COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS AGREEMENT FOR PROFESSIONAL SERVICES

DESIGN ENGINEERING
AND
PROJECT DEVELOPMENT
FOR
PINE HILL ROAD BRIDGE (04C-0173)
OVER SWAIN SLOUGH

FEDERAL PROJECT NO. BRLO-5904 (112)

ARTICLE I INTENT OF AGREEMENT

1.01 WHEREAS, COUNTY requires professional, expert, and technical services of a temporary and occasional character. WHEREAS, COUNTY has no employees available to perform such services within the desired time period. THEREFORE, COUNTY hereby employs CONSULTANT to perform those professional services described in Article II hereof and agrees to pay the CONSULTANT for such services in the amount and at the time and in the manner specified in Article V hereof.

ARTICLE II SERVICES OF CONSULTANT

- 2.01 CONSULTANT agrees to provide those technical, expert, and professional services as described in Exhibit "A" and Exhibit "B" which are attached hereto and incorporated herein by reference as though fully set forth herein.
- 2.02 CONSULTANT has inspected the project site for the purpose of determining the nature and scope of the engineering services required by this agreement.

- 2.03 The absence, omission, or failure to include in this Agreement items which are normally considered to be a part of engineering procedure or which involve professional engineering judgement shall not be used as a basis for submission of inadequate work or incomplete engineering performance.
- 2.04 COUNTY relies upon the professional ability and stated experience of CONSULTANT as a material inducement to entering into this Agreement. CONSULTANT understands the use to which COUNTY will put his work product and hereby warrants that all findings, recommendations, calculations, computations, plans and specifications shall be made and prepared in accordance with generally accepted engineering practices.
- 2.05 When the Agreement calls for preparation of project plans, specifications or estimates, they shall be in form acceptable to COUNTY. Project plan format shall conform with the current edition of the California Department of Transportation Drafting and Plans Manual.
- 2.06 When the Agreement calls for preparation of project plans, CONSULTANT shall submit with the design documents such backup information as required in Exhibit "A" to support review of said plans. They shall be in a form acceptable to COUNTY.
- 2.07 CONSULTANT shall utilize to the fullest extent possible the California Department of Transportation Standard Specifications, Standard Provisions, and Standard Plans (latest editions) unless other criteria are included in Exhibit "A".
- 2.08 CONSULTANT shall provide all printing and reproduction costs until final design is accepted by COUNTY, at which time CONSULTANT shall turn over to COUNTY all documents and design drawings. COUNTY shall print all documents necessary for bidding and construction purposes.
- 2.09 CONSULTANT agrees to perform any additional services as may be required due to significant changes in general scope of the project or its design, including but not limited to changes in size, complexity or character of construction. Such additional services shall be paid for by Supplemental Agreement and shall conform to the rates of payment specified in Article V hereof.
- 2.10 <u>Responsibility for Others</u>. CONSULTANT shall be responsible to COUNTY for its Services and the services of its subcontractors. CONSULTANT shall not be responsible for the acts or omissions of other parties engaged by COUNTY nor for their construction means, methods, techniques, sequences, or procedures, or their health and safety precautions and programs.
- 2.11 <u>Documents.</u> Reuse of any such materials by COUNTY on any extension of this project or any other project without CONSULTANT's written authorization shall be at COUNTY's sole risk. CONSULTANT shall have the right to retain copies of all such materials.

- 2.12 The CONSULTANT shall uphold claims of performance contained within the proposal submitted to COUNTY as part of the consultant selection process.
- 2.13 The CONSULTANT shall perform the work contemplated with the resources available within it's own organization and no portion of the work pertinent to this Agreement shall be subcontracted without written authorization from the COUNTY, except that which is expressly identified in the CONSULTANT's cost Proposal.
- 2.14 Any subcontract in excess of \$25,000 entered into as a result of this Agreement shall contain all the provisions stipulated in this contract to be applicable to subconsultants.
- 2.15 The COUNTY in advance of assigning work to a substitute subconsultant must approve any substitution of subconsultants in writing.

ARTICLE III SERVICE OF COUNTY

- 3.01 COUNTY shall provide full information as to its requirements for performance of the Agreement. Said information shall be described in Exhibit "A".
- 3.02 COUNTY shall place at the disposal of CONSULTANT all available information pertinent to the project.
- 3.03 COUNTY will examine all studies, reports, preliminary plans, specifications or other submittals from CONSULTANT and will render, in writing, decisions or comments pertaining thereto within fourteen (14) calendar days of receipt thereof. This is separate and apart from the time required for Caltrans review, if applicable.
- 3.04 COUNTY shall arrange for access to private property as required by CONSULTANT provided that such access is necessary for the performance of the engineering services described herein and that the owners or occupants of any parcel to which access is required do not consent to entry by CONSULTANT.
- 3.05 COUNTY shall be responsible for advertising, award of bid to successful contractor, execution of a construction contract, and complete contract administration, including construction staking, should these functions be required.

ARTICLE IV TIME OF COMPLETION

4.01 The execution of this Agreement by the COUNTY shall constitute the CONSULTANT's authority to proceed immediately with the performance of the work described in Exhibit "A". The parties hereto agree that time is of the essence in completing this contract.

