

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

DEPT: PUBLIC WORKS

BOARD AGENDA # \*C-3

Urgent \_\_\_\_\_ Routine X

AGENDA DATE MAY 1, 2001

CEO Concurs with Recommendation YES \_\_\_\_\_ NO \_\_\_\_\_  
(Information Attached)

4/5 Vote Required YES \_\_\_\_\_ NO X

SUBJECT:

APPROVAL OF AN AGREEMENT FOR PROFESSIONAL SERVICES WITH NOLTE ASSOCIATES, INC. FOR ENGINEERING DESIGN SERVICES FOR THE CROWS LANDING ROAD SEISMIC BRIDGE REPLACEMENT PROJECT

STAFF RECOMMENDATIONS:

1. APPROVE AN AGREEMENT FOR PROFESSIONAL SERVICES WITH NOLTE ASSOCIATES, INC. FOR ENGINEERING DESIGN SERVICES FOR THE CROWS LANDING ROAD SEISMIC BRIDGE REPLACEMENT PROJECT FOR AN AMOUNT NOT TO EXCEED \$385,000;
2. AUTHORIZE THE CHAIR TO EXECUTE THE MASTER AGREEMENT WITH NOLTE ASSOCIATES, INC. FOR THE ENGINEERING DESIGN AND PREPARATION OF PLANS, SPECIFICATIONS, AND ESTIMATE OF THE CROWS LANDING ROAD SEISMIC BRIDGE REPLACEMENT PROJECT; AND,

(CONTINUED ON PAGE 2)

FISCAL IMPACT:

None. This seismic bridge replacement project is mandated by the state legislature and is 100% funded by Federal and State monies.

BOARD ACTION AS FOLLOWS:

No. 2001-323

On motion of Supervisor Blom, Seconded by Supervisor Caruso and approved by the following vote,

Ayes: Supervisors: Mayfield, Blom, Simon, Caruso, and Chair Paul

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) X Approved as recommended

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

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

Motion:

Christine Ferraro

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

By: Deputy

File No.

**SUBJECT:** APPROVAL OF AN AGREEMENT FOR PROFESSIONAL SERVICES WITH NOLTE ASSOCIATES, INC. FOR ENGINEERING DESIGN SERVICES FOR THE CROWS LANDING ROAD SEISMIC BRIDGE REPLACEMENT PROJECT

**PAGE:** 2

**STAFF  
RECOMMEN  
DATIONS**

**(Continued):**

3. AUTHORIZE THE AUDITOR TO INCREASE APPROPRIATIONS AND ESTIMATED REVENUE PER THE ATTACHED BUDGET JOURNAL SHEET.

**DISCUSSION:**

The State conducted an engineering study that determined that the existing Crows Landing Road Bridge over the San Joaquin River was subject to collapse if a significant seismic event occurred. The study also determined that the cost of strengthening the bridge was a major part of replacing the bridge, and therefore; the State has authorized the County to replace the bridge under the State's Seismic Bridge Replacement Program. This project will be 100% funded by State and Federal funds. Nolte and Associates has been selected to provided professional services for the design, plans and specifications on a time and materials basis for an amount not to exceed \$385,000.

**POLICY**

**ISSUE:**

This action is consistent with the Board's policy of providing a safe and healthy community.

**STAFFING**

**IMPACT:**

There is no additional staffing impacts associated with this action.

JLG:la

(L:\BRIDGES\32-068\admin\068NolteProfServAgreeBOS.wpd)

**AGREEMENT  
FOR  
PROFESSIONAL SERVICES**

This Agreement For Professional Services is made and entered into by and between the County of Stanislaus ("County") and Nolte Associates, Inc. ("Consultant"), on May 1, 2001 (the "Agreement").

**INTRODUCTION**

WHEREAS, the County has a need for services involving engineering services for completion of the plans, specifications and engineer's estimate for the Crows Landing Road Bridge at San Joaquin River Project; and

WHEREAS, the Consultant is specially trained, experienced and competent to perform and has agreed to provide such services;

NOW, THEREFORE, in consideration of the mutual promises, covenants, terms and conditions hereinafter contained, the parties hereby agree as follows:

**TERMS AND CONDITIONS**

1. SCOPE OF WORK

1.1 The Consultant shall furnish to the County upon execution of this Agreement or receipt of the County's written authorization to proceed, those services and work set forth in **Exhibit A**, which is attached hereto and, by this reference, made a part hereof.

1.2 All documents, drawings and written work product prepared or produced by the Consultant under this Agreement, including without limitation electronic data files, are the property of the Consultant; provided, however, the County shall have the right to reproduce, publish and use all such work, or any part thereof, in any reasonable manner and for any purposes whatsoever and to authorize others to do so. If any such work is copyrightable, the Consultant may copyright the same, except that, as to any work which is copyrighted by the Consultant, the County reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, and use such work, or any part thereof, and to authorize others to do so. County recognizes that all technical data, evaluations, reports and other work products are instruments of Consultant's services and not designed for use other than what is intended by this Agreement. County will

indemnify, defend and hold Consultant harmless from any claim, damage, or liability from County's reuse, misuse or distribution of those documents, unless Consultant has give written approval.

1.3 Services and work provided by the Consultant under this Agreement will be performed in a timely manner in accordance with a schedule of work set forth in Exhibit A. If there is no schedule, the hours and times for completion of said services and work are to be set by the Consultant; provided, however, that such schedule is subject to review by and concurrence of the County.

1.4 The Consultant shall provide services and work under this Agreement consistent with the requirements and standards established by applicable federal, state and County laws, ordinances, regulations and resolutions. The Consultant represents and warrants that it will perform its work in accordance with generally accepted industry standards and practices for the profession or professions that are used in performance of this Agreement and that are in effect at the time of performance of this Agreement. Except for that representation and any representations made or contained in any proposal submitted by the Consultant and any reports or opinions prepared or issued as part of the work performed by the Consultant under this Agreement, Consultant makes no other warranties, either express or implied, as part of this Agreement.

1.5 If the Consultant deems it appropriate to employ a consultant, expert or investigator in connection with the performance of the services under this Agreement, the Consultant will so advise the County and seek the County's prior approval of such employment. Any consultant, expert or investigator employed by the Consultant will be the agent of the Consultant not the County.

## 2. CONSIDERATION

2.1 The Consultant shall be compensated on a time and materials basis as provided in Exhibit A attached hereto. The County and Consultant shall negotiate in good faith a cost of living fee adjustment of any remaining services or additional services to be completed after the three year initial period of this Agreement.

2.2 Except as expressly provided in this Agreement, Consultant shall not be entitled to nor receive from County any additional consideration, compensation, salary, wages or other type of remuneration for services rendered under this Agreement, including, but not limited to, meals, lodging, transportation, drawings, renderings or mockups. Specifically, Consultant shall not be entitled by virtue of this Agreement to consideration in the form of overtime, health insurance benefits, retirement benefits, disability retirement benefits, sick leave, vacation time, paid holidays or other paid leaves of absence of any type or kind whatsoever.

2.3 The Consultant shall provide the County with a monthly or a quarterly statement, as services warrant, of fees earned and costs incurred for services provided during the billing period, which the County shall pay in full within 30 days of the date each invoice is approved by the County. The statement will generally describe the

services performed, the applicable rate or rates, the basis for the calculation of fees, and a reasonable itemization of costs. All invoices for services provided shall be forwarded in the same manner and to the same person and address that is provided for service of notices herein.

2.4 County will not withhold any Federal or State income taxes or Social Security tax from any payments made by County to Consultant under the terms and conditions of this Agreement. Payment of all taxes and other assessments on such sums is the sole responsibility of Consultant. County has no responsibility or liability for payment of Consultant's taxes or assessments.

### 3. TERM

3.1 The term of this Agreement shall be from the date of this Agreement until completion of the agreed upon services unless sooner terminated as provided below or unless some other method or time of termination is listed in Exhibit A.

3.2 Should either party default in the performance of this Agreement or materially breach any of its provisions, the other party, at that party's option, may terminate this Agreement by giving written notification to the other party.

3.3 The County may terminate this agreement upon 30 days prior written notice. Termination of this Agreement shall not affect the County's obligation to pay for all fees earned and reasonable costs necessarily incurred by the Consultant as provided in Paragraph 2 herein, subject to any applicable setoffs.

3.4 This Agreement shall terminate automatically on the occurrence of (a) bankruptcy or insolvency of either party, or (b) sale of Consultant's business.

### 4. REQUIRED LICENSES, CERTIFICATES AND PERMITS

Any licenses, certificates or permits required by the federal, state, county or municipal governments for Consultant to provide the services and work described in Exhibit A must be procured by Consultant and be valid at the time Consultant enters into this Agreement. Further, during the term of this Agreement, Consultant must maintain such licenses, certificates and permits in full force and effect. Licenses, certificates and permits may include but are not limited to driver's licenses, professional licenses or certificates and business licenses. Such licenses, certificates and permits will be procured and maintained in force by Consultant at no expense to the County.

### 5. OFFICE SPACE, SUPPLIES, EQUIPMENT, ETC.

Unless otherwise provided in this Agreement, Consultant shall provide such office space, supplies, equipment, vehicles, reference materials and telephone service as is necessary for Consultant to provide the services under this Agreement. The Consultant--not the County--has the sole responsibility for payment of the costs and expenses incurred by Consultant in providing and maintaining such items.

## 6. INSURANCE

6.1 Consultant shall take out, and maintain during the life of this Agreement, insurance policies with coverage at least as broad as follows:

6.1.1 General Liability. Commercial general liability insurance covering bodily injury, personal injury, property damage, products and completed operations with limits of no less than One Million Dollars (\$1,000,000) per incident or occurrence. 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.

6.1.2 Professional Liability Insurance. Professional errors and omissions (malpractice) liability insurance with limits of no less than One Million Dollars (\$1,000,000) aggregate. Such professional liability insurance shall be continued for a period of no less than one year following completion of the Consultant's work under this Agreement.

6.1.3 Automobile Liability Insurance. If the Consultant or the Consultant's officers, employees, agents, representatives or subcontractors utilize a motor vehicle in performing any of the work or services under this Agreement, owned/non-owned automobile liability insurance providing combined single limits covering bodily injury, property damage and transportation related pollution liability with limits of no less than One Million Dollars (\$1,000,000) per incident or occurrence.

6.1.4 Workers' Compensation Insurance. Workers' Compensation insurance as required by the California Labor Code. In signing this contract, the Consultant certifies under section 1861 of the Labor Code that the Consultant is aware of the provisions of section 3700 of the Labor Code which requires every employer to be insured against liability for workmen's compensation or to undertake self-insurance in accordance with the provisions of that code, and that the Consultant will comply with such provisions before commencing the performance of the work of this Agreement.

6.2 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.

6.3 The Consultant shall obtain a specific endorsement to all required insurance policies, except Workers' Compensation insurance and Professional Liability insurance, naming the County and its officers, officials and employees as additional insureds 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 the Consultant; (b) 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. 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.

6.4 The Consultant's insurance coverage shall be primary insurance regarding the County and County's officers, officials and employees. Any insurance or self-insurance maintained by the County or County's officers, officials and employees shall be excess of the Consultant's insurance and shall not contribute with Consultant's insurance.

6.5 Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the County or its officers, officials and employees.

6.6 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.

6.7 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.

6.8 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.

6.9 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.

6.10 At least ten (10) days prior to the date the Contractor begins performance of its obligations under this Agreement, Contractor 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 Contractor. 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.

6.11 The limits of insurance described herein shall not limit the liability of the Consultant and Consultant's officers, employees, agents, representatives or subcontractors.

## 7. DEFENSE AND INDEMNIFICATION

7.1 Consultant shall indemnify, hold harmless and defend the County and its officers and employees from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and reasonable attorneys' fees, arising out of, resulting from, or in connection with the performance of services under this Agreement by the Consultant or Consultant's officers, employees, representatives or subcontractors and resulting in or attributable to personal injury, death, or damage or destruction to tangible or intangible property, including the loss of use. Notwithstanding the foregoing, Consultant's obligation to indemnify the County and its officers and employees for any judgment, decree or arbitration award shall extend only to the percentage of negligence or responsibility of the Consultant in contributing to such claim, damage, loss and expense.

7.2 Consultant's obligation to defend, indemnify and hold the County and its agents, officers and employees harmless under the provisions of this paragraph is not limited to or restricted by any requirement in this Agreement for Consultant to procure and maintain a policy of insurance.

7.3 To the fullest extent permitted by law, the County shall indemnify, hold harmless and defend the Consultant and its officers, employees, agents, representatives or subcontractors from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and attorney's fees, arising out of or resulting from the negligence or wrongful acts of County and its officers or employees.

7.4 Subject to the limitations in 42 United States Code section 9607 (e), and unless otherwise provided in a Scope of Services approved by the parties:

(a) Consultant shall not be responsible for liability caused by the presence or release of hazardous substances or contaminants at the site, unless the



release results from the negligence of Consultant or its subcontractors;

(b) No provision of this Agreement shall be interpreted to permit or obligate Consultant to assume the status of "generator," "owner," "operator," "arranger," or "transporter" under state or federal law; and

(c) At no time, shall title to hazardous substances, solid wastes, petroleum contaminated soils or other regulated substances pass to Consultant.

## 8. STATUS OF CONSULTANT

8.1 All acts of Consultant and its officers, employees, agents, representatives, subcontractors and all others acting on behalf of Consultant relating to the performance of this Agreement, shall be performed as independent contractors and not as agents, officers or employees of County. Consultant, by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of County. Except as expressly provided in Exhibit A, Consultant has no authority or responsibility to exercise any rights or power vested in the County. No agent, officer or employee of the County is to be considered an employee of Consultant. It is understood by both Consultant and County that this Agreement shall not be construed or considered under any circumstances to create an employer-employee relationship or a joint venture.

8.2 At all times during the term of this Agreement, the Consultant and its officers, employees, agents, representatives or subcontractors are, and shall represent and conduct themselves as, independent contractors and not employees of County.

8.3 Consultant shall determine the method, details and means of performing the work and services to be provided by Consultant under this Agreement. Consultant shall be responsible to County only for the requirements and results specified in this Agreement and, except as expressly provided in this Agreement, shall not be subjected to County's control with respect to the physical action or activities of Consultant in fulfillment of this Agreement. Consultant has control over the manner and means of performing the services under this Agreement. If necessary, Consultant has the responsibility for employing other persons or firms to assist Consultant in fulfilling the terms and obligations under this Agreement.

8.4 Consultant is permitted to provide services to others during the same period service is provided to County under this Agreement; provided, however, such services do not conflict directly or indirectly with the performance of the Consultant's obligations under this Agreement.

8.5 If in the performance of this Agreement any third persons are employed by Consultant, such persons shall be entirely and exclusively under the direction, supervision and control of Consultant. All terms of employment including hours, wages, working conditions, discipline, hiring and discharging or any other term of employment or requirements of law shall be determined by the Consultant.

8.6 It is understood and agreed that as an independent contractor and not an employee of County, the Consultant and the Consultant's officers, employees, agents, representatives or subcontractors do not have any entitlement as a County employee, and, except as expressly provided for in any Scope of Services made a part hereof, do not have the right to act on behalf of the County in any capacity whatsoever as an agent, or to bind the County to any obligation whatsoever.

