of the nine adjacent parcels. Additionally, depending on what is determined to be the preferred road alignment alternative, permanent partial acquisitions may be required from up to six (6) properties with as many as two (2) of these partial acquisitions being from parcels belonging to the City of Waterford. A clear understanding of these impacts will be achieved during environmental studies. OPC's right of way analysts will review preliminary design plans, estimate acquisition costs, and assess the reasonableness of all proposed right of way impacts. This information will be used to complete a Caltrans Right of Way Data Sheet, as required by the Caltrans Right of Way Manual. Following approval, full right of way program implementation will take place.

### Task 13.1: Preliminary Cost Estimates/ Caltrans Right of Way Data Sheets

From the onset of the project, OPC will be involved at the design level to identify right of way requirements and characterize and/or re-characterize right of way impacts, and where necessary, explore potential measures to mitigate/minimize project impacts and capital costs, assess potential cost-to-cure options, and evaluate these considerations against the overall project schedule. During this phase, OPC will work in unison with the design team to evaluate right of way impacts and identify appropriate strategies that avoid costly relocations and/or severance damages. Property values will be estimated using traditionally accepted property valuation techniques for both full and partial acquisitions. This process includes searching the real

estate market place for sales of similar properties to develop base values and applying them to the right of way interests needed on the subject parcels. Once this market data is gathered and applied to the subject properties, the cost study will estimate the probable values of land and improvements, associated damages, potential relocation costs, and cost-to-cure remediation costs, if applicable.

Specifically OPC will:

- Take an inventory of the affected properties.
- Secure preliminary parcel information from online database sources and investigate current ownerships. Utilizing this information and Assessor's Roll information, determine other valuation considerations such as zoning, lot and building size, current usage, and other relevant factors.
- Visually inspect each property (aerial and street-level views) and note the effects of all proposed acquisitions.
- Sort each property into product types to determine the set of real estate data to be researched and create valuation data sets for each product type.
- Prepare an estimate of the probable cost of each partial acquisition, as well as permanent and temporary easement interests, including (for partial acquisitions) damages to the remaining parcel, using created data sets from various real estate value databases.
- Prepare an estimate of the probable relocation assistance (if applicable) for each residential or non-residential occupant located on each property.
- Prepare an estimate of the total probable loss of business goodwill (if applicable) attributable to each operating business.
- Prepare an estimate of the inspection and demolition costs (if applicable) associated with delivering each cleared site.



- Prepare an estimate of the total services and incidental costs associated with each acquisition program (appraisals, acquisition and relocation consultants, title/escrow, legal services, etc.).
- Prepare latest Caltrans Right of Way Data Sheet cover in accordance with Caltrans policies and all applicable findings.
- Provide QA/QC of final work product, submit to client and other Project Team members, respond to inquiries, and update report, as needed.

### **Task 13.2: Right of Way Appraisal and Acquisition Services**

Upon notice to proceed, OPC will begin working with the design team in developing a Project Plan detailing all aspects of the right of way program to ensure that all acquisition tasks are properly identified and completed in accordance with all applicable regulations and the Caltrans Right of Way Manual. An ancillary task to the Project Plan will be the creation of the project's acquisition schedule that will incorporate all relevant project development milestones including advertisement of the project's construction contractor. Concurrent with these activities, OPC will secure and review preliminary title reports for all impacted parcels and coordinate with the right of way engineering team to review legal descriptions and plat maps for each right of way interest required. Once the latter are finalized and delivered to OPC's acquisition staff, appraisal and appraisal review activities will be initiated to value each temporary and permanent interest required for the construction of project improvements. As these reports are finalized, the County will review the findings and establish a Determination of Just Compensation for each property owner offer package. OPC will subsequently draft the offer packages and all applicable acquisition agreements, submit them to the County for final approval and negotiate owner settlements. If relocations are required, all owner and tenant relocations will be completed per the Uniform Act and subsequent relocation claims will be processed through the agency. Once an amenable agreement is reached, a Purchase and Sale Agreement will be

executed for each respective ownership and an escrow account will be established to facilitate payment and any required title clearance activities. When the transaction closes and owner payments are disbursed, OPC will begin coordination with the appropriate state and federal oversight authorities to secure right of way certification. Where voluntary agreements are not possible, OPC will coordinate with the agency's legal counsel in eminent domain proceedings and provide all relevant property and negotiations details to support the condemnation task.

Specifically OPC will:

- Draft Right of Entry (ROE) documents and secure approval as to form from County.
- Establish personal contact with property owners, wherever possible, present details of ROE.
- Negotiate with property owners and secure execution of required agreements.
- Provide regular status updates to any relevant parties associated with the Project Team.
- Facilitation of any payments from County to private property owners via mail.
- Reasonable assistance to project survey team with special owner request and access concerns.

### **Task 14: Plans, Specifications, and Estimate (PS&E) (WBS 230/250/260)**

#### **Task 14.1: Plans**

##### **Task 14.1.1: 30% Plans (WBS 230.05)**

Upon receipt of written documentation from Stanislaus County identifying the preferred project alternative and bridge type and approval of the Project Strategy Report and Bridge Type Selection Report, DHA will prepare preliminary roadway and bridge plans for the selected project alternative (one alternative). The preliminary plans will consist of:

- Title Sheet
- Preliminary Typical Sections
- Preliminary Roadway Plan and Profile Sheet
- Right-of-Way Constraint Exhibit
- Preliminary Bridge General Plan Sheet

These preliminary plans will provide enough data to convey a complete scope of the project. The plans will provide enough detail for use in the development of the project environmental documents. All of the plans will be prepared in accordance with the Caltrans Local Assistance Procedures Manual.