- 4.02 CONSULTANT agrees to complete and deliver to COUNTY all work products associated with Exhibit "B" Phases I and II, including final contract plans, specifications and cost estimates by February 13, 2013, unless extended by mutual agreement of both parties.
- 4.02A CONSULTANT further agrees to provide technical support to COUNTY through the advertisement for bids, evaluation of bids, selection of apparent low bidder and construction contract award processes. CONSULTANT's responsibility shall terminate 30 days following receipt of bids by COUNTY unless extended by mutual agreement of both parties.
- 4.03 If COUNTY requests significant modifications or changes in the scope of the project the time of performance shall be adjusted appropriately. The number of days of said extension shall be the final decision of COUNTY.
- 4.04 If performance of CONSULTANT's work is delayed by earthquake, flood, high water, or other Act of God or by strike, lockout, or similar labor disturbance, the time for CONSULTANT's performance shall be extended by a number of days equal to the number of days the CONSULTANT has been delayed. The COUNTY retains the right to cancel the contract with the CONSULTANT if said delay affects project funding.

ARTICLE V PAYMENT FOR SERVICES

- 5.01 COUNTY shall pay CONSULTANT for all engineering work required in the satisfactory completion of this Agreement an amount to be determined in accordance with the "Fee Schedule" attached hereto and marked Exhibit "C" and incorporated herein by reference as though fully set forth herein. The basis of payment for the services to be furnished shall be on an hourly rate plus non-salary expenses (other direct costs).
- 5.02 It is mutually agreed between COUNTY and CONSULTANT that payments to CONSULTANT including the total amount of salaries and expenses shall not exceed \$290,000.00 for that work as set forth in Article II, as described in Exhibit "B" of this Agreement and the attached Summary Cost Estimate.
- 5.03 Payments to CONSULTANT shall be based upon itemized invoices submitted by CONSULTANT. Invoices shall include a summary that identifies all applicable current costs with a summary of contract costs to date.
- 5.04 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 permissibility of individual items of cost.
- 5.05 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.

- 5.06 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 County.
- 5.07 Any subcontract in excess of \$25,000 entered into as a result of the Agreement shall contain all the provisions of this Article.
- 5.08 If COUNTY substantially alters the scope of work the maximum fee may be changed by Supplemental Agreement.

ARTICLE VI PROJECT INSPECTION AND ACCOUNTING RECORDS

- 6.01 For the purpose of determining compliance with Public Contract Code, Section 10115, et. Seq. And Title 21, California Code of Regulations, Chapter 21, section 2500 et. Seq., when applicable, and other matters connected with the performance of the Agreement pursuant to Government code Section 8546.7, the CONSULTANT, subconsultant, and the COUNTY shall maintain all the books, documents, papers, accounting records, and other evidence pertaining to the costs of administering the Agreement. All parties shall make such materials available at their respective offices at all reasonable times during the Performance Period and for three (3) years from the date of final payment under the Agreement. The State, the State Auditor, FHWA, or duly authorized representative of the Federal government having jurisdiction under Federal laws or regulations (including the basis of federal funding in whole or in part) shall have access to the books, records, and documents of the CONSULTANT that are pertinent to the Agreement for audits, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested in writing.
- 6.02 Any subcontract, in excess of \$25,000 entered into as a result of this Agreement shall contain all the provisions of this Article.

ARTICLE VII DISPOSITION OF FINAL PLANS

- 7.01 All original tracings of plans and specifications together with such backup data as required by this Agreement shall be and shall remain the sole property of COUNTY.
- 7.02 CONSULTANT's attention is directed to the required notice under Government Code Section 7550, which requires that: Any documents or written reports prepared as a requirement of this contract shall contain, in a separate section preceding the main body of the document, the numbers and dollar amounts of all contracts and subcontracts relating to the preparation of those documents or reports if the total cost for work by non-employees of the public agency exceeds \$5,000.

ARTICLE VIII DISPUTES

- 8.01 CONSULTANT shall give the COUNTY written notice within fifteen (15) days of an event, thing, occurrence or other cause of an increase in the scope and cost of the work for which CONSULTANT believes additional compensation may be due. The written notice shall set forth the reasons that the CONSULTANT believes additional compensation will or may be due, the nature of the costs involved, and insofar as possible, the amount of the dispute.
- 8.02 The notice of dispute filed by the CONSULTANT shall be in sufficient detail to enable COUNTY to ascertain the basis and amount of said dispute. The COUNTY will consider and make a determination within 30 days on the dispute filed by the CONSULTANT.
- 8.03 The Director of Public Works will make the final determination on any dispute.
- 8.04 The dispute shall not be a basis to delay prosecution of the Consultant's work, nor to alter the performance period set forth in Section 4.02. Consultant agrees to diligently pursue the work during the pendency of any dispute.

ARTICLE IX TERMINATION OF CONTRACT

- 9.01 The COUNTY reserves the right to terminate this Agreement immediately in the event of breach or failure of performance by the CONSULTANT, or upon thirty (30) calendar days written notice to the CONSULTANT if terminated for the convenience of the COUNTY.
- 9.02 In the event the Agreement is terminated for the convenience of the COUNTY, the CONSULTANT shall be paid for the percentage of the work completed, relative to the total work effort called for under the Agreement, and for termination costs.
- 9.03 Within 60 days of the date the CONSULTANT is notified of early termination for the convenience of the COUNTY, the CONSULTANT shall prepare and submit to the COUNTY for approval, two separate supplemental cost proposals: 1) A final revised cost proposal for all project related costs to the revised termination date, and 2) A cost proposal specifically addressing the termination settlement costs only.
- 9.04 CONSULTANT shall provide all project related documents and correspondence required as part of the Scope of Work. Project related documents should be described, listed and identified as part of the final revised cost proposal. Project related documents should include all documents that are in complete and final form and which have been accepted as complete by the COUNTY, or documents in draft and/or incomplete form for those deliverables, which are in progress by the CONSULTANT and have not been accepted as complete. All documents must be received and accepted before the settlement cost invoice is paid.