8.7 It is further understood and agreed that Consultant must issue W-2 forms or other forms as required by law for income and employment tax purposes for all of Consultant's assigned personnel under the terms and conditions of this Agreement.

8.8 As an independent contractor, 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.

## 9. RECORDS AND AUDIT

9.1 Consultant shall prepare and maintain all writings, documents and records prepared or compiled in connection with the performance of this Agreement for a minimum of four (4) years from the termination or completion of this Agreement. This includes any handwriting, typewriting, printing, photostatic, photographing and every other means of recording upon any tangible thing, any form of communication or representation including letters, words, pictures, sounds or symbols or any combination thereof.

9.2 Any authorized representative of County shall have access to any writings as defined above for the purposes of making audit, evaluation, examination, excerpts and transcripts during the period such records are to be maintained by Consultant. Further, County has the right at all reasonable times to audit, inspect or otherwise evaluate the work performed or being performed under this Agreement.

## 10. 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.

## 11. NONDISCRIMINATION

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 handicap, medical condition (including genetic characteristics), marital status, age, political affiliation or

sex. 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.

12. ASSIGNMENT

This is an agreement for the services of Consultant. County has relied upon the skills, knowledge, experience and training of Consultant and the Consultant's firm, associates and employees as an inducement to enter into this Agreement. Consultant shall not assign or subcontract this Agreement without the express written consent of County. Further, Consultant shall not assign any monies due or to become due under this Agreement without the prior written consent of County.

13. WAIVER OF DEFAULT

Waiver of any default by either party to this Agreement shall not be deemed to be waiver of any subsequent default. Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach, and shall not be construed to be a modification of the terms of this Agreement unless this Agreement is modified as provided below.

14. NOTICE

Any notice, communication, amendment, addition or deletion to this Agreement, including change of address of either party during the term of this Agreement, which Consultant or County shall be required or may desire to make shall be in writing and may be personally served or, alternatively, sent by prepaid first class mail to the respective parties as follows:

To County: County of Stanislaus  
Department of Public Works  
Attention: James L. Gregg  
1010 Tenth Street, Suite 3500  
Modesto, CA 95354

To Consultant: Nolte Associates, Inc.  
Attention: Mike Pugh  
302 Cherry Lane, #201  
Manteca, CA 95336

15. CONFLICTS

Consultant agrees that it has no interest and shall not acquire any interest direct or indirect which would conflict in any manner or degree with the performance of the work and services under this Agreement.

16. SEVERABILITY

If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction or if it is found in contravention of any federal, state or county statute, ordinance or regulation the remaining provisions of this Agreement or the application thereof shall not be invalidated thereby and shall remain in full force and effect to the extent that the provisions of this Agreement are severable.

17. AMENDMENT

This Agreement may be modified, amended, changed, added to or subtracted from by the mutual consent of the parties hereto if such amendment or change is in written form and executed with the same formalities as this Agreement and attached to the original Agreement to maintain continuity.

18. ENTIRE AGREEMENT

This Agreement supersedes any and all other agreements, either oral or in writing, between any of the parties herein with respect to the subject matter hereof and contains all the agreements between the parties with respect to such matter. Each party acknowledges that no representations, inducements, promises or agreements, oral or otherwise, have been made by any party, or anyone acting on behalf of any party, which are not embodied herein, and that no other agreement, statement or promise not contained in this Agreement shall be valid or binding.

19. ADVICE OF ATTORNEY

Each party warrants and represents that in executing this Agreement, it has received independent legal advice from its attorneys or the opportunity to seek such advice.

20. CONSTRUCTION

Headings or captions to the provisions of this Agreement are solely for the convenience of the parties, are not part of this Agreement, and shall not be used to interpret or determine the validity of this Agreement. Any ambiguity in this Agreement shall not be construed against the drafter, but rather the terms and provisions hereof shall be given a reasonable interpretation as if both parties had in fact drafted this Agreement.

21. GOVERNING LAW AND VENUE

This Agreement shall be deemed to be made under, and shall be governed by and construed in accordance with, the laws of the State of California. Any action brought to enforce the terms or provisions of this Agreement shall have venue in the County of Stanislaus, State of California.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first hereinabove written.

COUNTY OF STANISLAUS

NOLTE ASSOCIATES, INC.

By: Pat Paul  
Pat Paul  
Chair of the Board of Supervisors

By: Michael L. Capik  
Michael L. Capik  
Vice President

"County"

"Consultant"

ATTEST: CHRISTINE FERRARO TALLMAN  
Clerk of the Board of Supervisors of the  
County of Stanislaus, State of California

Taxpayer Identification No. 1218149

By: Christine Ferraro Tallman  
Deputy Clerk

APPROVED AS TO CONTENT:  
George Stillman, Director  
Department of Public Works

By: James L. Gregg  
James L. Gregg  
Supervising Civil Engineer

APPROVED AS TO FORM:  
Michael H. Krausnick  
County Counsel

By: John P. Doering  
John P. Doering  
Deputy County Counsel

## EXHIBIT A

### A. SCOPE OF WORK

The Consultant shall provide services under this Agreement for completion of the Plans, Specifications and Engineer's Estimate for the **CROWS LANDING ROAD BRIDGE AT SAN JOAQUIN RIVER PROJECT** in accordance with its Proposal dated June 21, 2000, attached hereto and, by reference, made a part hereof. The Plans, Specifications, and Engineer's Estimate shall detail the construction of a new replacement bridge with approach roadways to the existing Crows Landing Road and the removal of the existing bridge. The Consultant shall prepare the Plans Specifications and Engineer's Estimate in accordance with the current edition of the State of California, Department of Transportation, Design and Local Programs, Office of Local Program's, "Local Assistance Procedures Manual," Processing Procedures for Implementing Federal and/or State Funded Local Public Transportation Projects.

### B. COMPENSATION

The Consultant shall be compensated for the services provided under this Agreement as follows:

1. 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 consultant's Proposal. The specified hourly rates shall include direct salary costs, employee benefits, and overhead. These rates are not adjustable for the performance period set forth in this Agreement. In addition to the aforementioned fees, Consultant will be reimbursed for the following items, plus any expenses agreed by the parties as set forth in the Fee Schedule Consultant Cost Proposal attached hereto, that are reasonable, necessary and actually incurred by the Consultant in connection with the services:

- (a) Any filing fees, permit fees, or other fees paid or advanced by the Consultant.
- (b) Expenses, fees or charges for printing, reproduction or binding of documents at actual costs.

2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall not exceed \$385,000.00, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Consultant to perform or to assist in the performance of its work under this Agreement.

### C. FEDERAL OR STATE PROJECTS

The following provisions shall apply to projects funded entirely or in part by the

State or federal government, and the Consultant agrees to perform services under this Agreement in accordance with such provisions, which shall take precedence over any different or inconsistent provisions of this Agreement.

1. Allowable cost items shall be determined in accordance with the Contract Cost Principals and Procedures (48 CFR Chapter 1, Part 31) and shall comply the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (49 CFR Part 18) (collectively referred to hereafter as the "Regulations").

2. The Consultant shall comply with all requirements and procedures set forth in the Regulations.

3. Any costs for which payments have been made to the Consultant, which are determined by subsequent audit to be unallowable under the Regulations, shall be promptly repaid to the County after demand.

4. Any subcontract entered into by the Consultant for performance of the Consultant's obligations under this Agreement, shall be subject to all of the provisions of this Agreement, and shall incorporate by reference all of the terms and conditions of this Agreement, and shall contain all of the provisions for State or federally funded projects set forth in Section C herein.

5. The Consultant shall perform the work under this Agreement with resources available within its own organization and no portion of the work pertinent to this Agreement shall be subcontracted without the prior written consent or approval by the State's or the County's Contract Manager, except that which is expressly identified in the Consultant's proposal. Any substitution of subcontractors must be approved in writing by the State's or the County's Contract Manager.

6. Representatives of the State and FHWA shall have access to review all project records and documents for the purposes of making audit, evaluation, examination, excerpts and transcripts during the the period such records are maintained by the Consultant.

Proposal to Provide  
Consulting Engineering Services for

# Crows Landing Road Bridge at San Joaquin River



Department of  
**Public Works**  
STANISLAUS COUNTY

**NOLTE**  
BEYOND ENGINEERING

April 2, 2001



April 2, 2001



Mr. James L. Gregg  
Supervising Civil Engineer  
Stanislaus County  
Department of Public Works  
1716 Morgan Road  
Modesto, CA 95358

**SUBJECT: Proposal for the Crows Landing Road Bridge at San Joaquin River**

Dear Mr. Gregg:

Nolte Associates, Inc., is pleased to submit our proposal to provide engineering services for developing the construction documents and related technical studies, reports, and calculations for Crows Landing Bridge at the San Joaquin River. As previously mentioned in our Statement of Qualifications for this project, *Nolte has been involved in providing design services on HBRR projects since the inception of the program.*

#### **Team Commitment**

We are committed to your project and are using the same project team that we presented in our Statement of Qualifications. Steve Hiatt, our Principal-in-Charge, and Mike Pugh, Project Manager, have met with you to discuss project issues. *Under the direction of Steve Hiatt and Mike Pugh, we have designed over 20 HBRR funded projects in the past five years.* Gary Taylor, our roadway engineer, is currently providing design services on the Crows Landing Roadway Widening project for Stanislaus County.

#### **Knowledge of Caltrans Procedures and Design Criteria**

The Nolte team is very familiar with the requirements of the *Local Programs Manual* as mentioned in our Statement of Qualifications. *All projects highlighted in our Statement of Qualifications were designed according to Caltrans procedures and design criteria.* We are also familiar with the American Association of State Highway and Transportation Officials (AASHTO) design criteria. This knowledge allows us to produce project documents that conform to Caltrans format and thus achieve local and state agency approval.

Your project plans will be prepared using AutoCAD 14. We successfully use client-provided pallets in our electronic drawing files so that the line color and associated pen weights within the drawing files conform to our clients' standards. We also successfully utilize client-provided drawing layering conventions and drawing borders to conform to our clients' standards. Thus, *we will successfully provide electronic files that conform to Stanislaus County standards.* In addition, our project special provisions are prepared in Microsoft Word and our engineer's cost estimates are prepared in Microsoft Excel, which conforms to the Stanislaus County standards.

#### **Approach**

Included in our proposal are a project description and our project approach. Both are based on current knowledge from site visits and meetings between Steve Hiatt, Mike Pugh, and yourself. We are proposing to design the new structure to the west of the existing alignment, allowing the existing bridge to remain open during construction of the replacement structure. Thus, *interruption to public traffic through the site will be minimized.*

Mr. James L. Gregg  
April 2, 2001  
Page 2

We have also provided a detailed scope of work that we are proposing to provide the engineering services necessary to successfully complete your project. In Appendix A of our proposal, we have included a description of our HBRR project *Quality Assurance/Quality Control Plan*, which will ensure quality at all stages of your project. We have included in Appendix B copies of our two latest pre-award audits, which were conducted per Caltrans' requirements. We have also provided a cost proposal and fee schedule in a sealed envelope as requested by Stanislaus County.

Nolte has carefully reviewed the County's Master Agreement and is willing to sign such an agreement. I am pleased to have this opportunity to present our proposal and look forward to once again working with you and your staff.

Sincerely,

**Nolte Associates, Inc.**



Mike Capik, PE  
Senior Vice President



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Project Description and Approach

Nolte Team

Project Scope of Services and Schedule

Appendix A: Quality Assurance/Quality Control Plan

Appendix B: Pre-Award Audits



## PROJECT DESCRIPTION AND APPROACH

The Crows Landing Road Bridge is located just northeast of the community of Crows Landing at the San Joaquin River. The existing bridge is 8.8 meters wide and 204.5 meters long. It consists of 17 continuous steel (4) stringer spans and one simply supported steel plate girder span. The structure is supported by pier walls founded on concrete piles, concrete pile extension piers, and two reinforced concrete winged abutments. A seismic retrofit analysis was conducted on the existing bridge structure in 1997. During this analysis seismic retrofit alternatives were evaluated. Liquefiable soils within the river channel were also discovered. In addition, it was determined that the bridge was scour critical for both the existing condition and the retrofitted condition. It was determined from the analysis that retrofitting the existing bridge was not practically feasible and replacing the existing structure was recommended.

Our approach to replacing the bridge structure for the Crows Landing Bridge is to provide a new structure just downstream or west of the existing structure. Realigning the roadway to the east of the existing road alignment is not recommended since it would impose on an existing residence and business.

Our proposed alignment is shown in Figure 1. We are proposing to begin our realignment just north of Carpenter Road. A large radius curve will be utilized to sweep the new road alignment and replacement structure to the west of the existing roadway. This curve will allow the road to be realigned just west of the existing roadway without impacting any existing residences. This curve will also easily conform to the existing roadway near the existing tangent section in front of the abandoned camper park located south of the existing bridge. We will work diligently to develop this road alignment so that impacts to the existing electrical, phone, and gas utilities are

minimized. An existing DWR stream gauging station and an existing irrigation pump north west of the existing bridge will need to be avoided or relocated. In addition, an existing petroleum pipeline southwest of the existing bridge will need to be avoided. We are also anticipating that approach fill will be required along the new roadway alignment south of the San Joaquin River, since this area is currently significantly lower than the existing roadway. A 90-degree intersection at Carpenter Road will be maintained.

We are currently anticipating that the replacement structure will consist of a 5 span cast-in-place post-tensioned box girder bridge with a maximum span of 48.75 meters and a total length of 205.25 meters (see figures 2 and 3). The superstructure will be 13.25 meters wide supported by 1.5 (5 feet) meter CISS piles at the bents. As part of our scope of work, Nolte will investigate two possible bridge replacement structures, and recommend the most optimum structure type.

Providing a realigned roadway and a replacement bridge structure west of the existing roadway allows the existing bridge to remain open during the construction of the replacement structure. Thus interruption to public traffic through the site will be minimized.

To ensure the existing structure will be able to remain in service during the design and construction process of the replacement structure, we are proposing in our approach to perform a field review of the existing bridge structure. This field review would be conducted under Task 3 of our Preliminary Engineering scope of services. The purpose of the field review would be to observe the condition of the existing structure and determine if there are any structural items that appear to be degraded to a point that warrants additional structural inspection, analysis, and/or structural repair.