- **Deliverables:** Half size (11x17) 30% Preliminary Plans - Hard Copy and Electronic PDF

#### **Task 14.1.2: 60% Plans (WBS 240.50)**

After review comments are received on the 30% plans, DHA will prepare the 60% plan set. This task includes the development of the bridge and roadway plans, including roadway layout, drainage, signing and striping. The plans will be prepared in accordance with the Bridge Design Details Manual and the Highway Design Manual as published by Caltrans. Environmental mitigation requirements, if required, will be incorporated into the development of these documents.

DHA intends to use AutoCAD Civil 3D. We will develop our drawing files using Stanislaus County's standard sheet format. We anticipate roadway layout plans to be at a scale of 1"=40' or 1"=20', and roadway construction details to be at a scale of 1"=10' unless otherwise requested by the County. Bridge plans will be at the required feet and inch scales.

Plans for the 60% submittal and beyond will include the following:

- Title Sheet & Key Map
- Roadway Typical Cross Section Sheet
- Roadway Plan and Profile Sheets
- Construction Detail Sheets
- Staged Construction/Traffic Handling Plans
- Temporary Erosion/Pollution Control Sheets
- Roadway Drainage Plan

- Utility Plan
- Signing and Striping Plan
- Bridge General Plan
- Bridge Foundation Plan
- Abutment Detail Sheets
- Bridge Typical Section Sheet
- Bridge Girder Layout Sheet
- Bridge Railing Plan
- Log of Test Borings Sheet

Plans at 60% should be of sufficient level to start right of way acquisition after environmental determination is achieved.

#### • **Deliverables:**

- Half-size (11x17) 60% Plans - Hard Copy and Electronic PDF
- "Red Line" set of the plans with County review comments on the 30% Plans

#### **Task 14.1.3: 90% Plans (WBS 240.50)**

Upon receipt of the 60% review comments, revisions will be made to the plans in preparation for the 90% plan set. A written response will be prepared by the designer addressing any reviewer or checker comments, suggestions or proposed revisions.

#### • **Deliverables:**

- Half-size (11x17) 90% Plans - Hard Copy and Electronic PDF
- "Red Line" set of the plans with County review comments on the 60% Plans

#### **Task 14.1.4: 100% Plans (WBS 250.55)**

Upon receipt of the 90% review comments, revisions will be made to the plans in preparation for the 100% (final) plan set. A written response will be prepared by the designer addressing any reviewer or checker comments, suggestions or proposed revisions.

The final plans will be prepared in accordance with the Local Programs Manual and presented to Stanislaus County at the completion of the design phase of the project. All plans will be stamped and signed by a licensed civil or structural engineer registered in

California.

The final plan submittal will consist of:

- One set of full size (24x36) Plans stamped and signed on Mylar
- Compact Disk containing electronic PDF files of the signed contract plans (Half and full size PDF files) and AutoCAD drawing files
- “Red lined” set of the plans with County review comments on the 90% submittal

## **Task 14.2: Special Provisions**

### **Task 14.2.1: 60% Special Provisions (WBS 240.90)**

DHA will use the most current version of the Standard Special Provisions available from Caltrans, 2010, and will revise the Standard Special Provisions to meet the requirements for this specific project. The special provisions document will be developed using Microsoft Word.

- **Deliverables:** Draft Technical Specification With Track Edits On - Hard Copy and Electronic Microsoft Word File

### **Task 14.2.2: 90% Special Provisions (WBS 250.60)**

Upon receipt of the 60% review comments, revisions will be made to the technical special provisions in preparation for the 90% special provisions. The project special provisions will be finalized in Caltrans' standard format for inclusion in the Bid Documents along with the boilerplate portion provided by Stanislaus County. A written response will be prepared by the designer addressing any reviewer or checker comments, suggestions or proposed revisions.

- **Deliverables:**
  - Second Draft Specification - Hard Copy and Electronic Microsoft Word File
  - “Red Line” set of the special provisions with County review comments on the 60% special provisions

### **Task 14.2.3: 100% (Final) Special Provisions (WBS 250.60)**

Upon receipt of the 90% review comments, revisions will be made to the special provisions in preparation for the 100% (final) specification package. A written response will be prepared by the designer addressing any reviewer or checker comments, suggestions or proposed revisions.

The final special provisions will be prepared in accordance with the Local Programs Manual for Federal funded projects and presented to Stanislaus County at the completion of the design phase of the project. The cover sheet of the specification package will be stamped and signed by a licensed civil or structural engineer registered in California.

The final specification submittal will consist of:

- One camera-ready set of special provisions, including Stanislaus County's Boiler Plate, stamped and signed
- Compact Disk containing an electronic PDF file of the stamped and signed special provisions and Microsoft Word file of the special provisions (not signed)
- “Red lined” set of the special provisions with County review comments on the 90% submittal

## **Task 14.3: Construction Cost Estimate**

### **Task 14.3.1: 30% Estimate (WBS 230.40)**

Concurrent with the development of the 30% plans, DHA will prepare a preliminary construction cost estimate. Costs will be estimated for approximate quantities of roadway materials and structural bridge items. The cost estimate spreadsheet will be developed using Microsoft Excel.