- 9.05 Separate final invoices for project related costs and termination settlement costs shall be submitted no later than thirty (30) calendar days after the date the CONSULTANT is notified of acceptance of the final cost proposal by the COUNTY. Invoices shall be submitted in accordance with Article V.
- 9.06 The CONSULTANT shall notify any subconsultant and service vendor providing service under this Agreement of the early termination date of this Agreement. Failure to notify any subcontractor and service vendor shall result in the CONSULTANT being liable for the termination costs incurred by any subcontractor and service vendor for work performed under this Agreement, except those specifically agreed to in the termination notice to the CONSULTANT.
- 9.07 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 for architectural and engineer contract terminations.
- 9.08 CONSULTANT agrees to release the COUNTY from any and all termination claims for services performed arising out of this Agreement or its early termination, upon acceptance by CONSULTANT of payment in the total amount agreed upon as full and final payment of its costs from performance and early termination of this Agreement.

ARTICLE X RESPONSIBILITY FOR CLAIMS AND LIABILITIES

10.01 HOLD HARMLESS INDEMNIFICATION CLAUSE

CONSULTANT shall hold harmless, defend and indemnify County and its officers, officials, employees and volunteers from and against all claims, damages, losses and expenses including attorney fees arising out of the performance of the work described herein, caused in whole or in part by any willful misconduct, negligent act or omission of the Consultant, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except where caused by the active negligence, sole negligence, or willful misconduct of the County.

10.02 Insurance: CONSULTANT shall maintain the insurance specified in Exhibit "D" which is attached hereto and incorporated by reference as though fully set forth herein.

ARTICLE XI GENERAL COMPLIANCE WITH LAWS

11.01 It is understood and agreed that, the CONSULTANT will comply with all Federal, State, and Local laws and ordinances as may be applicable to the performance of work under this Agreement.

ARTICLE XII ENDORSEMENT OF PLANS

12.01 It is understood and agreed that the CONSULTANT will endorse reports and documents in accordance with applicable portions of the Business and Professions Code of the State of California.

ARTICLE XIII COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 FOR FEDERAL AID CONTRACTS

- 13.01 COMPLIANCE WITH REGULATIONS: The CONSULTANT shall comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, 49 CFR 21 (hereinafter referred to as the Regulations) through Appendix C shall be incorporated by reference and made a part of this Agreement.
- 13.02 NONDISCRIMINATION. The CONSULTANT, with regard to the work performed by it after award and prior to completion of the agreement work, will not discriminate on the ground of race, color, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The CONSULTANT will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices, when the Agreement covers a program set forth in Appendix A of the Regulations.
- 13.03 SOLICITATIONS AND SUBCONTRACTS, INCLUDING PROCUREMENT OF MATERIALS AND EQUIPMENT: In all solicitations either by competitive bidding or negotiation made by the CONSULTANT for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the CONSULTANT of the CONSULTANT's obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- 13.04 INFORMATION AND REPORTS: The CONSULTANT will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, other sources of information, and its facilities as may be determined by the COUNTY, CALTRANS or the Federal Highway Administration (FHWA) to be pertinent to instructions.

Where any information required for the CONSULTANT is in the exclusive possession of another who fails or refuses to furnish this information, the CONSULTANT shall so certify to the COUNTY, CALTRANS or FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.

13.05 SANCTIONS FOR NONCOMPLIANCE: In the event of the CONSULTANT's noncompliance with the nondiscrimination provisions of this Agreement, the COUNTY shall impose such contract sanctions as it or FHWA may determine to be appropriate including, but not limited to:

- 1. Withholding of payments to the CONSULTANT under this Agreement until the CONSULTANT complies, and/or
- 2. Cancellation, termination, or suspension of the Agreement in whole or in part.

13.06 INCORPORATION OF PROVISIONS: The CONSULTANT will include the provisions of paragraphs 13.01 through 13.06 of this ARTICLE XIII in every subcontract, including procurement of material and leases of equipment, unless exempt by the Regulations, orders, or instructions issued pursuant thereto. The CONSULTANT will take such action with respect to any subcontract or procurement as CALTRANS or FHWA may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the CONSULTANT becomes involved in or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the CONSULTANT may request the COUNTY enter into such litigation to protect the interests of the COUNTY, and in addition, the CONSULTANT may request the United States to enter into such litigation to protect the interest of the United States.

ARTICLE XIV INDEPENDENT CONTRACTOR

14.01 The CONSULTANT, in accordance with his status as an independent contractor, covenants and agrees that he will conduct himself consistent with such status, that he will neither hold himself out as nor claim to be an officer or employee of the COUNTY by reason hereof, and that he will not by reason hereof, make any claim, demand, or application to or for any right or privilege applicable to an officer or employee of the COUNTY including but not limited to, Workers' Compensation coverage, Unemployment Insurance benefits, Social Security coverage, or retirement membership or credit.