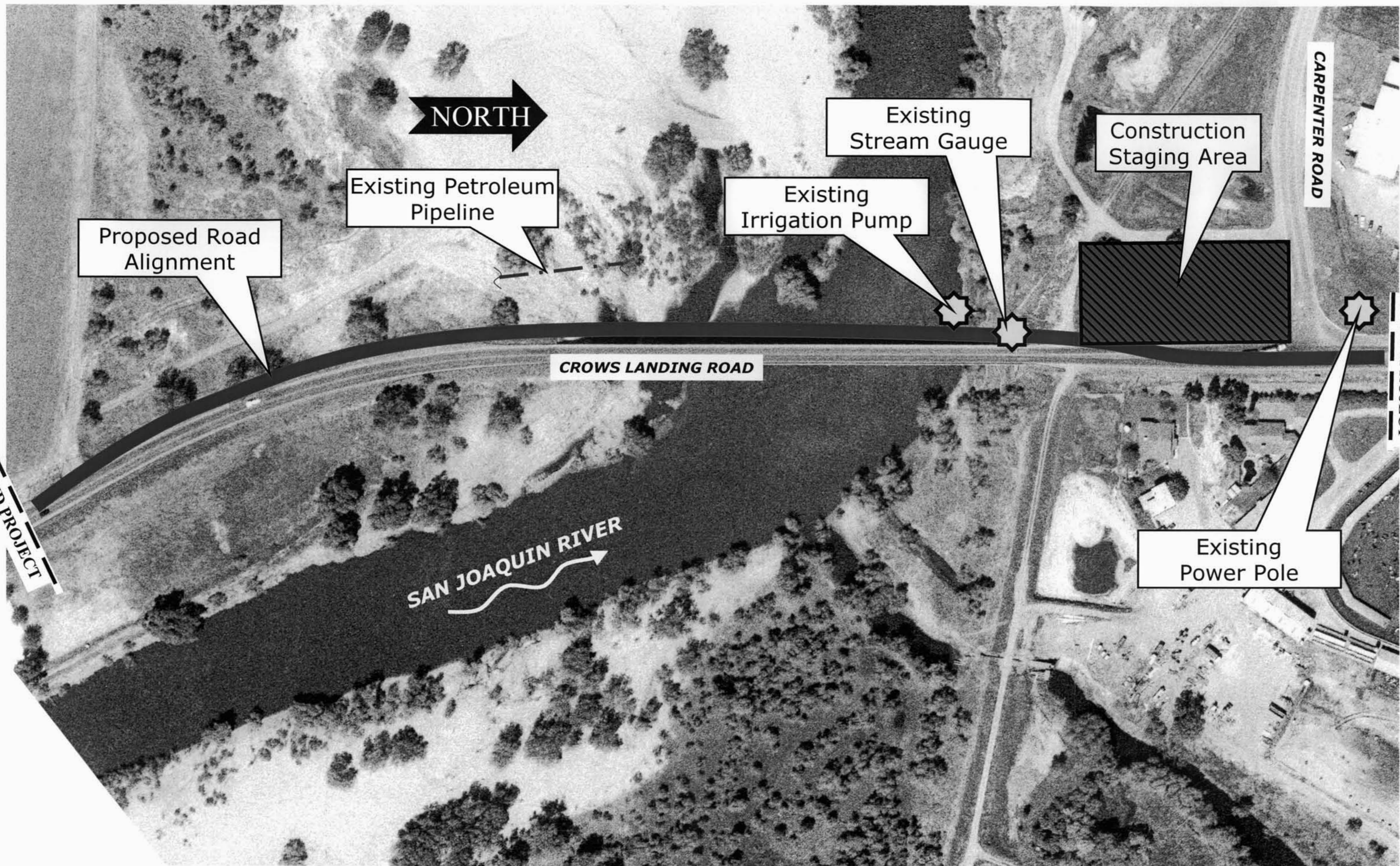


Figure 1



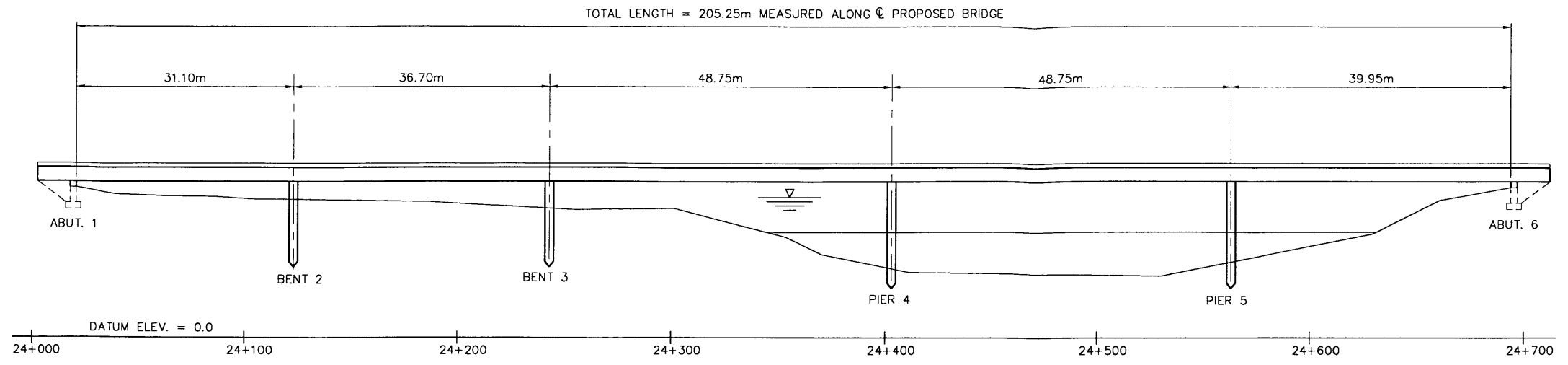
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-	-	-	-	-	-

REGISTERED CIVIL ENGINEER

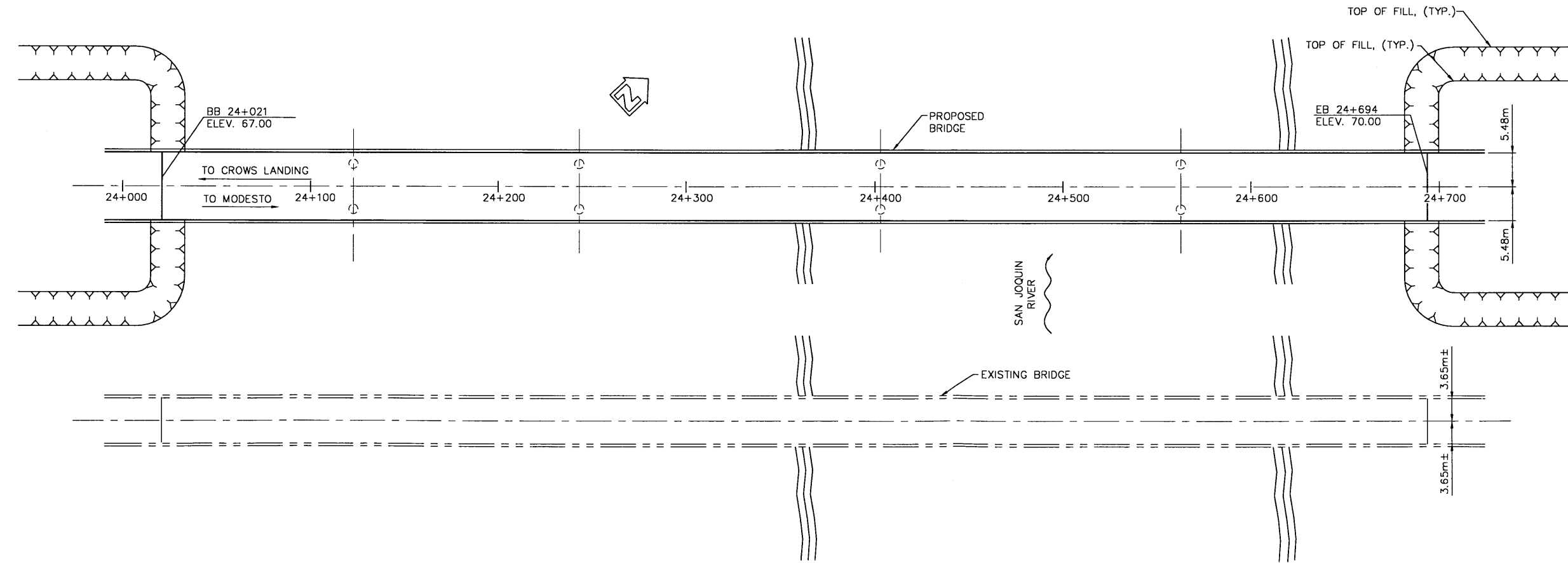
PLANS APPROVAL DATE \_\_\_\_\_

NOLTE ASSOCIATES, INC.  
1750 CREEKSIDE OAKS DR., SUITE 200  
SACRAMENTO, CA. 95833

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**ELEVATION**  
1:400



**PLAN**  
1:400

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FIGURE 2

DESIGN OVERSIGHT	DESIGN BY C. SHENOY	CHECKED -	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	<b>PREPARED FOR</b> <b>STANISLAUS COUNTY</b>	<b>M.A. PUGH</b> PROJECT ENGINEER	BRIDGE NO.	<b>CROWS LANDING AT SAN JOAQUIN RIVER</b> <b>BRIDGE GENERAL PLAN I</b>
SIGNOFF DATE	DETAILS BY D. SQUIRES	CHECKED -	LAYOUT	CHECKED			KILOMETER POST	
	QUANTITIES BY -	CHECKED -	SPECIFICATIONS	PLANS AND SPECS COMPARED				
					ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100	CU - EA -	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY) SHEET OF



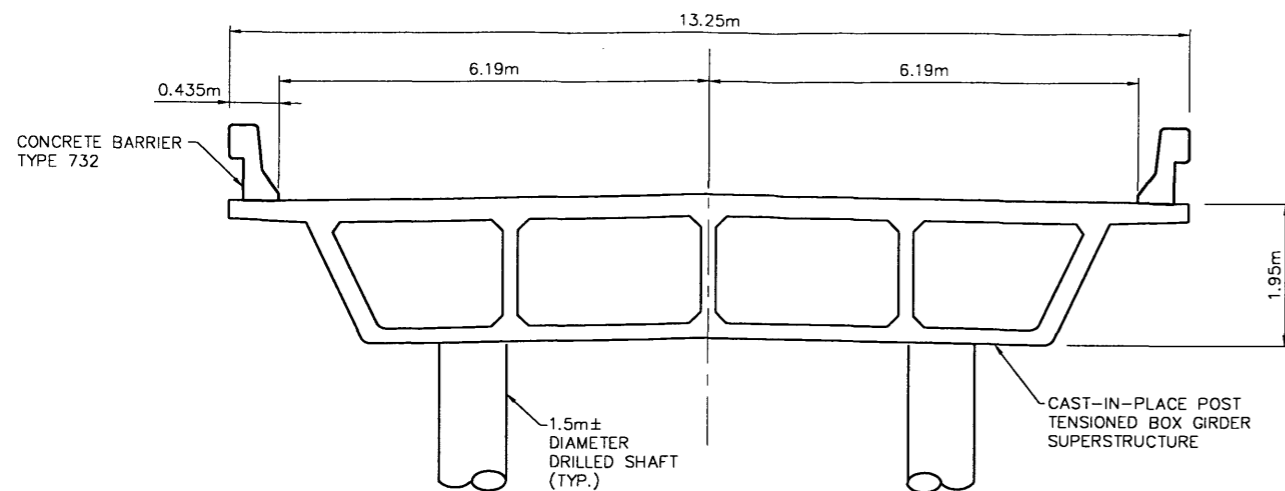
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
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REGISTERED CIVIL ENGINEER

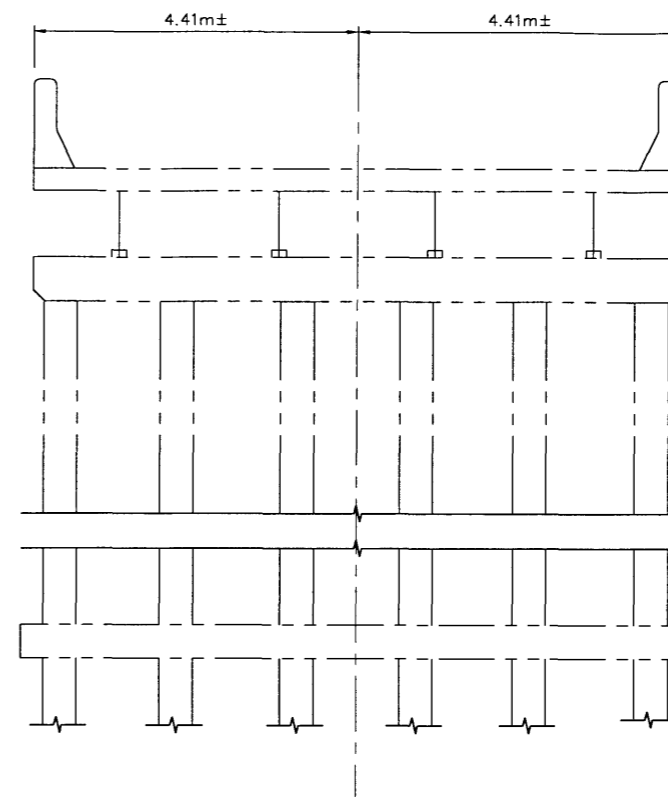
PLANS APPROVAL DATE \_\_\_\_\_

NOLTE ASSOCIATES, INC.  
1750 CREEKSIDE OAKS DR., SUITE 200  
SACRAMENTO, CA. 95833

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**PROPOSED BRIDGE**  
1:40

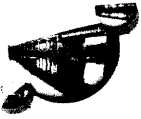


**EXISTING BRIDGE**  
1:40

ALL DIMENSIONS SHOWN ARE IN METERS UNLESS OTHERWISE NOTED

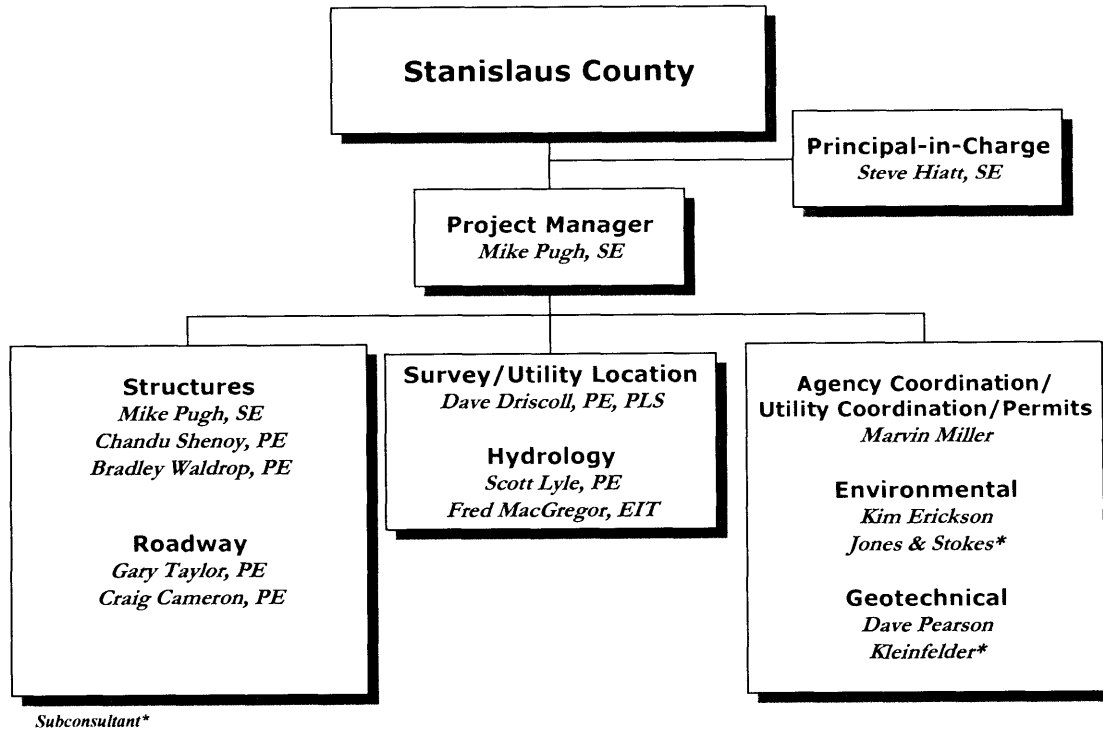
FIGURE 3

DESIGN OVERSIGHT	DESIGN BY C. SHENOY	CHECKED -	<b>PREPARED FOR STANILAUS COUNTY</b>	PROJECT ENGINEER	BRIDGE NO. 30C-0010	<b>CROWS LANDING AT SAN JOAQUIN RIVER BRIDGE GENERAL PLAN II</b>
SIGNOFF DATE	DETAILS BY D. SQUIRES	CHECKED -		CU -	KILOMETER POST	
	QUANTITIES BY -	CHECKED -		EA -	-	
<small>ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS</small>					<small>DISREGARD PRINTS BEARING EARLIER REVISION DATES</small>	
					<small>REVISION DATES (PRELIMINARY STAGE ONLY)</small>	
					<small>SHEET OF</small>	



## NOLTE TEAM

Nolte has been successfully delivering HBRR design projects since the inception of the program. *Over the past five years the proposed team has designed over 20 HBRR funded projects.* In addition, the Nolte team has the expertise and knowledge of Caltrans procedures and design criteria needed to successfully deliver the Santa Fe Avenue Bridge replacement project.