- **Deliverables:** 30% Construction Cost Estimate - Hard Copy and Electronic PDF

**Task 14.3.2: 60% Estimate (WBS 240.90)**

Along with the development of the 60% plans and special provisions, a detailed construction cost will be developed. A Marginal Estimate will be prepared as an estimate of probable construction cost for the project. This estimate will be based on quantity take-off calculations performed and checked by the designer and unit cost information for each of the items listed. The unit cost data will be based on past relevant experience with similar projects; including any Stanislaus County construction cost data, and the latest version of Contract Cost Data as prepared by Caltrans.

• **Deliverables:**

- 60% Construction Cost Estimate - Hard Copy and Electronic PDF
- “Red lined” set of the estimate with County review comments on the 30% submittal

**Task 14.3.3: 90% Estimate (WBS 250.60)**

Upon receipt of the 60% review comments, revisions will be made to the construction cost estimate in preparation for the 90% estimate. The construction cost estimate will be finalized in Caltrans' standard format for inclusion in the Bid Documents plans and special provisions. A written response will be prepared by the designer addressing any reviewer or checker comments, suggestions or proposed revisions.

• **Deliverables:**

- 90% Construction Cost Estimate - Hard Copy and Electronic PDF
- “Red lined” set of the estimate with County review comments on the 60% submittal

**Task 14.3.4: 100% (Final) Estimate (WBS 250.60)**

Upon receipt of the 90% review comments, revisions will be made to the construction cost estimate in preparation for the 100% (final) Bid List and Engineer's Estimate. A written response will be prepared by the designer addressing any reviewer or checker comments, suggestions or proposed revisions.

The final Engineer's Estimate will be prepared in accordance with the Local Programs Manual and presented to Stanislaus County at the completion of the design phase of the project. The Engineer's Estimate will be stamped and signed by a licensed civil or structural engineer registered in California.

The final specification submittal will consist of:

- One camera-ready set of the Bid List (included in the special provisions) and Engineer's Estimate stamped and signed
- Compact Disk containing an electronic PDF file of the stamped and signed Engineer's Estimate and Microsoft Excel of the Engineer's Estimate (not signed)
- “Red lined” set of the estimate with County review comments on the 90% submittal

**Task 14.4: Final Engineering Document Submittal in Support of the PS&E (WBS 250/260)**

In addition to the 100% Bid Set of the PS&E, DHA will submit the final engineering documents in support of the PS&E at the conclusion end of the Final Design and PS&E Phase of the project.

The final engineering document will consist of:

- Stamped and Signed Bridge Design and Quantity Calculations
- Stamped and Signed Bridge Independent Bridge and Quantity Check Calculations
- Stamped and Signed Final Hydrology, Hydraulics and Scour Report
- Stamped and Signed Final Foundation Report
- Compact Disk containing an electronic PDF files of the stamped and signed engineering documents

## Phase 3: Post Design Services

### Task 15: Bidding and Construction Support

#### Task 15.1: Construction Bid Assistance (WBS 265.55)

DHA will assist Stanislaus County during the pre-bid opening. Services that will be provided by DHA under this task include:

- Suggesting any pre-qualification criteria for the construction bidder
- Providing assistance to Stanislaus County with responding to inquiries from bidders relative to the plans, special provisions, and quantity estimates during the advertising process
- Preparing any required addenda to clarify the scope of the project for review and approval by Stanislaus County and distribution to the bidders

#### Task 15.2: Construction Support Services (WBS 270.20)

DHA will provide the following construction support services during the construction period:

- Attend the pre-construction meeting
- Provide ongoing consultation to Stanislaus County during construction
- Review and respond to request for information regarding the project PS&E
- Review, comment, and approve Contractor submittals and shop drawings including falsework drawings
- Prepare As-Built Drawings on Mylar at the completion of project construction

DHA is also available to provide on-site inspections if requested by Stanislaus County. Onsite inspection services would be provided by DHA to Stanislaus County as an additional service on a time and materials basis.