ARTICLE XV COVENANT AGAINST CONTINGENT FEES

15.01 The CONSULTANT warrants that he has not employed or retained any company or person, other than a bona fide employee working for the CONSULTANT, to solicit or secure this Agreement, and that he has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration contingent upon or resulting from the award of making this Agreement. For breach or violation of this warranty, the COUNTY shall have the right to annul this Agreement without liability, or, in its discretion to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

ARTICLE XVI SUCCESSOR AND ASSIGNMENTS

- 16.01 The COUNTY and the CONSULTANT each binds himself, his partners, successors, and executors, administrators and assigns to the other party to this Agreement, and to the partners, successors, executors, administrators and assigns of such other party in respect to all covenants of this Agreement.
- 16.02 Except as hereinabove set forth, neither the COUNTY nor the CONSULTANT shall assign, sublet, or transfer his interest in this Agreement without the written consent of the other, however, the CONSULTANT reserves the right to assign the proceeds due under this Agreement to any bank or person.
- 16.03 In the case of the death of one or more members of the firm of the CONSULTANT, the surviving member or members, shall complete the engineering services covered by this Agreement.

ARTICLE XVII INDEMNIFICATION

- 17.01 COUNTY will require the construction contractor to indemnify and name CONSULTANT as additional insured in the same manner as COUNTY is indemnified and named as additional insured by the construction contractor in contract between COUNTY and construction contractor.
- 17.02 Nothing in this Agreement shall be construed to give any person or entity other than COUNTY and the CONSULTANT any legal or equitable right, remedy or claim under this Agreement, except as may otherwise be provided for in this Agreement; and it shall be construed as being for the sole and exclusive benefit of COUNTY and the CONSULTANT.
- 17.03 COUNTY will disclose to the CONSULTANT the existence and nature of any other encumbrances, defects and circumstances with regard to the construction contract or the project that COUNTY is aware of and that may have and adverse affect upon the CONSULTANT's performance of Services under this Contract.
- 17.04 COUNTY will provide written notice of these limitations on the CONSULTANT'S obligations and responsibilities to the construction contractor prior to or concurrently with the CONSULTANT's assignment to perform construction management or inspection services for the project.

ARTICLE XVIII CERTIFICATION

- 18.01 CONSULTANT shall sign and include EXHIBIT "E": Debarment and Suspension Certification as a part of this contract.
- 18.2 CONSULTANT shall sign and include EXHIBIT "F": Non-Lobbying Certification as a part of this contract.

ARTICLE XIX NUCLEAR FREE COUNTY ORDINANCE

CONSULTANT certifies by its signature below that CONSULTANT is not a Nuclear Weapons Contractor, in that CONSULTANT is not knowingly or intentionally engaged in the research, development, production, or testing of nuclear warheads, nuclear weapons systems, or nuclear weapons components as defined by the Nuclear Free Humboldt County Ordinance. CONSULTANT agrees to notify COUNTY immediately if it becomes a nuclear weapons contractor, as defined above. COUNTY may immediately terminate this agreement if it determines that the forgoing certification is false or if CONSULTANT becomes a nuclear weapons contractor

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized officers to execute this Agreement in duplicate the day and year first above written.

COUNTY OF HUMBOLDT	
Unginia Ban CHAIRMAN, Board of Supervisors	
CITALEGIZATI, DOLLE OF Supervisors	
ATTEST:	FIRM: Quincy Engineering Inc
43-12	Oh Seum 3/5/12
CLERK OF THE BOARD DATE	Signature / Date TITLE:
APPROVAL RECOMMENDED:	(Print Name and Title of Signer:
Sp. 1/4 3/4/12	If Corporate: Chairman, President or Vice President)
TO US TO THE	1/m 7/5/2
TOM MATTSON LONG DATE	Signature Date
DIRECTOR OF PUBLIC WORKS	TITLE:
	(Print Name and Title of Signer:
	If Corporate: Secretary, Assistant Secretary, CFO or Assistant Treasurer)
	A MODERAL EL POUR DE L'ACTION
APPROVED AS TO FORM:	IRS IDENT. NO. 680269312
3/19/12	
COUNTY COUNSEL DATE	
Any Men 3/19/12	
RISK MANAGER DATE	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS AGREEMENT FOR PROFESSIONAL SERVICES

EXHIBIT "A"

GENERAL DESCRIPTION OF PROJECT

The selected consultant team will provide all professional services necessary to prepare documents for the construction of Swain Slough Bridge (04C-0173) on Pine Hill Road (3J430). These services shall include but not be limited to bridge type selection, hydraulics report, constructability report, geotechnical investigations and engineering design. In addition, the consultant will work with the Humboldt County Natural Resources Department assisting in the development of environmental documentation for the project, including area of potential effect mapping, project implementation scenarios and the description of how construction activities will occur.

A critical component of both the design and environmental phases will be the maintenance of consistent communication and consultation with the Humboldt County Department of Public Works and the California Department of Transportation (Caltrans).

This project shall be prepared using the Standard System of Units.