### Steve Hiatt, SE-Principal-in-Charge

Steve will be the Principal-in-Charge for your project. He will be *responsible for project oversight including the allocation of manpower and resources and monitoring project schedules, quality control, and client satisfaction.*

Steve has over 16 years of experience in managing and designing bridge projects, including those in the HBRR program. His experience includes the design of numerous concrete bridges and has been involved in almost every aspect of bridge design and construction.

### Mike Pugh, SE-Project Manager

Mike will perform as Project Manager and Chief Structural Designer. He will be *in charge of your project on a daily basis and will be the main contact for Stanislaus County.* Mike has been involved in providing structural engineering services on 10 HBRR projects in the past five years. His experience encompasses project management, structural design, and construction engineering.

### Chandu Shenoy, PE-Structures

Chandu has provided design and construction services for both HBRR funded projects and FEMA funded projects. Chandu will *develop the Bridge Type Selection Report, structures layout, preparation of structural calculations, and development of design details for your bridge.*





### **Bradley Waldrop, PE - Structures**

Bradley is a registered engineer specializing in structural engineering. With over ten years of experience, he has worked on projects ranging from seismic retrofit of structures to bridge design and construction. His role will be to *provide the independent bridge design check*.

### **Gary Taylor, PE-Roadway**

Gary has 20 years of experience in the planning and design of transportation projects. He has extensive design experience on freeway, primary, secondary, and urban arterial projects. He is currently providing management and roadway design services for the Crows Landing Road Widening project in Stanislaus County. He will *provide the roadway design services for your project*.

### **Craig Cameron, PE-Roadway**

Craig has been providing transportation engineering design services for nearly a decade. His responsibilities have ranged from design engineer to project engineer. He has worked on eight HBRR projects with Mike Pugh as the project manager. Craig is very familiar with AASHTO, Caltrans, and local public agency design criteria for all types of roadway classifications. Craig will *provide added roadway design resources*, if needed, to support Gary Taylor.

### **Dave Driscoll, PE, PLS-Survey**

Dave will be responsible for *providing the necessary survey, right of way, and utility location work* for your project. He is both a registered engineer and a licensed land surveyor.

He has 35 years of experience in engineering and surveying for transportation and construction projects. His experience includes topographic surveys, right-of-way surveys, preparation of plat maps, preparation of legal descriptions, utility location, and construction staking.

### **Scott Lyle, PE-Hydrology**

Scott will be responsible for *preparing the hydrologic and hydraulic reports required for your project*. He has provided this service on 10 HBRR projects under Mike Pugh's direction during recent years.

### **Fred McGregor, EIT-Hydrology**

Fred is an assistant engineer at Nolte specializing in hydrology, hydraulics, and storm drain systems. Fred will be available to *assist Scott Lyle* on an as-needed basis.

### **Marvin Miller-Agency Coordination/ Utility Coordination/Permits**

Marvin has a long term working relationship with city and county staff members in Stanislaus, Merced, San Joaquin, Tuolumne, and Calaveras Counties. He also maintains working relationships with a number of state and federal agencies including the Regional Water Quality Control Board, Fish and Game, and the US Army Corps of Engineers.

Marvin also has design and management experience on projects within the Central Valley. These types of projects have required him to work closely and coordinate with various utility companies in and around Stanislaus County.

Marvin's relationships and experience make him well suited to *provide the necessary agency coordination, utility coordination, and permitting services required for your project*. He will also greatly assist in obtaining agency approval of the contract documents for your project. In addition, he is currently providing program management and project monitoring services for the San Joaquin Council of Governments.



## Subconsultants

### Kim Erickson, Jones and Stokes-Environmental

Ms. Erickson has worked with Nolte on three HBRR projects with Mike Pugh as the project manager in the recent past. She will oversee the environmental documentation for your project. With Jones and Stokes, she has managed numerous EIR's related to bridge projects, interchanges and roadway facilities, community plans, specific plans, and wastewater treatment plant projects.

Ms. Erickson will be *responsible for providing the environmental services required to obtain NEPA and CEQA clearances*. She will also be responsible for obtaining the necessary construction permits from the Regional Water Quality Control Board, Fish and Game, and the U.S. Army Corps of Engineers.

### David Pearson, PE, Kleinfelder-Geotechnical

David will be *responsible for the soils engineering portion of your project*. He has over 28 years experience in geotechnical engineering and has intimate knowledge of the soil and geological conditions in the San Joaquin Valley. Mr. Pearson has been responsible for preparation of foundation reports for over 300 bridges. More than 200 of these bridge projects have been for local agencies under the HBRR program. Kleinfelder routinely works with Nolte, and has provided geotechnical services to us on seven bridge widening or replacement projects.



## PROJECT SCOPE OF SERVICES AND SCHEDULE

Nolte looks forward to providing engineering services to Stanislaus County for the Crows Landing Bridge at San Joaquin River. Every important aspect of our design services for your project is outlined below. The following work statement closely follows the scope of work currently being used for other HBRR bridge project within Caltrans District 10, and has been well received. Following our proposed scope of work is our anticipated project schedule.

### **Phase I - Preliminary Engineering, NEPA/CEQA Documentation**

#### **Task 1. Project Management and Project Review Meetings**

Nolte 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. As part of the project, Nolte will keep project records with all correspondence and submittals.

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

#### **Task 2. Quality Assurance/Quality Control**

Throughout the project, Nolte will ensure project quality at all levels of design by incorporating our standardized Quality Assurance/Quality Control Plan. This includes implementing our standardized process flow charts for HBRR projects, 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 3. Review Record Drawings, Existing Environmental Documents, and Field Review Existing Bridge Structure**

Nolte will review all available information regarding the existing bridge and site, provided by Stanislaus County. This includes County provided bridge, utility, and road plans. Our investigation will also include review of any existing environmental documentation. In addition, we will review existing geotechnical reports and soil boring logs performed during the seismic retrofit analysis of the existing bridge structure. *Information taken from our research and previous site visits will assist us in determining the best construction procedures for replacing the existing bridge.* This data will later be used during the preparation of the plans, specifications, and estimates.

Nolte will also perform a field review of the existing bridge structure. The purpose of this field review is to determine if the existing bridge structure can remain in services during the design and construction processes of the replacement structure. *The field review will consist of visually observing the condition of the existing bridge structure to see if there are any structural items that appear to be degraded to a point that warrants additional structural inspection analysis, and/or structural repair.*



It is anticipated that the existing bridge will not need any supplemental repairs, therefore, the attached fee does not include these study and repair design services.

#### **Task 4. Topographic Survey and Mapping**

The Crows Landing Road Bridge project will require a topographic survey. The survey data will be used as the basis for right-of-way and easement locations and for preparation of the project construction plans. Nolte will obtain a digital orthophoto of the project together with field elevations and locations of needed structures and utilities for use in preparing topographic base maps. The following topographic survey and mapping services would include:

- Detailed Topographic Survey of the project limits
- Survey information based on Stanislaus County Horizontal and Vertical Control datum.

#### **Task 5. San Joaquin River Topographic Survey and Mapping**

Nolte will provide the San Joaquin River topographic survey and mapping for 12 channel cross sections. Cross section information will be used in the Channel Hydraulic Analysis.

#### **Task 6. Geotechnical Investigation**

Kleinfelder, Inc., as a subconsultant to Nolte, will provide a Geotechnical Investigation Report for the project. The Geotechnical Investigation Report will recommend bridge foundations and construction considerations. In order to compile the Geotechnical Investigation Report, Kleinfelder will perform field explorations, a laboratory testing program, and geotechnical analyses. Kleinfelder will obtain the encroachment permits necessary to conduct the field explorations. The intent of the field exploration will be to obtain information regarding the subsurface soils at the proposed replacement bridge pier and abutment

foundation locations. It is anticipated that four (4) test borings to depths of 75 to 130 feet will be drilled using a truck-mounted drill rig. Two (2) borings will be taken at the proposed abutments, and two (2) within the San Joaquin River channel south of the river. Two (2) additional borings will be drilled in the river low flow channel using a barge. A minimum water depth of 3-1/2 feet is required to drill from the barge.

The test borings will be drilled using mud-rotary drilling techniques under the guidance of a certified engineering geologist. Based on observations of the site, a considerable amount of grading will be required to access the pier locations within the river channel. Log or test borings and soil samples will generally be obtained at 5-foot intervals. The laboratory testing program involves performing tests on selected soil samples to evaluate the in-place moisture, density, strength, and gradation characteristics of the soils encountered. Laboratory testing will also include performing R-value tests (California Test Method 301) on subgrade samples obtained from each of the approaches. Kleinfelder will provide calculated minimum pavement sections for the bridge approaches based on the R-value test results and a traffic index provided by Stanislaus County.

Upon completion of the field exploration and laboratory testing, *Kleinfelder will prepare a Geotechnical Investigation Report for the Crows Landing Road Bridge in accordance with Caltrans requirements.* This includes the preparation of a Log of Test Borings sheet to be incorporated into the project plans. The report will also include a seismic assessment of the project site per Caltrans Standard Practices. A Draft Report will be submitted, followed by a Final Report after receiving review comments.

Preliminary investigations at the site have determined that a significant amount of liquefiable soils are present within the river channel at the proposed bridge location.



Our scope of services assumes these previous studies are accurate, and a detailed liquefaction analysis will not be performed. Our borings are intended to confirm the depths of liquefiable soils at the proposed boring locations.

**Deliverables:**

- Four copies of Draft Geotechnical Investigation Report
- Electronic copy of the Log of Test Borings Sheet
- Four copies of the Final Geotechnical Investigation Report (delivered with 95% submittal)

**Task 7. Environmental Clearance Documents**

**Task 7.1 Preliminary Environmental Study**

Jones & Stokes Associates will initiate the environmental review process by preparing a preliminary environmental study (PES) to determine the potential presence of sensitive environmental resources near the Crows Landing Road Bridge. To complete this task, Jones & Stokes will develop a complete project description with project map and conduct one site visit. *The PES form will be completed, according to Caltrans Local Assistance Procedures Manual* to assess the potential direct and indirect effects on the environment and to recommend technical studies needed to support the checklist conclusions. The PES form will be the basis for discussion with Caltrans staff about the scope of the studies.

**Task 7.2 Environmental Documents**

Since a PES has not been developed or approved by Caltrans, it is not possible to determine at this time with 100 percent accuracy all of the appropriate documents that will be required for this project. The decision as to the appropriate documents will ultimately be made by Stanislaus County and Caltrans (CEQA), and FHWA (NEPA). We anticipate that it will be technically feasible to avoid significant project impacts through project design or incorporation of mitigation measures

into the project. Based on our current knowledge of the project, we anticipate preparing an initial study/ mitigated negative declaration to comply with CEQA and a categorical exclusion to comply with NEPA. Also based on our understanding of the PES process and the site conditions at the Crows Landing Road Bridge, we are anticipating that the following environmental technical studies will be required:

- Water Quality Study
- Biology Study
- Wetlands Study
- Air Quality Study
- Section 106, Cultural Resource Studies
  - Delineation of the Area of Potential Effect (APE)
  - Archaeological Survey Report (ASR)
  - Historic Property Survey Report (HPSR)
  - Historic Bridge Evaluation Report and Historic Architecture Survey Report (HASR)
- Initial Study/Negative Declaration under CEQA
- Categorical Exclusion under NEPA

The scope of work includes four copies of an administrative draft, a draft, and a final version of each of the anticipated documents for review and approval by Stanislaus County, Caltrans, and FHWA. It is assumed that Jones & Stokes will attend a maximum of four meetings with Stanislaus County and/or Caltrans to complete the environmental clearance documents. If additional meetings are required, Jones & Stokes will attend these meetings as a supplemental service. Fees for staff required to attend each additional meeting are in addition to the total proposed fee. Additional meetings must be approved in advance by the County.

**Water Quality Study** - The Water Quality Study will be based on an early coordination meeting with Stanislaus County and Caltrans staff as recommended in the *Local Assistance Procedures Manual*. The water quality analysis will focus mainly on short-term construction effects on water quality in San Joaquin River.



These potential effects will be qualitatively evaluated by assessing changes in turbidity and suspended solids loads and the potential for hazardous materials spills (i.e., fuels, oils, solvents) in the construction area.

The mitigation measures will be closely coordinated with the development of the construction documents.

**Biology Study** - The biological resources analysis will describe existing natural communities and wildlife habitats based on a detailed biological resources inventory, including a qualitative fisheries evaluation; identify potential impacts on biological resources; and recommend feasible measures to avoid or mitigate biological effects.

Field surveys will focus on locating or identifying potential habitat for special-status plant, wildlife, and fish species. Natural communities and unique wildlife habitat features will be mapped on aerial photographs or a topographic map. Surveys will follow Caltrans methods and DFG recommended guidelines, which require that all plant species encountered during the survey be identified to ensure that no special-status plants are overlooked. Floristic surveys (surveys to identify all species at the site) are not proposed. A survey corridor will be identified that extends 100-200 feet beyond the construction right-of-way. Return surveys may be recommended for late-blooming species if suitable habitat is found and if populations have been reported for the project vicinity. Special-status plant populations identified during the field survey will be documented on NDDDB native species field survey forms, mapped on an aerial photograph or topographic map, and verified with a voucher specimen or photograph.

A wildlife biologist will also survey the project site for wildlife species, including special-status species, employing survey methods recommended and approved in coordination with DFG and USFWS staff. Using DFG's guidelines, all potential nesting sites within 0.25 mile of the project site will be surveyed.

All active nesting sites will be mapped on project maps or 7.5-minute USGS topographic maps. Jones & Stokes will also survey all potential nesting habitats (i.e., grasslands and fields) within 500 feet of the project site for the possible presence of burrowing owls. For species that cannot be adequately surveyed because of their seasonal occurrence, an evaluation will be performed on the potential for species to occur based on site habitat types. All wildlife observed at the project site would be identified and included in the report.