**EXHIBIT C  
CONSULTANT'S FEE SCHEDULE**

HICKMAN ROAD OVER TUOLUMNE RIVER BRIDGE REPLACEMENT - STANISLAUS COUNTY

FEE ESTIMATE  
July 21, 2014

TASK	TASK DESCRIPTION	PK & CAJ/CP	Project Manager	Bridge Lead	Senior Bridge Engineer	Bridge Designer	Bridge Engineer	Bridgeway Lead	Regulatory Designer	Env. Coordinator	Env. Assistant	CAD Tech	Project Admin	DHA Labor Fee	Reimbursable	D-BA Total Fee	Public Outreach	H&M	Geotechnical			Bridge Ins. Check	Street Lighting	Survey	Right of Way	Envir.	Total Fee	
																	Burthe (DBE)	Auda (DBF)	Table	Woodward Drilling (DBH)	Open-Cl. Pile (DBE)	DRG (DBF)	YAC (DBB)	Northstar	OPC	LSA		
<b>PROJECT IMPLEMENTATION PHASE</b>																												
1	<b>Project Implementation</b>																											
	1.1 Management		8	250										\$52,840		\$52,840												\$52,840
	1.2 Meetings		40	10	20	20	40		40					\$33,572		\$33,572												\$33,572
	1.3 Quality Assurance / Quality Control		80				80							\$23,760		\$23,760												\$23,760
	1.4 Project Progress Reports			40										\$8,160		\$8,160												\$8,160
	1.5 Project Schedule			40										\$8,160		\$8,160												\$8,160
	1.6 HBP and LBSSRP (Prop. 1B) Funding Document Technical Assistance		32	40										\$16,192		\$16,192												\$16,192
	<b>Subtotal - Task 1</b>		160	410	40	20	20	80	40	0	40	0	0	16		\$142,684	\$0	\$142,684	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$142,684
<b>PHASE I - PRELIMINARY ENGINEERING</b>																												
2	<b>Strategy Report</b>																											
	2.1 Draft Strategy Report		4	80	8	20	20		4					\$16,484		\$16,484												\$16,484
	2.2 Strategy Meeting			4	4	4		4		4		8	8	\$4,904		\$4,904												\$4,904
	2.3 Final Strategy Report			12	4	4	6	4				8	8	\$6,156		\$6,156												\$6,156
	<b>Subtotal - Task 2</b>		4	56	16	28	28	0	12	0	4	0	8	16		\$27,544	\$0	\$27,544	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,544
3	<b>Public Outreach</b>																											
	3.1 Team Kickoff and Project Development Team Meetings			40	24	24		40		40			8	\$28,896		\$28,896	\$8,944											\$37,840
	3.2 Identification of Stakeholders			8										\$1,632		\$1,632	\$1,604											\$3,236
	3.3 Newsletter Notifications, Public Information Meeting, and Media			4										\$816		\$816	\$9,770											\$9,986
	3.4 Individual Stakeholder Meetings			16		16		16						\$8,768		\$8,768	\$1,148											\$9,916
	3.5 Hotlines													\$0		\$0	\$2,153											\$2,153
	<b>Subtotal - Task 3</b>		0	68	24	40	0	56	0	40	0	0	8	\$40,112	\$0	\$40,112	\$23,019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,131
4	<b>Bridge Alternatives Analysis / Type Selection</b>																											
	4.1 Bridge Alternatives Analysis / Type Selection			24	24	100	150		24	200		90	0	\$82,796		\$82,796												\$82,796
	<b>Subtotal - Task 4</b>		0	24	24	100	150	0	24	200	0	0	90	0	\$82,796	\$0	\$82,796	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82,796
5	<b>Geotechnical Investigation</b>																											
	5.1 Geotechnical Project Management / Meetings													\$0		\$0				\$5,950								\$5,950
	5.2 Existing Available Geotechnical Data													\$0		\$0			\$1,000									\$1,000
	5.3 Field Studies													\$0		\$0			\$45,450	\$59,600	\$8,000						\$113,250	
	5.4 Laboratory Testing													\$0		\$0			\$7,700									\$7,700
	5.5 Engineering Analysis													\$0		\$0			\$7,970									\$7,970
	5.5A Drivability Analysis (Regulatory Agency Requirements for Max Pile Strikes per Day)													\$0		\$0			\$4,470									\$4,470
	5.6 Foundation Report Preparation				8	16								\$3,688		\$3,688			\$12,040									\$16,628
	<b>Subtotal - Task 5</b>		0	0	8	16	0	0	0	0	0	0	0	\$3,688	\$0	\$3,688	\$0	\$0	\$65,480	\$59,600	\$8,000	\$0	\$0	\$0	\$0	\$0	\$166,988	
6	<b>Topographical Survey</b>																											
	6.1 Record Search													\$0		\$0												\$1,951
	6.2 Record Calculations													\$0		\$0												\$3,251
	6.3 Right of Way and Control Field Survey													\$0		\$0												\$11,703
	6.4 Topographic Survey								24					\$3,240		\$3,240												\$27,307
	6.5 Right of Way Mapping Services													\$0		\$0												\$20,806
	<b>Subtotal - Task 6</b>		0	0	0	0	0	0	24	0	0	0	0	\$3,240	\$0	\$3,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68,257
7	<b>Environmental</b>																											
	7.1 Environmental Project Management									60				\$6,300		\$6,300												\$7,630
	7.2 Purpose and Need and Project Description			8		8		8		16	40			\$8,104		\$8,104												\$8,104
	7.3 Preliminary Environmental Study									24	40			\$4,660		\$4,660												\$4,660
	7.4 Technical Studies									40	140			\$11,340	\$400	\$11,740												\$11,740
	7.5 Preparation of Initial Study and Mitigated Negative Declaration									60	180			\$14,460		\$14,460												\$14,460
	7.6 Regulatory Permitting									40	40			\$9,240		\$9,240												\$9,240
	<b>Subtotal - Task 7</b>		0	8	0	8	0	8	0	240	420	0	0	\$51,004	\$400	\$51,404	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$119,915