All work shall be prepared in accordance with Caltrans engineering standards and formats and in accordance with the following Caltrans documents: Project Preparation Manual, Highway Design Manual, Standard Specifications, Standard Plans, Standard Special Provisions, Memos to Designers, Bridge Design Details, Bridge Design Aids, and Bridge Design Specifications, as well as with the Standard Specifications for Highway Bridges as adopted by the American Association of State Highway and Transportation Officials (AASHTO). Consultant shall prepare work in conformance with the standards listed above unless directed otherwise by the County.

All design documents, including preliminary plans, specifications, and bid documents shall be submitted to Humboldt County for review and approval prior to their submission to any outside agencies. The Consultant shall submit copies of design calculations, quantity calculations, geotechnical reports, and any other reports prepared in connection with the project.

The Consultant shall prepare the bridge plans and specifications in an electronic format approved by the County. Upon final approval of the plans and specifications by the County, the Consultant shall submit the design plans and the specifications to the County both in hard copy and in electronic format.

All bridge plans and design calculations shall receive an independent detailed check. The independent consulting engineer shall provide a certification, stamped with the seal of a California registered civil engineer, that the plans and specifications prepared by the Consultant have been checked and conform to applicable state and federal standards.

DPW AGREEMENT NO. <u>594020</u>

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS AGREEMENT FOR PROFESSIONAL SERVICES

EXHIBIT "B"

SCOPE OF SERVICES



Detailed Scope for Pine Hill Road Bridge at Swain Slough

The following tasks will be performed by the Quincy Engineering Team for the design of a new bridge and approach roadways:

- Prepare Type Selection Report, Basis of Design and Project Report;
- Detailed plans, specifications, cost estimates and structural calculations pursuant to Caltrans methods;
- Independent check and PS&E certification;
- Geotechnical tests and a materials and geotechnical design report for the bridge and approach roadways in accordance with Caltrans Local Assistance Procedures Manual (LAPM);
- Hydraulic studies in accordance with Caltrans LAPM;
- Support Humboldt County Natural Resources Department's CEQA/NEPA Environmental Documents, technical studies and regulatory permits;
- Support Humboldt County's Right of Way Acquisition effort; and
- Coordinate with Humboldt County's Project Manager.

Quincy Engineering, Inc. personnel and its Project Team have provided plans, specifications, and estimates for more than 250 Federal Highway Bridge Program (HBP) projects throughout California. Therefore, the Team recognizes the importance of maintaining close coordination and cooperation with the County throughout the PS&E process. With this in mind, we have developed and utilize an efficient project approach that expedites this process. Tasks are defined and numbered in this discussion in accordance with the scope of work typical of HBP projects.

The Quincy Engineering design process is carried out under procedures that closely parallel those of local agencies and Caltrans. Our Management Plan outlines areas of responsibility for key people during the design process and describes Quality Assurance/Quality Control procedures for independent design checks and reviews, as well as the administrative guidelines dealing with signatures, approvals, and records.

Quincy Engineering will be utilizing the information, standards, and details for this project as provided by the following Caltrans documents/manuals:

- * Bridge Design
- Specifications Manual
- Bridge Design Details Manual
- Bridge Design Aids Manual
- * Bridge Design Practice Manual
- * Bridge Memos to Designers
- Standard Plans (2010)
- Standard Specifications (2010)

- Guide for the Submittal of Plans, Specifications and Estimates
- Externally Financed Projects Branch (EFPB) Information and Procedures Guide
- Standard Special Provisions
- Bridge Standard Detail Sheets
- CADD Users Manual of Instruction
- Local Assistance Procedures Manual

Quincy Engineering's detailed Scope of Work for this project is as follows:

PHASE 1- PRELIMINARY ENGINEERING

TASK 1 - PROJECT MANAGEMENT

Task 1.1 - Project Management

Quincy Engineering, Inc. (QEI) knows that successful projects require attention and must be managed towards success. The Project Management task includes management, tracking, and communication of project engineering design budget, administrative costs, project progress reporting, and coordination with the County, as well as other project stakeholders, and the entire Project Development Team (PDT).

QEI will develop, track, and lead the following project management tasks:

- Critical Path Schedule;
- Quarterly in person PDT meetings;
- Weekly teleconference meetings;
- Meeting Agendas, Minutes, and Action Item Summaries; and
- Monthly Invoices, Progress Reports, and Look-Ahead Summaries.

Task 1.2 - Project Review Meetings

A kick-off meeting will be held after the notice to proceed and will introduce the

Project Team, establish communication channels, set the project schedule, clarify the scope of work, and define the roles and responsibilities of the various Team members. Subconsultants will participate in Project Team meetings as needed, either by attending in person or by teleconference when appropriate.

Task 1 Products

- Final Scope/Schedule
- * Kick-off Meeting
- Project Meetings (4)
- Project Progress Reports
- Weekly Teleconference
 Meetings



TASK 2 - TOPOGRAPHIC SURVEY & STREAM CROSS-SECTIONS

QEI will review the detailed topographic survey that will be provided by the County for use during preliminary and final engineering. QEI will field verify critical physical features. We understand that the County will provide supplemental surveys if required. These may include slough cross sections, test borings & utility locations per USA markings, existing property boundary information, among others.