A fisheries biologist will conduct a reconnaissance-level stream survey to evaluate existing fishery habitat quality, occurrence of special-status species, and the extent of the aquatic habitat potentially affected by the project. For species that cannot be adequately surveyed because of their seasonal occurrence at the project site, an evaluation will be done on the potential for species to occur based on the known distribution and habitat requirements of Central Valley fish species. General observations of the distribution and relative composition of fish habitat types will be recorded and habitat quality will be visually assessed.

The bridge replacement will require consultation with NMFS on Central Valley Steelhead and possibly consultation with USFWS on splittail. Jones & Stokes will coordinate informal consultation with NMFS and USFWS to discuss federally listed fish species that may be affected by the project and to determine the most efficient approach for achieving ESA Section 7 compliance. Construction of the replacement Crows Landing Bridge could affect the mitigation corridor for steelhead returning and leaving the Merced River upstream of the bridge site. The period of concern would likely be November 1 through May 30. The removal of riparian vegetation for the replacement bridge would need to be minimized as much as possible.



In addition, although chinook salmon are not listed (currently considered a candidate species), ESA consultation would also need to include conferencing on essential fish habitat for chinook salmon.

Potential impacts on biological resources from constructing and operating the replacement Crows Landing Bridge will be identified based on the specific bridge design proposed. Possible impacts to be addressed could include direct or indirect effects on special-status species or their habitats; loss of wildlife habitat; fragmentation of wildlife habitat; and loss or degradation of riparian areas. Personnel from DFG, USFWS, and other biological experts will be consulted to assess impacts on any sensitive botanical and wildlife resources.

At this time, it is not known if consultation will be required with USFWS on other federally listed species such as valley elderberry longhorn beetle (VELB) or other species. Based on a preliminary site reconnaissance (not knowing the exact project limits) conducted on August 2, 2000, we do not anticipate any impacts to elderberry shrubs or valley elderberry longhorn beetle or special-status bats. We did, however, notice numerous swallows nesting under the existing bridge and will identify mitigation in the NES to avoid and minimize impacts on swallows.

**Wetland Delineation** - A formal wetland delineation and an identification of other waters of the U.S. will be conducted concurrently with biological field surveys. The bridge project site will be completely surveyed to determine the types, locations, and approximate acreage of potential wetlands under federal jurisdiction, pursuant to Section 404 of the Clean Water Act. Identification of potential jurisdictional wetlands will be based on the three mandatory criteria for identifying wetlands: the presence of hydrophilic (water-loving) vegetation, hydric soils, and wetland hydrology.

Additionally, other waters of the United States will be mapped according to the Code of Federal Regulations (33 CFR 3283 (e)). A wetland delineation report, including maps, will be prepared and submitted to the Corps for verification.

**Air Quality Study** – Jones & Stokes will prepare an air quality analysis for the proposed replacement of the Crows Landing Bridge over the San Joaquin River. The analysis will be coordinated with Stanislaus County, San Joaquin Valley Unified Air Pollution Control District (APCD), and Caltrans. Jones & Stokes will collect the information required for the air quality report. We will use data from a recently prepared Stanislaus County project and update that data as needed. A construction- and demolition-related emissions analysis will be conducted for the project. The construction and demolition emissions analyses will be based on the methodology included in the San Joaquin Valley Unified APCD's Guide for Assessing Air Quality Impacts manual. Mitigation measures for any air quality impacts found to exceed the San Joaquin Valley Unified APCD's thresholds will be identified.

**Cultural Resource Studies** - Cultural resources studies for the Crows Landing Road Bridge project will be performed in compliance with Section 106 of the National Historic Preservation Act. Cultural resources work will consist of several tasks, including establishing the area of potential effect (APE), performing prefield research and field reconnaissance, and preparing reports for the bridge project. This scope assumes that no archaeological or historical resources other than buildings or structures will be identified in the APE and a maximum of two architectural resources more than 45 years of age will be identified.

Prefield research will consist of conducting a records search at the Central California Information Center at California State University Stanislaus to collect information on previous historical and archaeological studies and site listings within a minimum of 0.5 mile



radius of the project area. Jones & Stokes also will initiate Native American consultation through the Native American Heritage Commission, and will contact the Caltrans archaeologist or Native American liaison for direction regarding additional consultation with native groups or individuals potentially interested in the project. Jones & Stokes will contact the Stanislaus County Planning Department, the County Historical Society and Museum, and knowledgeable local individuals to request information regarding the types of potential cultural resources in the study area.

A draft APE map for cultural resources will be prepared using project maps and aerial photographs. The map will show preliminary design information, staging areas, permanent right-of-way takes, temporary construction easements, and other information pertinent to the ground-disturbing activities. Jones & Stokes will prepare the draft APE map and submit it to Caltrans for review and processing. The exact limits of the APE can only be approved by FHWA.

The APE for the project will be examined for archaeological and architectural resources. All archaeological resources will be documented on California Department of Parks and Recreation site record forms using the *California Archaeological Inventory Handbook for Completing an Archaeological Site Record*.

An Archaeological Survey Report (ASR), Historic Property Survey Report (HPSR), Historic Bridge Evaluation Report, and Historic Architecture Survey Report (HASR) will be prepared for Stanislaus County and Caltrans to review. These documents will conform to guidelines in *Caltrans Guidance for Consultants*.

**CEQA/NEPA Documentation** - After completion of the technical reports, Jones & Stokes will prepare an initial study/mitigated negative declaration. The initial study/mitigated negative declaration will include the detailed project description and an initial study checklist.

All of the mitigation measures identified in the technical reports will be included in the initial study/mitigated negative declaration.

To ensure that the document is acceptable to Stanislaus County and Caltrans, we will prepare and submit an administrative draft document for review and approval prior to preparation of the public draft document.

After we receive written comments from the county and Caltrans, we will prepare a public draft initial study/mitigated negative declaration and publish four copies for the County. Jones & Stokes will attend one public hearing/meeting to present the findings of the document to either the planning commission or board of supervisors. Our scope of work assumes that comments on the initial study/mitigated negative declaration from the public or agencies will not require new analyses.

#### **Deliverables:**

- Four administrative draft copies
- Four draft copies
- Four copies of each of the following studies:
  - Water quality study
  - Biology study
  - Wetlands study
  - Air Quality Report
  - Section 106 cultural resource studies
    - Delineation of the Area of Potential Effect (APE)
    - Archaeological Survey Report (ASR)
    - Historic Property Survey Report (HPSR)
    - Historic Bridge Evaluation Report and Historic Architectural Survey Report (HASR)
- Initial Study/Negative Declaration under CEQA
- Categorical Exclusion under NEPA





### **Task 8. Hydrologic and Hydraulic Analysis**

The first task to be performed by Nolte's hydraulic engineers will be to coordinate with Stanislaus County to obtain the hydraulic study prepared by West Consultants.

West Consultants has performed extensive hydrologic studies for this river reach. Therefore, Nolte has assumed that additional hydrologic studies will not be required and have not been included in our scope of work.

**Establish Existing Conditions** - Stream cross sections prepared by Nolte will be utilized to develop a hydraulic model of the stream in the vicinity of the bridge.

The San Joaquin River hydraulic model will be developed for use in the COE's HEC-RAS computer program with the flood discharge(s) determined in West Consultants study. The hydraulic model will be used to determine water surface elevations (WSEL) with the existing bridge geometry.

**Analyze Flooding Impacts for Alternative Bridge Designs** - The alternative bridge replacement designs will be evaluated to estimate their potential impacts on existing flood conditions. This analysis will consider impacts of bridge piers, bridge deck configurations, and approach roadway vertical alignments.

Following selection and approval of a recommended conceptual bridge replacement, a detailed analysis of the hydraulic impacts (both positive and negative) of the selected design will be conducted. For this task, the hydraulic model will be used to determine the WSEL (for an objective release). This hydraulic analysis will be consistent with the requirements of the *Caltrans Highway Design Manual*, chapter 800, paragraph 821.3.

The hydraulic model will also provide flow velocities upstream, within, and downstream of the structure. These velocities will be used to assess the potential for scour at the bridge abutments and piers, and will also be used to design protective measures to minimize scour at these locations.

#### **Hydrologic and Hydraulic Analysis Report**

Using the data obtained from the literature search, input provided by the regulatory agencies, and the results of the hydraulic analysis, Nolte will prepare a hydrologic and hydraulic report. This report will include the appropriate items identified in *Local Programs Manual*, section 08, exhibit 08-3, "Checklist for Drainage Studies and Reports."

The report will summarize the hydraulic capacity requirements and existing flow conditions. The summary will also include a plot of the floodplain on the map prepared from the project's topographic survey. This summary report will also include the hydraulic parameters for the design of the bridge cross section. The parameters will include flow velocity, scour potential, recommended scour protection, pier selection criteria, approach channel configuration, and design water surface elevation.

**Contract Plans** - Nolte will summarize pertinent hydraulic and hydrologic data on the contract plans. The data will include the frequency, magnitude, and pertinent water surface elevations for the design flood, base flood, overtopping flood, and flood of record, if available.

#### **Deliverables:**

- Four copies of the Hydraulic Design Report
- Pertinent hydraulic and hydrologic information will be incorporated on the final contract plans



### **Task 9. Preliminary Engineering and Type Selection**

Nolte will plan, design, and coordinate the required preliminary engineering documents for the project. This task will include the preparation of the bridge replacement alternatives, and the development of a Bridge Type Selection Report, as well as conducting additional work associated with the preparation of this report.

Two possible bridge replacement alternatives will be investigated for the Crows Landing Road Bridge. We will utilize the topographic survey and proposed road alignment developed by Nolte as well as Caltrans Field Review Forms to help develop the bridge replacement alternatives. A General Plan Sheet and Caltrans Type Selection Forms will be prepared to convey each alternative. The vertical profile and horizontal alignment of each bridge alternative will be based upon the preliminary roadway geometries developed by Nolte. Accompanying each replacement alternative will be a narrative description addressing pertinent information about that alternative.

A preliminary planning study cost estimate for each of the two replacement alternatives will also be prepared. Costs will be preliminary and will be prepared in accordance with Caltrans Standard Planning Study Cost Estimating practices. This information will be summarized and included in the Bridge Type Selection Report.

Upon the completion of the preliminary engineering, geotechnical investigation, and the completion of the preliminary hydraulic study, Nolte will submit a Bridge Type Selection Report for the two possible bridge replacement alternatives. The report will be prepared to include a General Plan Sheet for each of the bridge replacement alternatives, as well as a layout sheet showing preliminary plan and profile information of the proposed road alignment. A General Plan Cost Estimate and a descriptive narrative detailing the alternatives, and their pros and cons, will also be included.

The report will be accompanied by a draft geotechnical report and a draft hydrologic and hydraulic report. Final PS&E structure plans will be prepared based on the selection of a preferred alternative by the County and the approval of these documents.

The preliminary (90 percent) document will be submitted for review and comment by Stanislaus County and will be revised for final submittal.

#### **Deliverables:**

- Four sets of the 90 percent Bridge Type Selection Report, which includes:
  - A General Plan Sheet for each replacement alternative
  - A Preliminary Roadway Plan and Profile Layout Sheet
  - A written narrative describing the pros and cons of each alternative
  - A Planning Cost Estimate for each proposed alternative
  - Recommended bridge replacement alternative
- Four sets of the Draft Geotechnical Report
- Four sets of the Draft Hydrologic and Hydraulic Reports
- Four sets of the Final Bridge

Type Selection Report, which includes revisions and County recommendations and comments

### **Task 10. Right-of-Way Engineering Services**

Right-of-way Engineering services for the project will include:

- Review Preliminary Title Reports (as provided by the County) for adjacent properties to be affected by the project
- Surveys necessary to determine existing right-of-way location in relation to existing improvements
- Right-of-way Plat Maps and Legal Descriptions for Needed Easements. A maximum of four easements have been included in the proposed budget.

Additional easements will be considered extra services.



**Note: Right-of-Way Appraisal and Acquisition services are not a part of this proposal.**

**Deliverables:**

- Two copies of signed Plat Maps and Legal Descriptions for each of the affected parcels.

**Task 11. Utility Coordination**

Nolte will provide utility coordination by contacting Stanislaus County, Pacific Gas & Electric Company, Pacific Bell, Turlock Irrigation District (TID), and Kinder Morgan to identify the locations of existing utilities and the requirements for planned utility relocations for this project. Coordination with the utilities will occur in three basic steps.

The first will be to send project limit drawings to all of the affected utility companies and request information related to location of the existing utilities. Then the existing utilities will be plotted on preliminary alignment drawings and resubmitted to the utility companies, for verification, review of 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, Nolte will resubmit the plans to the utility companies for final review and approval

**Deliverables:**

- Two sets of Project Limit Drawings to be submitted to each affected utility company
- Two sets of plans to be submitted to each affected utility for their final review

**Task 12. Preliminary (30%) Bridge and Roadway Plans**

Upon receipt of written documentation from Stanislaus County identifying the bridge type to design, Nolte will prepare a Preliminary Design for the optimum alternative (one alternative).

The preliminary design will consist of the Bridge General Plan Sheet, Roadway, and Plan and Profile Sheets, and Construction Staging Plans. The plans will be prepared in metric units and will provide enough data to convey a complete understanding of the project.

**Deliverables:**

- Four sets of Plan and Profile Sheets, Preliminary Staging Plans, and the Bridge General Plan Sheet (11”x 17”)

**Task 13. Preliminary (30%) Construction Cost Estimates**

Nolte will prepare preliminary construction costs to accompany the Preliminary Bridge and Roadway Plans. The costs will be based on quantities of materials as determined during the Preliminary Engineering Design.

Costs will be estimated for approximate quantities of structural concrete, piles, excavation, backfill, bridge railing, traffic control system, roadway materials, and import borrow. Construction cost estimates will also include estimates for applicable utility relocations, temporary construction easements, and any right-of-way costs. *The cost estimate spreadsheets will be developed using Microsoft Excel.*

**Deliverables:**

- Four sets of preliminary construction cost estimates for the Preliminary Design.

**Phase II - Final Design**

**Task 1. Final Plans and Special Provisions**

**Task 1.1 Intermediate (60%) PS&E**

After the environmental documents have been approved and acceptance has been given on the preliminary plans, Nolte will begin the design work and preparation of the PS&E. This phase will include the development of the bridge and roadway plans which will be prepared in



accordance with the Bridge Design Details Manual and the Highway Design Manual as published by Caltrans. This phase will also include the preparation of Special Provisions to accompany the State of California Standard Specifications. An intermediate submittal will be presented which includes plans, special provisions, and estimates.

A detailed description of the bridge design subtasks follow:

**Superstructure Design** - The superstructure will be designed to meet the requirements of the Caltrans Bridge Design Specifications Manual. Design loading on the superstructure will include HS20-44, Permit, and Alternative Vehicle live loads. The analysis of the bridge superstructure will utilize the Bridge Design Systems (BDS) computer program for live loads, which is widely used on Caltrans bridges. In conjunction with the design calculations, Nolte will prepare the Typical Section Sheet of the plans, the Deck Reinforcing Sheets, Girder Details, and Girder Layout Sheets.

**Substructure Design** - The support reactions from the superstructure will be used to design the substructure components, consisting of two-column bents and abutments. The substructure items will be designed in accordance with the Caltrans Bridge Design Specifications Manual for vertical loading and lateral loading. Nolte will prepare the Foundation Plan Sheets, the Abutment Plan and Details Sheets, and the Pier Detail Sheets for the structure in conjunction with the design calculations for the substructure.