HICKMAN ROAD OVER TUOLUMNE RIVER BRIDGE REPLACEMENT - STANISLAUS COUNTY

FEE ESTIMATE  
July 21, 2014

TASK	TASK DESCRIPTION	PIC &	Project	Lead	Senior	Bridge	Bridge	Roadway	Roadway	Env.	Env.	CAD	Project	DHA	Non-	DHA	Public	H&H	Geotechnical			Bridge	Street	Survey	Right	Envir.	Total		
		QA/QC	Manager	Bridge	Engineer	Designer	Engineer	Lead	Designer	Coordinator	Accountant	Tech	Admin	Labor	Subsidiary	Total	Outreach	Avila	Tablet	Woodward	Alert-Sub	BRD	Lighting	Nanostar	OPC	ISA		Fee	
<b>PHASE II - FINAL DESIGN AND PS&amp;E</b>																													
<b>8</b>	<b>Approach Roadway Design</b>																												
	8.1 Roadway Design							20	360					324			\$101,208											\$101,208	
	8.2 Street Lighting Design							18									\$2,160											\$2,160	
	<b>Subtotal - Task 8</b>	0	0	0	0	0	0	80	376	0	0	0	324	0	0	\$103,368	\$0	\$103,368	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$103,368	
<b>9</b>	<b>Utility Design and Coordination</b>																												
	9.1 Utility Design and Coordination							100					16				\$14,844											\$14,844	
	<b>Subtotal - Task 9</b>	0	0	0	0	0	0	100	0	0	0	16	0	0	0	\$14,844	\$0	\$14,844	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,844	
<b>10</b>	<b>Bridge Structural Design</b>																												
	10.1 Bridge Structural Design			80	150	300							300				\$104,180											\$104,180	
	<b>Subtotal - Task 10</b>	0	0	80	150	300	0	0	0	0	0	300	0	0	0	\$104,180	\$0	\$104,180	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,180	
<b>11</b>	<b>Independent Bridge Design Check</b>																												
	11.1 Independent Bridge Design Check																\$0											\$0	
	<b>Subtotal - Task 11</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70,000	\$0	\$0	\$0	\$0	\$70,000	
<b>12</b>	<b>Hydraulics</b>																												
	12.1 Review Existing Hydraulic Information / Field Review Bridge Reach																\$0											\$2,834	
	12.2 Existing Bridge Hydraulic and Scour Analysis																\$0											\$6,307	
	12.3 Estimate Scour for the Proposed Bridge Alternatives																\$0											\$5,600	
	12.4 Prepare Draft and Final Reports				16												\$4,400												\$8,465
	12.5 Location Hydraulic Study																\$0											\$2,270	
	12.6 Central Valley Flood Protection Board Coordination and Permitting																\$0											\$1,537	
	<b>Subtotal - Task 12</b>	0	0	0	16	0	0	0	16	0	0	0	0	0	0	\$4,400	\$0	\$4,400	\$0	\$27,122	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,522	
<b>13</b>	<b>Right of Way Services</b>																												
	13.1 Preliminary Cost Estimate / Caltrans Right of Way Data Sheets								8								\$1,632											\$1,632	
	13.2 Right of Way Appraisal and Acquisition Services								24								\$4,896											\$4,896	
	<b>Subtotal - Task 13</b>	0	0	0	0	0	0	32	0	0	0	0	0	0	0	\$6,528	\$0	\$6,528	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,528	
<b>14</b>	<b>Plans, Specifications, and Estimate (PS&amp;E)</b>																												
	14.1 Plans			40	80	100								270			\$133,370											\$133,370	
	14.2 Special Provisions		50	20													\$17,900											\$17,900	
	14.3 Construction Cost Estimate				20	60	80										\$39,300											\$39,300	
	14.4 Final Engineering Document Submittal in Support of the PS&E		18		20	20			30								\$15,198											\$15,198	
	<b>Subtotal - Task 14</b>	0	66	60	120	180	80	110	570	0	0	270	0	0	0	\$205,766	\$0	\$205,766	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$205,766	
<b>PHASE III - POST DESIGN SERVICES</b>																													
<b>15</b>	<b>Bidding and Construction Support Services</b>																												
	15.1 Construction Bid Assistance			24	24				24	24				18			\$18,720											\$18,720	
	15.2 Construction Support Services			40	40	40			40	80				18			\$45,864											\$45,864	
	<b>Subtotal - Task 15</b>	0	64	64	40	40	0	64	104	0	0	0	32	0	0	\$64,584	\$0	\$64,584	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$64,584	

<b>Totals:</b>	<b>\$854,828</b>	<b>\$400</b>	<b>\$855,228</b>	<b>\$23,019</b>	<b>\$27,122</b>	<b>\$85,480</b>	<b>\$59,800</b>	<b>\$8,000</b>	<b>\$70,000</b>	<b>\$8,000</b>	<b>\$65,017</b>	<b>\$102,686</b>	<b>\$68,511</b>	<b>\$1,372,863</b>													
															<b>GRAND TOTAL</b>												



**EXHIBIT D  
PROJECT SCHEDULE**

**STANISLAUS COUNTY**  
Addendum to Professional Design Services Agreement

Consultant: Drake Haglan & Associates  
Project: Hickman Road over Tuolumne River Bridge Replacement  
Contract No.: 9610  
Federal Project No.: BRLS-5938(199)  
Award Date & Board Resolution No. 09-16-2014, #2014-481

\*\*\*\*\*

In addition to, and notwithstanding, the requirements set forth in the Professional Design Services Agreement, CONSULTANT agrees to the following:

**1. CERTIFICATION OF CONSULTANT, COMMISSIONS & FEES**

Exhibit 10-F – (attachment)

**2. CONFIDENTIALITY OF DATA**

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

**3. 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 agreement, or any ensuing COUNTY construction project. The CONSULTANT shall also list current clients who may have a financial interest in the outcome of this agreement, 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 agreement, 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 agreement, or on any agreement to provide construction inspection for any construction project resulting from this agreement. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.
- 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 agreement shall be eligible to bid on any construction agreement, or on any agreement to provide construction inspection for any construction project resulting from this agreement.