Task 2 Products

- Topographic Surveys & Mapping
- Supplemental Surveys (if needed by County)

TASK 3 - PRELIMINARY ENGINEERING

Task 3.1 - Basis of Design

A Basis of Design document will be developed to summarize previously prepared information for the project, key project development standards, traffic count data as provided by the County, an evaluation of bridge replacement options, traffic detour recommendations and confirmation of the scope of work required to complete PS&E. This document will establish the design criteria and layout the preliminary bridge alternatives and associated costs.

Task 3.2 - Preliminary Roadway & Detour Plans

One horizontal and three vertical alignment options utilizing the site topographic survey information. Right-of-way, safety, utility, environmental, and other potential impacts may determine that one vertical alignment is preferred over the other. Design speed and safety through the project limits will be considered. Discussions shall include design, right-of-way, environmental, economic, and safety issues. Preliminary Plan and Profile (Geometric Approval) drawings will be prepared for each alignment alternative. Each alternative will be clearly defined (e.g., Alternative A, B, C, etc.) and all aspects of each alternative will be discussed separately for ease of reference in the environmental documents. An "Engineers Opinion of Probable Construction Cost" will be prepared and will include appropriate contingency factors for this level of design. Other issues

Task 3 Products:

- Preliminary Plan & Profile Sheets
- Preliminary Roadway, Bridge & Project Cost Estimates

- 35% Plans of Preferred Alternative

affecting the final design such as right-of-way, construction staging and access, utility relocation, traffic detours, drainage, and design exceptions if needed will also be addressed.

Task 3.3 - Advanced Planning Studies & Type Selection Report

The appropriate bridge structure type will be dictated by public safety, traffic handling, constructability, site constraints, environmental and hydraulic concerns, right-of-way, and economics. The three Advance Planning Studies will be developed based on the site topographic information, preliminary geotechnical report, preliminary hydraulic analysis and the preliminary environmental findings.

Different foundation types will also be evaluated at this time if appropriate. The purpose of the APS will be to evaluate the feasible structure alternatives and develop a recommendation for the County's review and type selection approval. The APS & Type Selection Report will include:

- Feasible alternative bridge types, span arrangements, and construction methods.
- Each planning study will include plan, elevation, and section views.
- A description of the advantages and disadvantages of each alternative will also be developed so that the County can judge each alternative on its own merits.
- An "Engineer's Opinion of Probable Construction Cost" for each alternative will be developed.
- Our Team's recommendation as to which of the alternatives is the most appropriate for the site will also be updated.

Task 3.4 - Project Report

A Project Report will summarize the findings of the completed work-to-date. In summary, the report will include the following:

- Site visit (field investigation) notes
- Design Hydraulic Study
- Preliminary Geotechnical Report
- Preliminary right-of-way information
- Utility relocation/protection information
- Preliminary construction staging and detour
- Bridge APS drawings
- Bridge Type Selection Report
- APS discussion and evaluation
- Summary of environmental studies
- Construction cost estimate for each alternative
- Alignment and bridge type selection recommendation

- Basis of Design
- Bridge Advance Planning Studies
- Alternative Aesthetic Treatment
- Project Report

requirements

Preliminary alignment drawings

Schedule to complete final design and construction

35% Plans of the preferred alternative

This report will be presented to and discussed with the County in draft form. All comments will be addressed and incorporated into the final report. Final design will occur upon concurrence by the County and approval of the environmental documents by Caltrans/FHWA. The approved report will become the basis for the project's final

TASK 4 - HYDROLOGY & HYDRAULICS

For the Pine Hill Road Bridge (Bridge No. 04C-0173) over Swain Slough in Humboldt County (County), WRECO will be responsible for the Bridge Location Hydraulic Study and Bridge Design Hydraulic Study Report. WRECO will provide the Project Team's structural engineers with necessary hydraulic data for their bridge structure and foundation design.

Task 4.1 - Data Review

WRECO will review available data provided by the County and the Project Team. Key information to review will be the available hydrologic and hydraulic data for Swain Slough.

Task 4.2 - Field Reconnaissance

WRECO will conduct a field reconnaissance to assess the existing conditions in the vicinity of the Project site.

Task 4.3 - Hydrologic Analysis

WRECO's preliminary research of the Federal Emergency Management Agency's (FEMA) Flood Insurance Study (FIS) indicated that there was no detailed study available. WRECO will perform a hydrologic analysis using the USGS gaging station data and Unit Hydrograph Method.

<u>Task 4 Products:</u>

- Bridge Location Hydraulic Study Report (Oraft & Final)
- Bridge Design Hydraulic Study Report (Draft & Final)

Task 4,4 - Hydraulic Analyses

WRECO will perform hydraulic analyses to determine the design flow characteristics for the existing and proposed conditions. WRECO will perform the hydraulic analysis of Swain Slough using the U.S. Army Corps of Engineer's HEC-RAS computer model. WRECO will coordinate with the Project Team to obtain the surveyed slough crosssections to be used for the hydraulic analysis. WRECO will address the concern of sea level rise's impact on the proposed bridge.

Task 4.5 - Bridge Location Hydraulic Study

WRECO will perform a Bridge Location Hydraulic Study and conduct a floodplain risk assessment for the proposed Project. WRECO will prepare a Bridge Location Hydraulic Study Report, which will include the standard Summary of Floodplain Encroachment Form and technical discussions.

Task 4.6 - Scour Analysis & Countermeasures

WRECO will perform a bridge scour analysis to determine the scour potential for the proposed project per the methodology specified in the Federal Highway Administration's HEC-18 and HEC-23 Manuals. WRECO will make recommendations on the need for scour countermeasures.