**Seismic Design** - After member sizes have been determined during the Superstructure and Substructure designs, Nolte 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 Kleinfelder. In addition, liquefiable zones will be identified and the appropriate foundation system will be designed.

Once we have 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 Bridge Design Specifications Manual and the Caltrans Memo to Designers Manual will be used to determine the loading. The Caltrans approved SEISAB computer program will be used to distribute the loads to the components of the structure. This analysis will then be used to design the lateral load resisting system of the bridge.

**Plan Preparation and Draft Special Provisions**

Throughout the design of the bridge and roadway, the plan sheets will be prepared (in metric). *Nolte intends to use AutoCAD Release 14. All details from the Caltrans Standard Plans will be detailed on the contract plans as specified by Stanislaus County.* We will develop our drawing files using Stanislaus County's standard color coding system.

*We will also utilize the County's standard detail sheet 24x36 paper such that all drawings can be readily reduced to half-scale on 11x17 paper.*

Nolte will use the most current version of the Standard Special Provisions available from Caltrans, and will revise the Standard Special Provisions to meet the requirements of this specific project. Revisions to the Standard Special Provisions will be made by underlining any new items to the Special Provisions and marking a line through and deleted items of the Special Provisions. This process is used to easily identify the changes that are being made to the provisions. *The special provisions document will be developed using Microsoft Word.*

**Intermediate (60%) PS&E Submittal** - Upon completion of the portion of the work, a 60 Percent PS&E package will be submitted for review and comment.



**Deliverables:**

- Four full-size blue-line sets of 60 Percent Plans
- Four half-size sets of 60 Percent Plans
- Four sets of annotated Bridge Special Provisions

**Task 1.2 Design Check**

At the 60% complete stage of the project, a comprehensive Quality Control Review of the Plans, Specifications, and Construction Cost Estimate will be performed by a senior staff member. In addition, an independent bridge design check will be conducted. The independent design check will be performed on the 60 percent plan set by an engineer not involved in the initial design of the project. 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 1.3 Response to Reviewer Comments/Plan Revisions**

Upon receipt of the County, State, and other review agency comments, revisions will be made to the Plans, Specifications and Special Provisions in preparation for the 90 percent submittal package. A written response will be prepared by the designer addressing any reviewer or checker comments, suggestions or proposed revisions.

Standard Special Provisions will be finalized in Caltrans' standard format for inclusion in the Bid Documents along with the boilerplate portion provided by Stanislaus County.

**Task 1.4 Construction Cost Estimate**

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 calculation performed and checked by the designer and checker 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.

**Task 1.5 90 Percent PS&E Submittal**

A complete set of checked Plans, Specifications, and Construction Cost Estimate will be submitted for final review and approval by Stanislaus County.

**Deliverables:**

The 90 percent submittal will include items listed below:

- Four sets of full size blue-line 90 percent plans (22"x34")
- Four sets of half size 90 percent plans
- Four sets of annotated Special Provisions
- Four copies of the Construction Cost Estimate
- Four sets of the Final Foundation Report with Log of Test Borings
- Four sets of the Final Hydrologic and Hydraulic Report

**Task 1.6 Final PS& E Submittal**

Design comments on the 90 percent PS&E submittal made by Stanislaus County and Caltrans will be incorporated into the Final Plans Special Provisions and Estimates, as appropriate.

The final PS&E will include the following items:

- Checked Structural Bridge Plans
- Final Roadway Plans
- Utility Relocation Information
- Special Provisions for Construction
- Engineer's Estimate

The original drawings, special provisions, and estimates 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 documents will be stamped and signed by a licensed civil or structural engineer registered in California.

**Deliverables:**

The final submittal will consist of:

- One set of full size (24"x36") Plans signed and stamped on Mylar
- One set of half size (11"x17") Plans signed and stamped on Mylar
- One camera-ready set of Bid Documents, including Stanislaus County's Boiler Plate as provided by the County
- Four sets of Quantity Calculations
- Four sets of signed and stamped bridge calculations
- Compact Disk containing electronic files of the contract plans (AutoCAD 14), special provisions (Microsoft Word), and estimate (Microsoft Excel)

**Task 2. Permitting**

Throughout the Final Plans and Special Provisions Task, Jones & Stokes will assist Nolte with the permitting for the Crows Landing Road Bridge project. The following efforts during the permitting process will be conducted:

**1601 Agreement** - In compliance with DFG Code Section 1600 et. sec. to obtain the streambed alteration agreement, Jones & Stokes will prepare a streambed alteration agreement package and coordinate with Stanislaus County and DFG to obtain streambed alteration agreement approval.

**Section 404 Permit** - Based on the results of the wetlands delineation and coordination with the COE, Jones & Stokes will meet with the COE to verify the delineation and determine whether a nationwide or individual permit is required. This will include the preparation and submittal to the COE of a Section 404 nationwide permit preconstruction notification package (PCN); preparation of a conceptual mitigation plan and final mitigation monitoring report; and coordination with Stanislaus County and the

COE to obtain nationwide permit authorization. Should the COE determine that an individual permit is required, the services for that permit would be considered supplemental, and are not included in our proposed fee.

**Water Quality Certification** - Water quality certification (Section 401 of the Clean Water Act) or a waiver of certification is required for all Section 404 permits. The Section 401 certification process requires completing the CEQA process and receiving a streambed alteration agreement before certification or a waiver is provided.

**Coast Guard Permit** – A Coast Guard permit is required to construct a new bridge or causeway or reconstruct or modify an existing bridge or causeway across navigable waters of the U.S. Jones & Stokes will assist Nolte Associates with providing the environmental documentation required for this permit.

**Additional Permits/Approvals** - Jones & Stokes will assist Nolte in providing Section 7 consultation with NMFS and USFWS on special status fish species. They will also provide assistance in obtaining a land use lease from the State Lands Commission as well as a reclamation permit from the State Reclamation Board.

**Task 3. Traffic Control Plan**

Nolte will develop a plan regarding the sequencing of the construction of the Crows Landing Road Bridge to minimize disruption to local traffic during construction. Traffic control for construction will consist of a traffic control plan. It will be developed to provide two travel lanes during construction. The Construction Traffic Handling Plans will include temporary signing, striping, and temporary K-rail required during construction. This plan will be delivered with appropriate submittals identified in Task 1. Final Plans and Special Provisions.

#### ***Task 4. Construction Bid Assistance***

Nolte will assist Stanislaus County during the pre-bid opening. If requested, we will suggest any pre-qualification criteria for the construction bidder. In addition, Nolte will prepare required addenda to be distributed to the bidders, and answer technical questions relative to the plans, special provisions, and quantity estimates. Fifteen hours of services have been established for assistance during the pre-bid period.

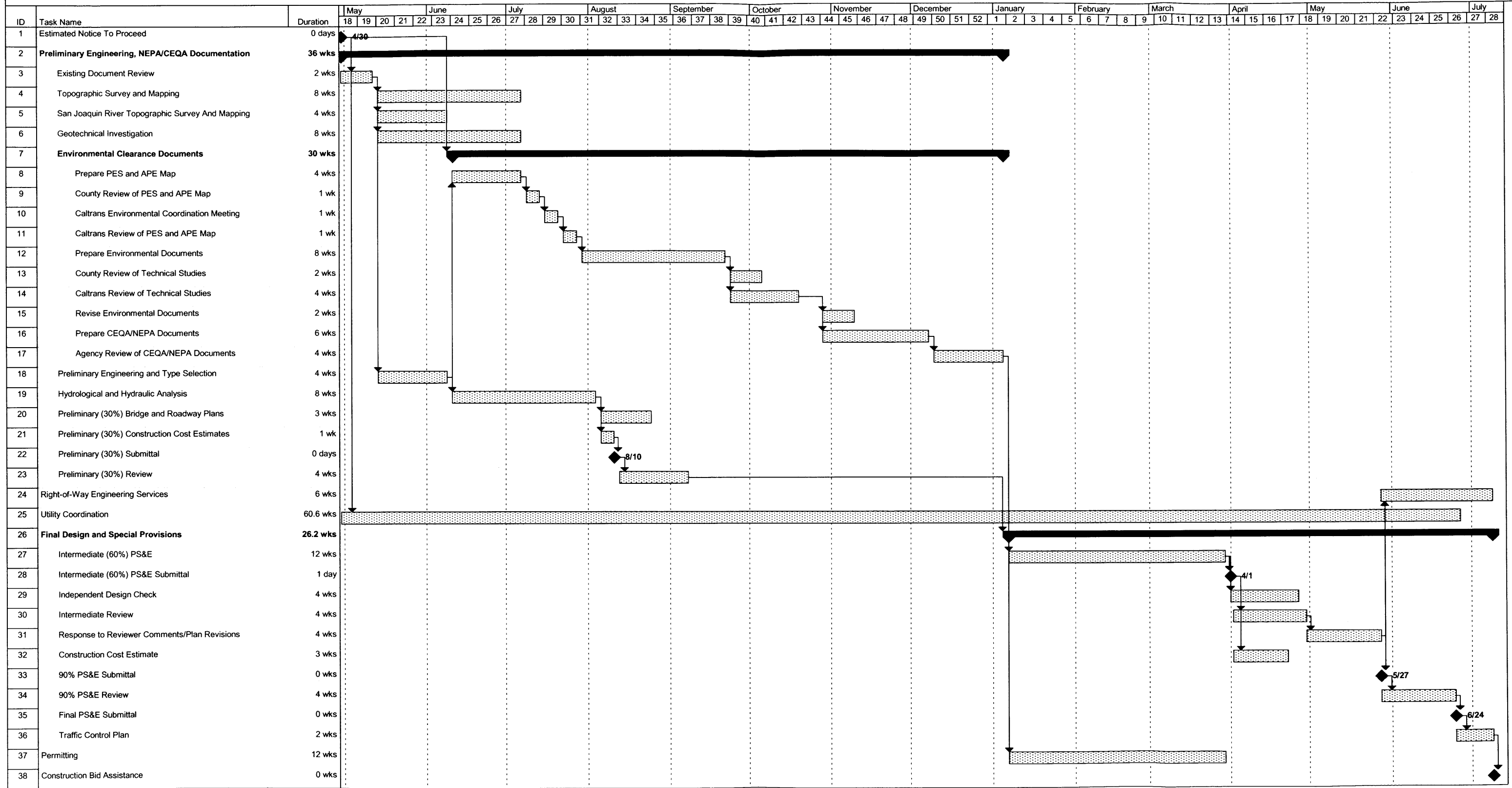
#### ***Task 5. Review Construction Submittals***

During the construction period, Nolte will review materials submittals that are typically the responsibility of the design engineer. This consists of submittals required for permanent construction of the bridge. Nolte will review the following submittals:

- Concrete mix designs
- Reinforcing steel shop drawings
- Structural steel shop drawings (railings, inserts, etc.)
- Post-tensioning shop drawings

The construction manager typically reviews submittals of temporary items of construction, such as falsework. Upon request by Stanislaus County, Nolte is available to provide the review of these temporary items. We can also supply construction assistance in the form of responding to Requests for Information (RFIs), as well as providing periodic or full-time inspection services. These services, however, are not included in our proposed fee. Upon request they can be conducted on a time-and-materials basis at our standard charge rates.

# Crows Landing Road Bridge Project Schedule



Project: Crows Landing Road Bridge  
Date: Wed 3/28/01

Task		Progress		Summary		Rolled Up Split		Rolled Up Progress		Project Summary	
Split		Milestone		Rolled Up Task		Rolled Up Milestone		External Tasks			



**Crows Landing Road Bridge Replacement  
Stanislaus County**

**Fee Estimate**

Task	Nolte Labor Hours										Nolte Expense	Nolte Subtotal Fee	Sub-consultant Fee	Total Project Fee
	(\$130/hr) Project Manager	(\$130/hr) Engineering Manager	(\$115/hr) Senior Engineer	(\$90/hr) Assoc. Engineer	(\$65/hr) Asst Engr	(\$75/hr) CADD Tech	(\$60/hr) Word Processing	(\$130/hr) Survey Manager	(\$120/hr) Office Survey	(\$165/hr) Nolte Field Crew				
Project Management	58	42	42	0	0	0	16	0	0	0	\$ -	\$ 18,790	\$ -	\$ 18,790
<b>Preliminary Engineering, NEPA/CEQA Documentation</b>														
Existing Document Review	0	0	34	0	30	0	0	0	0	0	\$ -	\$ 5,860	\$ 3,289	\$ 9,149
Topographic Survey and Mapping	2	0	0	0	0	20	0	6	16	24	\$ 1,100	\$ 8,420	\$ -	\$ 9,520
San Joaquin River Topographic Survey And Mapping	0	0	0	0	0	0	0	2	0	16	\$ -	\$ 2,900	\$ -	\$ 2,900
Geotechnical Investigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Predrill Services	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ 9,350	\$ 9,350
Truck-Mounted Drilling	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ 22,550	\$ 22,550
Barge-Mounted Drilling	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ 28,600	\$ 28,600
Lab Testing	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ 4,950	\$ 4,950
Geotechnical Report Development	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ 13,750	\$ 13,750
Environmental Clearance Documents	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preinvestigation Services	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ 12,804	\$ 12,804
Environmental Technical Studies	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ 52,745	\$ 52,745
Hydrological and Hydraulic Analysis	0	14	91	0	0	8	8	0	0	0	\$ -	\$ 13,365	\$ -	\$ 13,365
Preliminary Engineering and Type Selection	4	4	60	12	102	16	6	0	0	0	\$ -	\$ 17,210	\$ -	\$ 17,210
Right-of-Way Engineering Services	0	0	0	0	0	24	0	6	28	0	\$ -	\$ 5,940	\$ -	\$ 5,940
Utility Coordination	0	40	4	0	0	0	0	0	0	0	\$ -	\$ 5,660	\$ -	\$ 5,660
Preliminary (30%) Bridge and Roadway Plans	2	8	10	16	30	115	6	0	0	0	\$ -	\$ 14,825	\$ -	\$ 14,825
Preliminary (30%) Construction Cost Estimates	2	4	2	8	38	15	0	0	0	0	\$ -	\$ 5,325	\$ -	\$ 5,325
<b>Final Design and Special Provisions</b>														
Final Plans and Special Provisions	30	22	170	30	230	246	18	0	0	0	\$ -	\$ 63,490	\$ -	\$ 63,490
Independent Design Check	2	0	104	0	144	0	0	0	0	0	\$ -	\$ 21,580	\$ -	\$ 21,580
Construction Cost Estimate	2	0	20	0	92	8	0	0	0	0	\$ -	\$ 9,140	\$ -	\$ 9,140
Traffic Control Plan	0	8	0	26	0	14	0	0	0	0	\$ -	\$ 4,430	\$ -	\$ 4,430
Permitting	40	0	0	0	0	0	0	0	0	0	\$ -	\$ 5,200	\$ 16,157	\$ 21,357
Construction Bid Assistance	15	15	15	0	0	0	0	0	0	0	\$ -	\$ 5,625	\$ -	\$ 5,625
Review Construction Submittals	0	0	40	0	16	0	0	0	0	0	\$ -	\$ 5,640	\$ -	\$ 5,640

**Not To Exceed Total: \$ 378,695**



# **APPENDIX A: QUALITY ASSURANCE/ QUALITY CONTROL PLAN**



## QUALITY ASSURANCE/QUALITY CONTROL PLAN

The Nolte Team has a longstanding commitment to the formalized process of Quality Control (doing it right the first time) and Quality Assurance (checking to make sure it was done right). We are committed to providing service to our clients that more than meets project requirements. Our team members take pride in their reputation for creative, thoughtful, and successful engineering planning and design.