**4. CONSULTANT'S ENDORSEMENT OF PS&E/OTHER DATA:**

- A. The CONSULTANT/engineer shall sign all Plans, Specifications and Estimates (PS&E) and engineering data furnished under the contract including registration number.

**5. 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 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.

- C. Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by CONSULTANT to the COUNTY.

**6. COST PROPOSAL**

The Cost Proposal is subject to an audit or Certified Public Accountant (CPA) Indirect Cost (Overhead) Audit Workpaper Review. The Cost Proposal shall be adjusted by the CONSULTANT and approved by the COUNTY's Contract Manager to conform to the Workpaper Review recommendations or audit recommendations. The CONSULTANT agrees that individual terms of cost identified in the audit report shall be incorporated into the Agreement by this reference if directed by the COUNTY at its sole discretion. Refusal by the CONSULTANT to incorporate the Workpaper Review recommendations or audit recommendations will be considered a breach of the Agreement terms and cause for termination of the Agreement.

**7. 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.

**8. FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES**

Exhibit 17-F – (attachment)

## **9. EQUIPMENT PURCHASE**

- A. Prior authorization, in writing, by the COUNTY 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; 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 agreement 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 agreement, or if the agreement 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."
- D. All subcontracts in excess \$25,000 shall contain the above provisions.

## **10. FUNDING REQUIREMENTS**

- A. It is mutually understood between the parties that this contract may have been written before ascertaining the availability of funds or appropriation of funds, for the mutual benefit of both parties, in order to avoid program and fiscal delays that would occur if the agreement were executed after that determination was made.
- B. This agreement is valid and enforceable only, if sufficient funds are made available to the COUNTY for the purpose of this contract. In addition, this agreement is subject to any additional restrictions, limitations, conditions, or any statute enacted by the Congress, State Legislature or COUNTY governing

board that may affect the provisions, terms, or funding of this contract in any manner.

- C. It is mutually agreed that if sufficient funds are not appropriated, this contract may be amended to reflect any reduction in funds.
- D. The COUNTY has the option to void the contract under the 30-day cancellation clause, or by mutual agreement to amend the contract to reflect any reduction of funds.

## **11. INSPECTION OF WORK**

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

## **12. NONDISCRIMINATION**

- A. During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:
- B. Compliance with Regulations: The contractor shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, “DOT”) Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter “FHWA”) Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- C. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color or national origin, sex, age, and disability/handicap and low income in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- D. Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contract for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor

or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap and low income.

- E. Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the COUNTY or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the COUNTY, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.
- F. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the COUNTY shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
- G. Withholding of payments to the contractor under the contract until the contractor complies, and/or
- H. Cancellation, termination or suspension of the contract, in whole or in part.
- I. Incorporation of Provisions: The contractor shall include the provisions of paragraphs 1 through 6 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the COUNTY or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that , in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the COUNTY to enter into such litigation to protect the interests of the COUNTY, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

### **13. PERFORMANCE PERIOD**

- A. This agreement shall go into effect on **September 16, 2014**, contingent upon approval by the COUNTY, and the CONSULTANT shall commence work after notification to proceed by the COUNTY. The agreement shall end on **August 25, 2017**, unless extended by agreement amendment.

- B. The CONSULTANT is advised that any recommendation for agreement award is not binding on the COUNTY until the agreement is fully executed and approved by the COUNTY.

**14. PROHIBITION OF EXPENDING LOCAL AGENCY, STATE OR FEDERAL FUNDS FOR LOBBYING CLAUS**

- A. The CONSULTANT certifies to the best of his or her knowledge and belief that:
  - B. 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.
  - C. 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.
  - D. 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.
  - E. 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.



**15. REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION (LOBBYING CLAUSE)**

A. The CONSULTANT warrants that this agreement 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 agreement without liability; to pay only for the value of the work actually performed; or to deduct from the agreement price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

**16. REIMBURSEMENT OF TRAVEL & SUBSISTENCE**

COUNTY agrees to pay pre-approved travel and subsistence expenses per the COUNTY's Travel Policy.

**17. RETENTION OF RECORDS/AUDIT**

A. For the purpose of determining compliance with Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of the contract pursuant to Government Code 8546.7; the CONSULTANT, subcontractors, and the COUNTY shall maintain all books, documents, papers, accounting records, and other evidence pertaining to the performance of the agreement, including but not limited to, the costs of administering the agreement. All parties shall make such materials available at their respective offices at all reasonable times during the agreement period and for three years from the date of final payment under the agreement. The state, the State Auditor, 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 agreement for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.

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

**18. SALARY ESCALATION**

The CONSULTANT will be allowed salary increases as shown in EXHIBIT C.

**19. STATE PREVAILING WAGE RATES**

A. The CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor

Code, Section 177, 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.

**20. SUBCONSULTANT DBE PARTICIPATION**

Exhibit 10-J – (attachment)

**21. SUBCONTRACTING**

- A. The CONSULTANT shall perform the services with resources available within its own organization; and no portion of the work pertinent to this agreement shall be subcontracted without written authorization by the COUNTY, 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 agreement, shall contain all the provisions stipulated in this agreement to be applicable to subcontractors.
- C. Any substitution of subcontractors must be approved in writing by the COUNTY.