Task 4.7 - Bridge Design Hydraulic Study Report

WRECO will prepare a Bridge Design Hydraulic Study Report to summarize the results from the hydraulic and bridge scour analyses and recommendation for bridge scour countermeasures. The report will include all of the detailed hydraulic model output.

Schedule for WRECO Deliverables

The Bridge Location Hydraulic Study Report delivery schedule will correspond with the overall environmental study delivery schedule. WRECO will attend one (1) project coordination meeting and participate in two (2) conference calls with the County and Project Team staff.

The draft Bridge Design Hydraulic Study Report will be submitted with the Project Team's Bridge Type Selection Report. The final Bridge Design Hydraulic Study Report will be submitted after the review comments on the draft report are addressed and the bridge design is finalized by the Project Team.

TASK 5 - GEOTECHNICAL INVESTIGATIONS & FOUNDATION REPORT

SHN will perform the Geotechnical Investigations.

Task 5.1 - Kick-off Meeting

SHN will attend a project kickoff and site review meeting with Quincy Engineering, Humboldt County and other project team members.

Task 5.2 - Preliminary Foundation Memorandum

SHN will prepare a Preliminary Foundation Memorandum as part of the Preliminary Engineering phase. The memorandum will be based on available subsurface data, as-built drawings or other site data, published geologic mapping and seismicity data, aerial photographs, preliminary project data and site review/reconnaissance. No subsurface exploration will be completed for this task. The Preliminary Foundation Memorandum will summarize anticipated earth materials and conditions based on reference data and site exposures, provide seismic input parameters consistent with current Caltrans practice, discuss roadway approach and channel bank conditions, slope stability, cut/fill slopes, excavation conditions, and discuss conditions and constraints on likely foundation types, including liquefaction potential.

Task 5.3 - Bridge Foundation Investigation

For Bridge Design, SHN will prepare a Foundation Report based on subsurface exploration and testing following the preliminary phase and bridge type selection. As indicated in the RFP, "the specific scope of work will depend on results of the preliminary phase, especially with respect to support locations, loads and approach configurations."

SHN proposes to define subsurface conditions at the Pine Hill Road bridge site by integrating Cone Penetration Testing (CPT) and machine borings in order to supplement existing subsurface data. Up to four CPT probes will be advanced, with one at each bridge corner being the initial targets. The probes will be advanced to a depth of at least 100 feet, assuming we do not meet practical refusal in the underlying Hookton Formation sediments. Based on the results of the CPT probes, SHN will advance a single deeper machine boring in order to acquire undisturbed (or relatively undisturbed) samples for laboratory testing. SHN is specifically not proposing to advance borings into the Swain Slough channel, as the geologic conditions beneath the channel should not vary significantly from the materials encountered to either side of the channel.

Exploration/testing in evaluation of approach roadway embankment/subgrade conditions will include at least one test boring to 5-10±ft depth at each approach.

The abutment borings will be located on existing roadway shoulders, near the proposed bridge corners. SHN expects these can be drilled within County right-of-way and that warning signs and traffic cones (without flaggers) will provide adequate traffic control. SHN assumes the County will provide all necessary rights of entry for our work. SHN will mark the drill locations and notify USA for location of buried utilities before starting field exploration, and will obtain a Humboldt County Environmental Health Department permit for boring. We assume that the County will work with the California Coastal Commission to determine whether a Coastal Development Permit is required, and obtain the CDP if necessary.

The scope of our proposed services specifically excludes sampling for or evaluation of the presence or distribution of hazardous materials. If hazardous materials are identified during field exploration, SHN will stop work at that location and notify the client; a modified scope of services may be required.

SHN will collect bulk and relatively undisturbed soil/rock samples from the borings for laboratory testing, and backfill the borings with cement grout per County requirements.

The following laboratory tests will be completed at SHN's accredited soils testing laboratory, as appropriate, on selected soil samples retrieved from the test borings. The actual testing program will depend on the materials encountered and the selected bridge type.

- Moisture Content/Unit Weight
- Unconfined compressive, direct shear and/or triaxial compression tests
- Consolidation
- Particle size analysis (including fines content)
- Atterberg limits
- Corrosivity (per Caltrans method: pH, sulfate, minimum resistivity, chloride)
- R-value for approach roadway pavement design

The Foundation Report will summarize the subsurface exploration and field and laboratory soils testing, include a "Log of Test Borings" drawing (suitable for inclusion with plans) and discuss encountered earth materials and foundation conditions. The foundation report will contain the following:

Project and Site Description with Vicinity Map

- Field and Laboratory Testing Programs
- Site Geology and Subsurface Conditions
- Scour (based on Hydrology/Hydraulics Report prepared by others and field observations)
- Corrosion Evaluation
- Seismic Recommendations with ARS curve per current Caltrans Seismic Design Criteria
- Liquefaction/lateral spread evaluation (based on site-specific field penetration data from CPT/borings and computer modeling)
- Settlement analysis
- Discussion of existing As-Built Foundation Data (if available)
- Foundation Recommendations per current Caltrans LRFD/WSD procedures, including foundation type, settlement, allowable axial and lateral loading (based on L-Pile analyses)
- Approach Fill Earthwork and pavement recommendations
- Construction Considerations
- "Log of Test Boring" drawings, including field and laboratory test results

SHN will submit a draft Foundation Report for review and comment prior to issuance of the final Foundation Report.