At Nolte, we firmly believe that dedication to quality pays off. Most of our work comes from repeat clients because of our commitment to quality assurance and quality control. Nolte uses two company manuals, *Program Management* and *Quality Control*, to help manage and oversee our projects. The purpose of these guides is to describe our approach to quality control so that it can be effectively implemented by our project teams throughout the duration of our projects.

Throughout your project, Nolte will incorporate our Standard Quality Assurance/Quality Control Plan for HBRR projects. We firmly believe that dedication to quality pays off and are committed to providing quality assurance and quality control on your project.

The first step of our Quality Assurance/Quality Control Plan is to implement our standardized HBRR design process flow charts. Because Nolte has been involved in numerous HBRR projects, we have developed standardized design flow charts for the three main design stages; The Conceptual Design Stage, The Preliminary Design Stage, and the Final Design Stage (see the following pages for the design process flow charts). Having a standardized process for each of the design stages greatly improves the quality of our designs and related documents.

The second step of our Quality Assurance/Quality Control Plan includes the development of a *Project Work Plan Manual* specific to your project. This manual typically includes a Quality Control checklist (see the following list), design team contact list, project scope of work, project schedule, list of deliverables, standardized HBRR design flow charts, administrative procedures, and document control.

A copy of this manual is provided to all team members, including the subconsultants. This ensures that Nolte's design staff and subconsultants know who the design team is and are aware of their responsibilities and the project requirements.

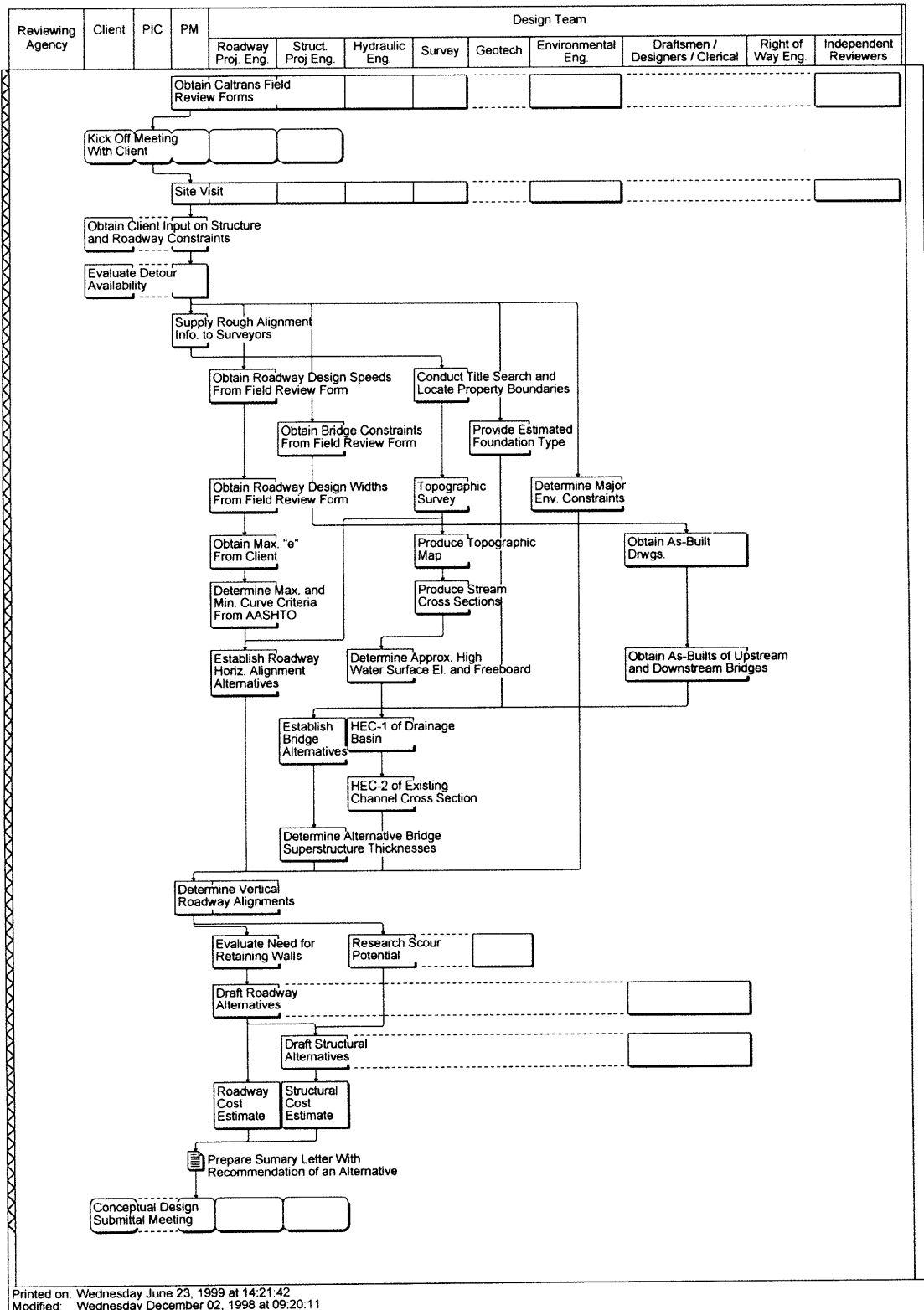
Our quality Assurance/Quality Control Plan also includes internal peer review of the design documents at each specified level of completion submitted (see the following Internal Peer Review Checklist). We have found throughout the years that these internal reviews help eliminate errors, omissions, and conflicts in the documents we produce.

In addition, our Quality Assurance/Quality Control Plan includes addressing County review comments. Nolte has developed a formal review comment response procedure, in which the appropriate staff members and/or subconsultants respond to all comments. Once all the review comments have been addressed, a completed spreadsheet stating each review comment and associated response is returned to the County for verification.

Our Quality Assurance/Quality Control Plan also includes an independent check of the bridge structure design, plans, specifications, and estimates (see the following Independent Bridge Design Checklist). This check is conducted at the completion of the 60% complete PS&E deliverable. An engineer not involved in the initial design of the project will perform the independent check. This ensures that the proposed design is critically reviewed with no bias.

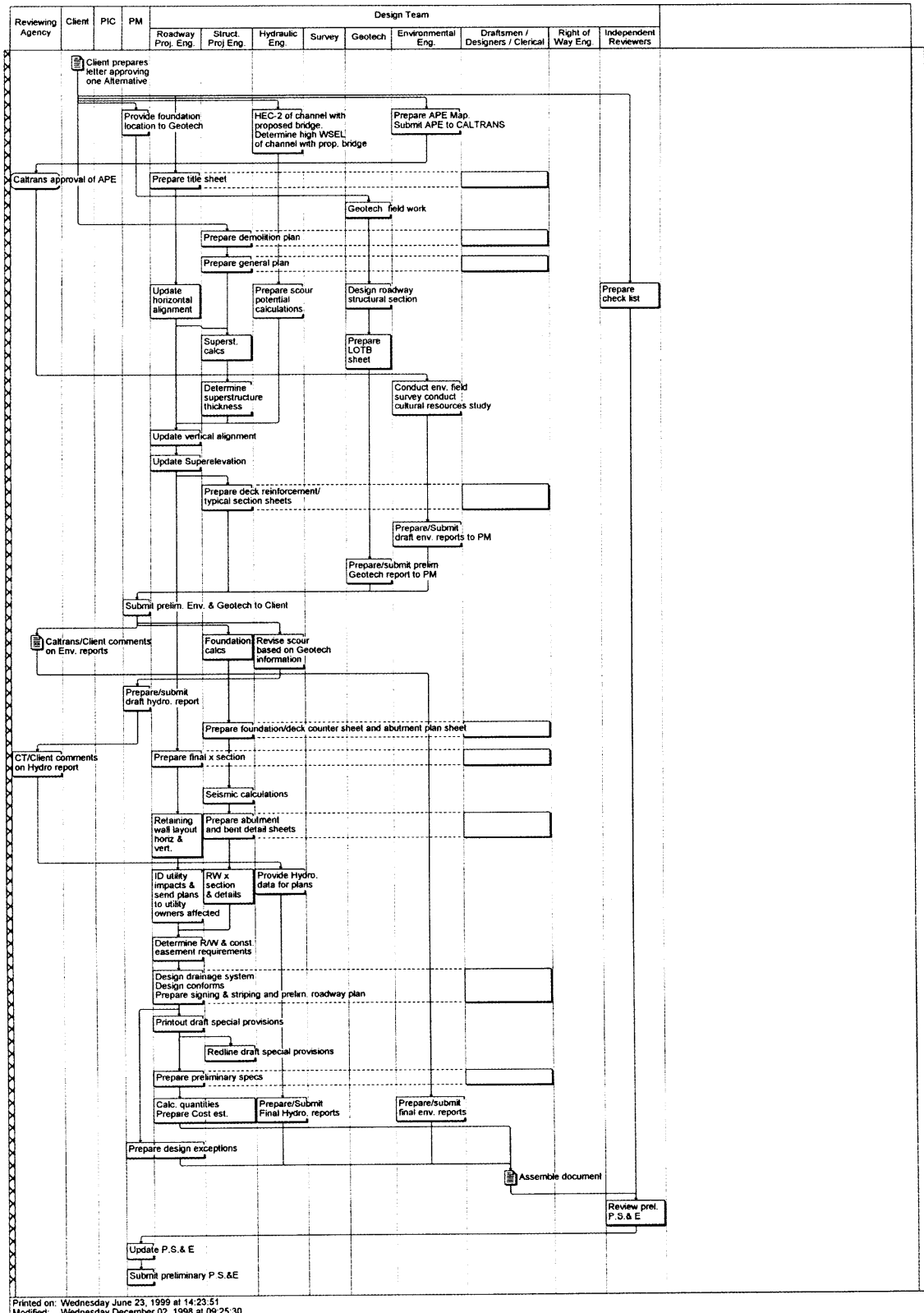


## Conceptual Design Process

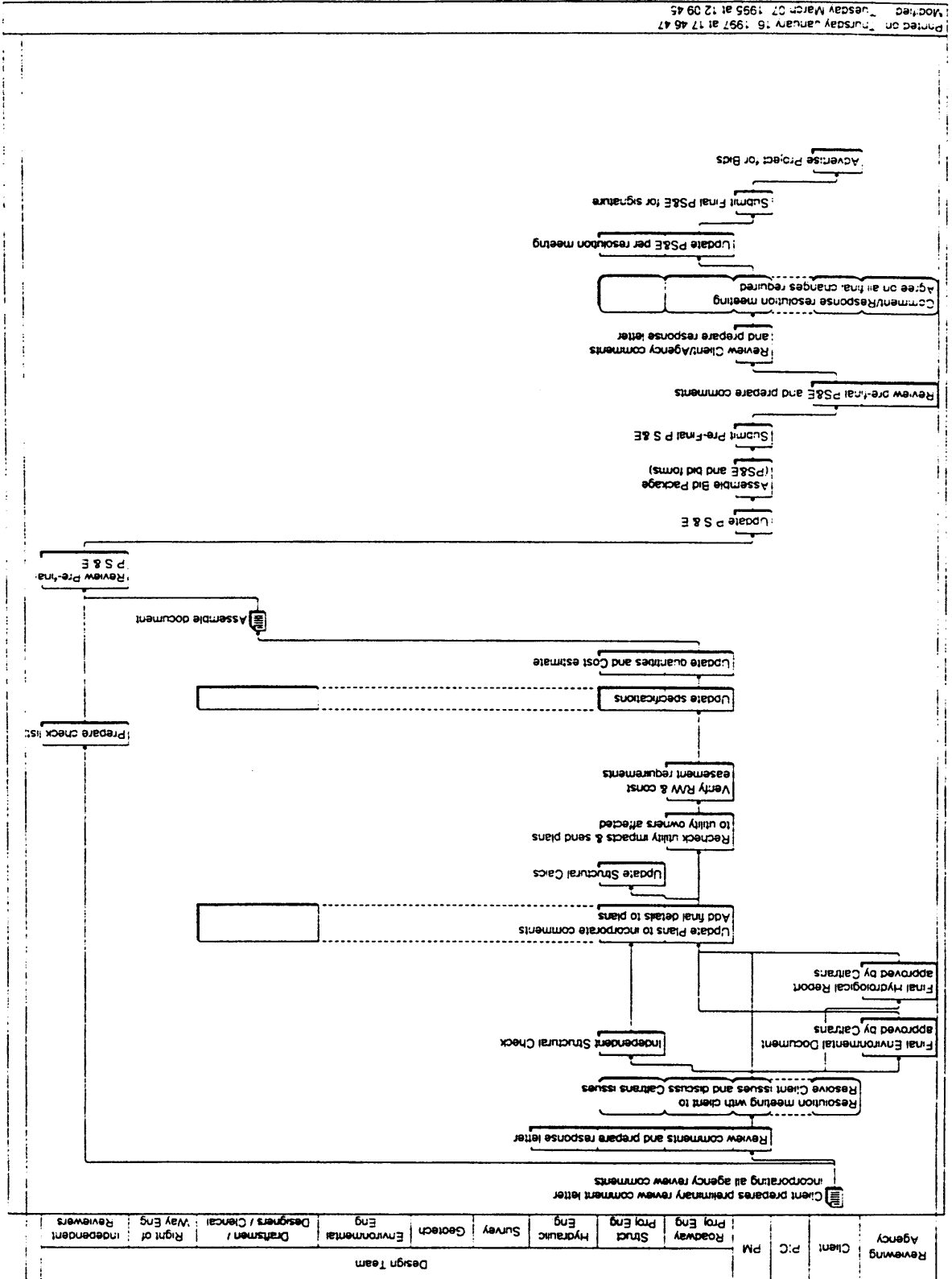




# Preliminary Design Process



Printed on: Wednesday June 23, 1999 at 14:23:51  
Modified: Wednesday December 02, 1998 at 09:25:30



Printed on Thursday January 16: 1997 at 17:46:47  
 Modified on Tuesday March 07: 1995 at 12:09:45

Final Design Process







**B. Internal Peer Reviews**

**(1) Preliminary Design Submittal**

- Review Design Basis
- Review 30% Complete Plans
- Coordination Check Between Disciplines
- Planning Estimates Checked
- Recommended Design Checked
- Review Comments Sent to Designer

Preliminary Design Submittal Complete \_\_\_\_\_  
 Reviewer \_\_\_\_\_ Date \_\_\_\_\_

**(2) 60% PS&E Submittal Review**

- County 20% Comments Addressed
- Peer Review 30% Comments Addressed
- Review 60% Complete Plans
- Coordination Check Between Disciplines
- Review 60% Complete Special Provisions
- Review 60% Complete Cost Estimates

60% PS&E Submittal Review Complete \_\_\_\_\_  
 Reviewer \_\_\_\_\_ Date \_\_\_\_\_

**(3) 90% PS&E Submittal Review**

- County 60% Comments Addressed
- Independent Bridge Check Comments Addressed
- Peer Review 60% Complete Comments Addressed
- Coordination Check Between Disciplines
- 90% Drawings, Special Provisions, and Estimates Final Check

90% PS&E Submittal Review Complete \_\_\_\_\_  
 Reviewer \_\_\_\_\_ Date \_\_\_\_\_





**C. Independent Bridge Design Check**

**(1) Initial Check**

Independent Checker: \_\_\_\_\_  
Name RCE No.