**22. REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**


FHWA-1273 – (attachment)

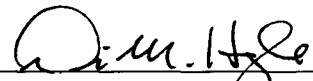
**(SIGNATURES ON FOLLOWING PAGE)**

**IN WITNESS WHEREOF**, the parties hereto have caused this Addendum to be executed by and through their respective authorized officers:

COUNTY OF STANISLAUS

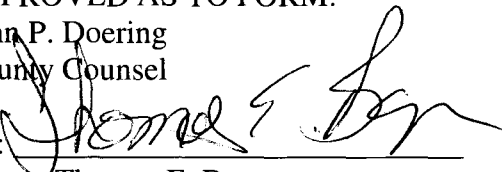
DRAKE HAGLAN & ASSOCIATES

By:   
Matt Machado, Director  
Department of Public Works

By:   
Dennis Haglan, PE  
President/Principal in Charge

APPROVED AS TO FORM:

John P. Doering  
County Counsel

By:   
Thomas E. Boze  
Deputy County Counsel

# ATTACHMENTS

- Exhibit 10-F – Certification of Consultant, Commissions & Fees
- Exhibit 10-J – Standard Contract Provisions for Subconsultant/DBE Participation
- Exhibit 17-F – Final Report-Utilization of Disadvantaged Business Enterprises
- FHWA-1273 – Required Contract Provisions Federal-Aid Construction Contracts

**EXHIBIT 10-F CERTIFICATION OF CONSULTANT, COMMISSIONS & FEES**

I HEREBY CERTIFY that I am the \_\_\_\_\_, and duly authorized representative of the firm of \_\_\_\_\_, whose address is \_\_\_\_\_, and that, except as hereby expressly stated, neither I nor the above firm that I represent have:

- (a) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above consultant) to solicit or secure this contract; nor
- (b) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract; nor
- (c) paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above consultant) any fee, contribution, donation, or consideration of any kind, for or in connection with, procuring or carrying out this contract.

I acknowledge that this Certificate is to be made available to the California Department of Transportation (Caltrans) in connection with this contract involving participation of federal-aid highway funds, and is subject to applicable state and federal laws, both criminal and civil.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

**Distribution:** 1) Local Agency Project File (Original & Contract)  
2) DLAE (with contract copy)

**EXHIBIT 10-J STANDARD CONTRACT PROVISIONS FOR SUBCONSULTANT/DBE PARTICIPATION****1. Subconsultants**

- A. Nothing contained in this Contract or otherwise, shall create any contractual relation between the Agency and any subconsultants, and no subcontract shall relieve the Consultant of his/her responsibilities and obligations hereunder. The Consultant agrees to be as fully responsible to the Agency for the acts and omissions of its subconsultants 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 Consultant. The Consultant's obligation to pay its subconsultants is an independent obligation from the Agency's obligation to make payments to the Consultant.
- 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 subconsultants.
- C. Consultant shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to the Consultant by the Agency.
- D. Any substitution of subconsultants must be approved in writing by the Agency's Contract Administrator in advance of assigning work to a substitute subconsultant.

**2. Disadvantaged Business Enterprise (DBE) Participation**

- A. This Contract 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.
- B. If the contract has a DBE goal, the Consultant must meet the 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. A DBE is a firm meeting the definition of a DBE as specified in 49 CFR.
- C. DBEs and other small businesses, as defined in 49 CFR, Part 26 are encouraged to participate in the performance of contracts financed in whole or in part with federal funds. The Consultant or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. 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 Contract, which may result in the termination of this Contract or such other remedy as the local agency deems appropriate.
- D. Any subcontract entered into as a result of this Contract shall contain all of the provisions of this section.
- E. A DBE may be terminated only with prior written approval from the local agency and only for the reasons specified in 49 CFR 26.53(f). Prior to requesting local agency consent for the termination, the prime consultant must meet the procedural requirements specified in 49 CFR 26.53(f).

**3. Performance of DBE Consultant and other DBE Subconsultants/Suppliers**

- A. A DBE performs a commercially useful function when it is responsible for execution of the work of the Contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible with respect to materials and supplies used on the Contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, evaluate the amount of work subcontracted, industry practices; whether the amount the firm is to be paid under the Contract is commensurate with the work it is actually performing; and other relevant factors.
- B. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, Contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, examine similar transactions, particularly those in which DBEs do not participate.
- C. If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its Contract with its own work force, or the DBE subcontracts a greater portion of the work of the Contract than would be expected on the basis of normal industry practice for the type of work involved, it will be presumed that it is not performing a commercially useful function.

**4. Prompt Payment of Funds Withheld to Subconsultants**

- A. Any subcontract entered into as a result of this Contract shall contain all of the provisions of this section.  
*(Local agency to include either B, C, or D below; delete the other two.)*
- B. No retainage will be withheld by the Agency from progress payments due the prime Consultant. Retainage by the prime Consultant or subconsultants is prohibited, and no retainage will be held by the prime Consultant from progress due subconsultants. Any violation of this provision shall subject the violating prime Consultant or subconsultants to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the prime Consultant or subconsultant in the event of a dispute involving late payment or nonpayment by the prime Consultant or deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime Consultants and subconsultants.
- C. No retainage will be held by the Agency from progress payments due the prime Consultant. Any retainage held by the prime Consultant or subconsultants from progress payments due subconsultants shall be promptly paid in full to subconsultants within 30 days after the subconsultant's work is satisfactorily completed. Federal law (49 CFR26.29) requires that any delay or postponement of payment over the 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 consultant, deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime consultant and subconsultants.