- Independent Design Calculations Complete
- Bridge Plans Checked
- Structures Special Provisions Checked
- Independent Quantities Complete
- Independent Design Calculations, Quantities, and Review Comments forwarded to Designer

Initial Check Complete \_\_\_\_\_  
Date Checker Initials

**(2) Independent Check Coordination with Designer**

**Designer Initials**      **Checker Initials**

- Design Calculations and Check Calculation Agree \_\_\_\_\_
- Design Quantities and check Quantities Agree \_\_\_\_\_
- Bridge Plan Check Comments and Structures Special Provisions Comments Incorporated and Back Checked \_\_\_\_\_

**(3) Independent Check Complete**

Checker: \_\_\_\_\_  
Name RCE No.

Designer: \_\_\_\_\_  
Name RCE No.

## APPENDIX B: PRE-AWARD AUDITS

**COUNTY OF BUTTE  
TREASURY OVERSIGHT COMMITTEE**

**FINDINGS AND RECOMMENDATIONS  
FOR THE FISCAL YEAR ENDED JUNE 30, 1998**

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We examined, on a test basis, Nolte & Associates' compliance with applicable laws and regulations, the contract requirements, and *Accounting and Auditing Guidelines for Contracts with Caltrans*, published by the California State Department of Transportation.

The following represents our findings and recommendations related to our examination of Nolte & Associates compliance with the above mentioned criteria.

Finding:

The proposed consultant agreement does not specifically provide for a three-year record retention period and right to audit.

Recommendation:

We recommend that the proposed contract be revised or amended to include these provisions.

Finding:

The proposed consultant agreement does not include references to cost principles set forth in CFR 48, Chapter 1, Part 31 for allowability of individual items of cost and CFR 49, Part 18, for administrative procedures.

Recommendation:

We recommend that the proposed contract be revised or amended to include these provisions.

**GILBERT ACCOUNTANCY CORPORATION**  
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT ACCOUNTANT'S REPORT

City of Porterville

We have examined Nolte & Associates management's assertion, included in their representation letter dated July 2, 1999, that, relative to their proposed contract with the City of Porterville for the Plano Street Bridge Project, they complied with applicable laws and regulations, the contract requirements, and *Accounting and Auditing Guidelines for Contracts with Caltrans*, published by the California State Department of Transportation. Management is responsible for Nolte & Associates' compliance with those requirements. Our responsibility is to express an opinion on management's assertion of Nolte & Associates' compliance based on our examination.

Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence about Nolte & Associates' compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion. Our examination does not provide a legal determination on Nolte & Associates' compliance with specified requirements.

Our examination disclosed the following material noncompliance with contract requirements applicable to Nolte & Associates proposed contract with the City of Porterville for the Plano Street Bridge Project

- The consultant agreement does not specifically provide for a three-year record retention period and right to audit, and
- The consultant agreement does not include references to cost principles set forth in CFR 48, Chapter 1, Part 31 for allowability of individual items of cost; CFR 49, Part 18, for administrative procedures.

In our opinion, except for the material noncompliance described above, Nolte & Associates management's assertion, that, relative to their proposed contract with the City of Porterville for the Plano Street Bridge Project, they complied with applicable laws and regulations, the contract requirements, and *Accounting and Auditing Guidelines for Contracts with Caltrans*, published by the California State Department of Transportation, is fairly stated, in all material respects.

This report is intended solely for the information of Nolte & Associates' management and City of Porterville. However, this report is a matter of public record and its distribution is not limited.

*Gilbert Accountancy Corporation*

GILBERT ACCOUNTANCY CORPORATION  
CERTIFIED PUBLIC ACCOUNTANTS

July 2, 1999

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**CITY OF PORTERVILLE**

**PRE-AWARD AUDIT OF  
NOLTE & ASSOCIATES**

**JULY 2, 1999**

State of California

# Memorandum

**RECEIVED**

Business, Transportation and Housing Agency

OCT 18 1999

To: HARJIT SIDHU, P.E.  
Associate Civil Engineer  
City Of Livermore

CITY OF LIVERMORE  
ECONOMIC DEVELOPMENT DIVISION

Date: October 14, 1999

File No.: P1300A-0256

Agreement No.: 04-Ala-0-LLvmr

From: DEPARTMENT OF TRANSPORTATION  
Audits and Investigations

Subject: Preaward Audit - Nolte Associate, Inc.

We completed a preaward audit of draft Agreement No. 04-Ala-0-LLvmr between the City of Livermore and Nolte Associate, Inc., the contractor. Under the terms of the agreement, the contractor shall provide consulting services for the widening of Greenville Road and replacement of the UPRR underpass for the City of Livermore. The total amount of this contract shall not exceed \$520,745. Reimbursement is to be made at Actual Cost Plus a Fixed Fee for the following contractors:

Nolte Associate, Inc. (Prime)  
Klenfelder\*  
David J. Powers\*  
Baals\*  
ATT\*  
Peter Shutts\*

\* Audit(s) waived due to low dollar amounts.

The preaward audit was conducted in accordance with generally accepted government auditing standards. These standards require that we plan and perform the audit to obtain reasonable assurance that the data and records reviewed are free of material misstatement. The audit includes examining on a test basis evidence supporting the amounts and disclosures in the data and the records reviewed. It also includes assessing the accounting principles used and significant estimates made by the contractor, as well as evaluating the overall presentation. We believe our audit provides a reasonable basis for our opinion.

The scope of the audit was limited to selected financial and compliance activities. The audit consisted of a review of the draft agreement, interviews with applicable personnel, a review of the contractor's accounting system and proposed costs as of September 9, 1999. Accounting system and cost proposal changes subsequent to this date were not tested and, accordingly, we do not express an opinion on changes arising after this date. We did not audit the proposed indirect rates since a preaward audit is significantly less in scope than an incurred cost audit. We reviewed the proposed indirect rate for the purpose of accepting contract progress billings. Our audit included such tests, as we considered necessary to accomplish the following audit objectives:

- Determine whether the draft agreement contains the required fiscal provisions.
- Determine whether the contractor's accounting system is capable of accumulating and segregating reasonable, allowable and allocable project costs.
- Determine whether the proposed project costs are reasonable in relation to actual historical costs and estimating procedures.

## AUDIT RESULTS

In our opinion, the draft agreement contains the required fiscal provisions, the contractor's accounting system is capable of accumulating and segregating reasonable, allowable, and allocable project costs, and the proposed costs appear reasonable in relation to actual historical costs and estimating procedures, except as follows:

### Contract Provisions:

1. Articles 2 (Services To Be Provided), 3 (Ownership of Documents), and 11 (Payment and Expenses) are missing the subcontractor clause.

*Recommendation:* The City of Livermore Contract Manager should add the following sentence to Articles 2, 3, and 11:

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

2. The draft agreement does not contain provisions for treatment of costs resulting from suspension or termination of the project.

*Recommendation:* The City of Livermore Contract Manager should add the following to Article 8 (Termination):

*Termination settlement expenses will be reimbursed in accordance with 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31. Subpart 31.205-42 (c) dealing with initial costs is not applicable to architectural and engineering contract terminations.*

*The fixed fee will be adjusted as determined by the CITY in accordance with the guidelines established in 48 CFR, Chapter 1, Section 49.305-1.*

3. The draft agreement contained the word exclusive instead of inclusive.

*Recommendation:* The City of Livermore Contract Manager should replace the word exclusive with inclusive in Article 11 (Payments and Expenses) paragraph A.



4. The draft agreement does not specifically state the fixed fee amount.

**Recommendation:** The City of Livermore Contract Manager should assure that the fixed fee amount is specifically stated in Article 11 (Payments and Expenses). The following contract language may be used:

*In addition to the actual costs, the CITY will pay the CONSULTANT a fixed fee of (AMOUNT). The fixed fee is nonadjustable for the term of the contract except in the event of a significant change in the scope of work and such adjustment is made by contract amendment.*

5. The draft agreement does not specifically note criteria for payment of travel costs.

**Recommendation:** The City of Livermore Contract Manager should add the following language to Article 11 (Payments and Expenses):

*Reimbursement for transportation and subsistence costs shall not exceed the rates authorized to be paid non-represented State employees under current State Department of Personnel Administration rules detailed in the Caltrans Travel and Expense Guide.*

6. The draft agreement does not contain the cost principles and subcontracting contract provisions.

**Recommendation:** The City of Livermore Contract Manager should add the following articles:

Cost Principles

- A) The CONSULTANT agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31 et seq., shall be used to determine the allowability of individual items of cost.
- 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 et seq., OR 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, are subject to repayment by CONSULTANT to CITY.
- D) Any subcontract in excess of \$25,000, entered into as a result of this contract, shall contain all the provisions of this Article.

Subcontracting

- A) *The CONSULTANT shall perform the work contemplated with resources available within its own organization and no portion of the work pertinent to this agreement shall be subcontracted without written authorization by the CITY except that which is expressly identified in the CONSULTANT'S Cost Proposal.*
- B) *Any subcontract in excess of \$25,000, entered into as a result of this contract, shall contain all the provisions stipulated in this contract to be applicable to subconsultants.*
- C) *Any substitution of subconsultants must be approved in writing by the CITY in advance of assigning work to a substitute subconsultant.*

**Notte Associates, Inc.:**

1. The contractor proposed an escalation rate of 10.6 percent, which could not be supported. Based on the last three years, the historical salary escalation average 5.6 percent.  
**Recommendation:** The City of Livermore Contract Manager should adjust the proposed annual escalation rate to 5.6 percent.
2. We reviewed the contractor's proposed combined indirect rate of 174.7 percent and noted several audit adjustments. As a result, we determined that a combined indirect rate of 171.0 percent is appropriate for billing purposes under this contract.  
**Recommendation:** The City of Livermore Contract Manager should adjust the proposed combined indirect rate to 171.0 percent for billing purposes.
3. The cost proposal listed a 25 percent fixed fee rate on subcontractor costs and their other direct costs (ODCs). Subsequently, the contractor withdrew the proposed ODC's from the cost proposal.  
**Recommendation:** The City of Livermore Contract Manager should remove any reference to ODCs from the cost proposal and remove the 25 percent fixed fee markup on subcontractors' costs.
4. Task No. 11 is defined as additional services that are not covered under task 1 through 10. At the request of the City of Livermore, the contractor estimated the cost to be \$56,350. Per CFR 48 chapter 1 Part 31.205-7 (c)(2) this is a contingency of unknown conditions, the effect of which cannot be measured so precisely as to provide equitable results to the contractor and to the Government, and therefore, this amount is unallowable.

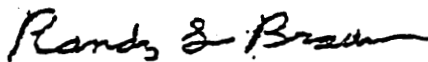
Harjit Sidhu, P.E.  
October 14, 1999  
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**Recommendation:** The City of Livermore Contract Manager should remove any reference to Task No. 11 from the cost proposal and adjust the contract amount accordingly. However the Contract Manager should continue to disclose Task No. 11 separately in the Scope of Service to facilitate the negotiation of appropriate contractual coverage.

The audit findings were discussed with Harjit Sidhu, Contract Manager for the City of Livermore on October 14, 1999, and Carol Mottershead, Controller for Nolte Associates, Inc., on September 30, 1999.

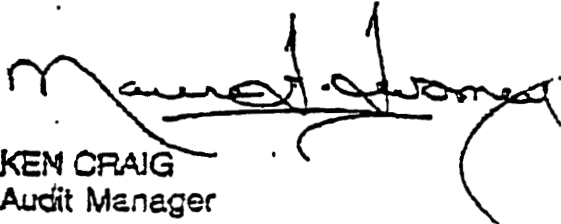
This report is intended for the information of the Audit Committee, Management, and FHWA. However, this report is a matter of public record and its distribution is not limited.

Please forward a copy of the executed agreement to Audits and Investigations. If you have any questions, please contact Randy Braun at (916) 653-9979 or Carlos M. Agulla, Audit Supervisor, at (916) 653-9380.



RANDY BRAUN  
Auditor

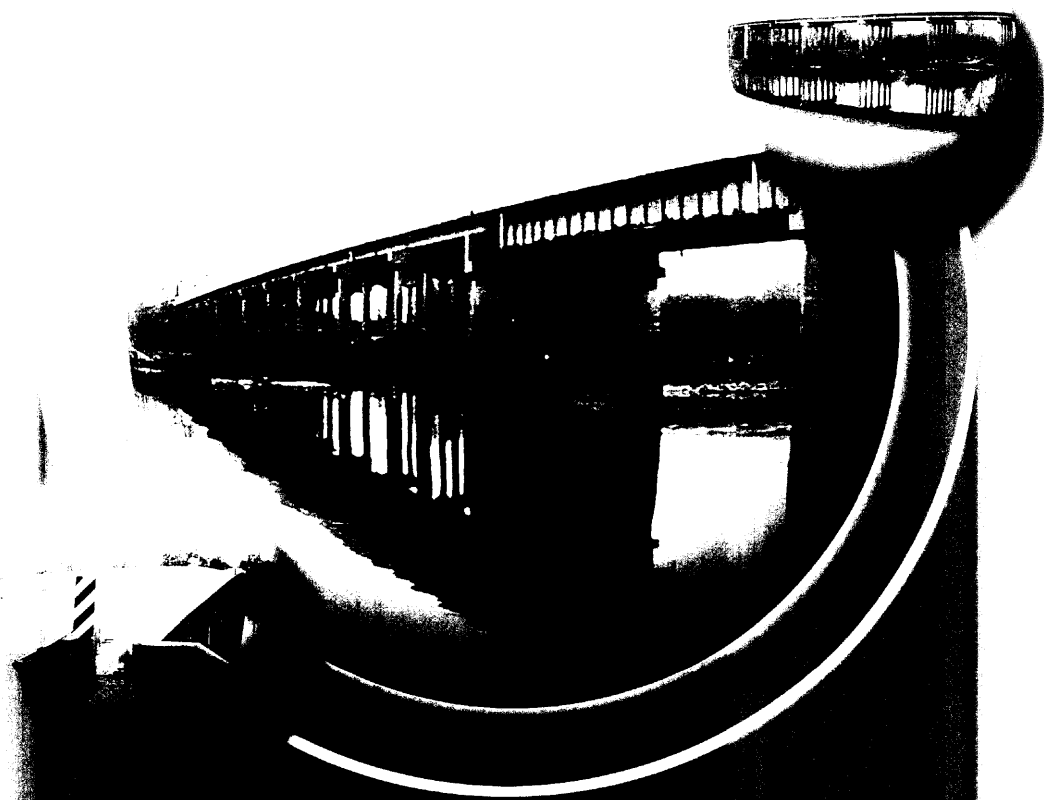
Approved:



KEN CRAIG  
Audit Manager

cc: Renato Resuello, Caltrans Local Assistance Engineer

Post-It® Fax Note	7871	Date	10/18	Page	5
To	Paul L. ...	From	Ken Craig		



**NOLTE**  
BEYOND ENGINEERING