- D. 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 consultant 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 Consultant, deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime consultant and subconsultants.

#### 5. DBE Records

- A. The Consultant shall maintain records of materials purchased or supplied from all subcontracts entered into with certified DBEs. The records shall show the name and business address of each DBE or vendor and the total dollar amount actually paid each DBE or vendor, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all firms. DBE prime consultants shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.
- B. Upon completion of the Contract, a summary of these records shall be prepared and submitted on the form entitled, "Final Report-Utilization of Disadvantaged Business Enterprise (DBE), First-Tier Subconsultants," CEM-2402F (Exhibit 17-F, Chapter 17, of the LAPM), certified correct by the Consultant or the Consultant's authorized representative and shall be furnished to the Contract Administrator with the final invoice. Failure to provide the summary of DBE payments with the final invoice will result in 25 percent 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 Subconsultants" is submitted to the Contract Administrator.

#### 6. DBE Certification and Decertification Status

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



**STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION**  
**FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES**  
**(DBE), FIRST-TIER SUBCONTRACTORS**

**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

CEM-2402F (REV 02/2008)

CONTRACT NUMBER		COUNTY	ROUTE	POST MILES	FEDERAL AID PROJECT NO.	ADMINISTERING AGENCY	CONTRACT COMPLETION DATE
PRIME CONTRACTOR				BUSINESS ADDRESS			ESTIMATED CONTRACT AMOUNT \$
ITEM NO.	DESCRIPTION OF WORK PERFORMED AND MATERIAL PROVIDED	COMPANY NAME AND BUSINESS ADDRESS	DBE CERT. NUMBER	CONTRACT PAYMENTS		DATE WORK COMPLETE	DATE OF FINAL PAYMENT
				NON-DBE	DBE		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
				\$	\$		
ORIGINAL COMMITMENT							
\$				TOTAL	\$	\$	
DBE							
List all First-Tier Subcontractors, Disadvantaged Business Enterprises (DBEs) regardless of tier, whether or not the firms were originally listed for goal credit. If actual DBE utilization (or item of work) was different than that approved at time of award, provide comments on back of form. List actual amount paid to each entity.							

**I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT**

CONTRACTOR REPRESENTATIVE'S SIGNATURE	BUSINESS PHONE NUMBER	DATE
<b>TO THE BEST OF MY INFORMATION AND BELIEF, THE ABOVE INFORMATION IS COMPLETE AND CORRECT</b>		
RESIDENT ENGINEER'S SIGNATURE	BUSINESS PHONE NUMBER	DATE

Copy Distribution-Caltrans contracts:	<b>Original</b> - District Construction	Copy- Business Enterprise Program	Copy- Contractor	Copy Resident Engineer
Copy Distribution-Local Agency contracts:	<b>Original</b> - District Local Assistance Engineer (submitted with the Report of Expenditure)	Copy- District Local Assistance Engineer	Copy- Local Agency file	

**FINAL REPORT – UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE), FIRST-TIER SUBCONTRACTORS  
CEM 2402(F) (Rev. 02/2008)**

The form requires specific information regarding the construction project: Contract Number, County, Route, Post Miles, Federal-aid Project No., the Administering Agency, the Contract Completion Date and the Estimated Contract Amount. It requires the prime contractor name and business address. The focus of the form is to describe who did what by contract item number and descriptions, asking for specific dollar values of item work completed broken down by subcontractors who performed the work both DBE and non-DBE work forces. DBE prime contractors are required to show the date of work performed by their own forces along with the corresponding dollar value of work.

The form has a column to enter the Contract Item No. (or Item No's) and description of work performed or materials provided, as well as a column for the subcontractor name and business address. For those firms who are DBE, there is a column to enter their DBE Certification Number. The DBE should provide their certification number to the contractor and notify the contractor in writing with the date of the decertification if their status should change during the course of the project.

The form has six columns for the dollar value to be entered for the item work performed by the subcontractor.

The Non-DBE column is used to enter the dollar value of work performed for firms who are not certified DBE.

The decision of which column to be used for entering the DBE dollar value is based on what program(s) status the firm is certified. This program status is determined by the California Unified Certification Program by ethnicity, gender, ownership, and control issues at time of certification. To confirm the certification status and program status, access the Department of Transportation Civil Rights web site at: <http://www.dot.ca.gov/hq/bep> or by calling (916) 324-1700 or the toll free number at (888) 810-6346.

Based on this DBE Program status, the following table depicts which column to be used:

<b>DBE Program Status</b>	<b>Column to be used</b>
If program status shows DBE only with no other programs listed	DBE

If a contractor performing work as a DBE on the project becomes decertified and still performs work after their decertification date, enter the total dollar value performed by this contractor under the appropriate DBE identification column.

If a contractor performing work as a non-DBE on the project becomes certified as a DBE, enter the dollar value of all work performed after certification as a DBE under the appropriate identification column.

Enter the total of each of the six columns in Form CEM-2402(F).

Any changes to DBE certification must also be submitted on Form-CEM 2403(F).

Enter the Date Work Completed as well as the Date of Final Payment (the date when the prime contractor made the "final payment" to the subcontractor for the portion of work listed as being completed).

The contractor and the resident engineer sign and date the form indicating that the information provided is complete and correct.