Preparation of the Preliminary Foundation Memorandum will commence immediately after the kick-off meeting and can be completed within six to eight (6-8) weeks. Completion of the field investigation and preparation of the Foundation Report will require approximately 12 weeks to complete, assuming the rights of entry are provided, a Coastal Development Permit is obtained (if necessary), and high (flood) water does not preclude site access.

Task 5 Products

- Prehrunary Foundation Memorandum (Draft & Final)
- Bridge Foundation Investigation Report (Draft & Final)
- Log of Test Borings Drawing

Task 6 Products:

Utility Letters

TASK 6 - UTILITY COORDINATION

QEI will perform early coordination with all utility owners. QEI will facilitate productive ongoing utility coordination with the following efforts:

- Obtain utility maps and identify conflicts with existing utilities
- Perform field review with USA markings following geotechnical borings
- Use Caltrans' utility letters to coordinate any required relocations
- Develop Caltrans Reports of Investigations and Notice to Owner
- Coordinate relocation schedules for timely completion

If needed, it is assumed that the utility owners will provide the design, construction costs, and construction of relocations and that potholing will not be required and considered optional if needed. Relocations cannot commence until any necessary right-of-way has been cleared for construction of the relocations.

PHASE 2- ENVIRONMENTAL DOCUMENT PREPARATION & PERMITTING SUPPORT

TASK 7 - ENVIRONMENTAL SUPPORT

Task 7.1 - Environmental Support

QEI will coordinate with Humboldt County Public Works and the Natural Resources Department (NRD) as necessary to obtain environmental clearance for the project. It is anticipated that QEI will work closely with the NRD staff and their consultants with the goal of obtaining the environmental clearance in an efficient manner. The sharing of concepts, potential impacts, and mitigation measures will be

Task 7 Products:

- APE Map
- CAD Files
- Additional information as Requested by NRD
- Permit Assistance

key in delivering this project. It is anticipated that QEI will develop the Area of Potential Effects mapping and provide NRD CAD files and plans for the various bridge alternatives as requested.

QEI will incorporate the mitigation measures identified in the environmental documents into the plans and specifications if possible. QEI will assist the NRD in developing the environmental permit applications by providing CAD files, technical language, or other information as requested.



TASK 8 - ENVIRONMENTAL MEETINGS

QEI will attend a kickoff meeting for the environmental phase of the project that will be held in Humboldt County. Preliminary designs for the bridge replacement project will be available for this meeting and will be discussed with the County and Caltrans. This meeting will facilitate open lines of communication between the Natural Resources Department, Caltrans, and QEI. QEI will also participate in weekly teleconference meetings with the County Natural Resources Department as required.

QEI will attend a scoping session with the regulatory agencies that will have jurisdiction over this project. QEI will assist Public Works and the Natural Resources Department in presenting the options for the bridge replacement project. The goal for this scoping session is to obtain preliminary acceptance from the regulatory agencies so that the formal study and permitting process is more efficient.

QEI will attend one Public & Agency meeting, assist in preparing necessary presentation materials, and assist in the

preparation of handouts for the two meetings. QEI will also assist in preparing exhibits to illustrate design concepts and project features. QEI will assist with the preparation of fact sheets, agendas, comment sheets, and other print materials as requested by the County.

TASK 9 - RIGHT-OF-WAY ASSISTANCE

QEI will delineate the final right-of-way and/or temporary construction easement needs for the County. The County will be responsible for providing all necessary land surveys and securing the right-of-way and/or easements.

Task 8 Products:

- Environmental Kickoff Meeting (1)
- Environmental Scoping Session (1)
- Public & Agency Meeting (1)
- Weekly Teleconference Meetings with County Staff

Task 9 Products:

Final Right-of-Way Delineation

PHASE 3- FINAL DESIGN

TASK 10 - FINAL DESIGN & DETAILING (PROJECT REPORT AND PS&E)

Task 10.1 - Design & Submittal of 65% Plans (Unchecked Details)

<u>Bridge Design:</u> The final bridge designs will be performed in accordance with Caltrans *Bridge Design Specifications* and other Caltrans design manuals. Design will be based on the "Load Resistance Factor Design" method, with TL-93 and permit truck design live loads. Seismic design will be performed in accordance with the Caltrans *Seismic Design Criteria*, *Version 1.6*, the latest ARS curve updates (2010) and information available from Caltrans Earthquake Research. Computer analysis and design programs used are "state-of-the-art" for bridge design.

Approach Roadway Design: The final approach roadway design (Geometric Approval Drawings) will be completed in accordance with County Standards, AASHTO's "A Policy on Geometric Design of Highways and Streets", Caltrans Highway Design Manual, and Caltrans Standard Specifications. Final grading and drainage details will be developed as well as new/existing roadway conformance details, as required. Cross-sections will be developed on approximately 50-foot intervals.

Other: A detour route and project signing plan will be developed as well as bridge and roadway embankment protection (rock slope protection) details. The preliminary estimate will be calculated in accordance with Caltrans' practice and segregated into pay items. The estimate will show quantities, unit costs, and a project cost summary.

The plan sheets will be prepared in CADD according to the County's and Caltrans' drafting standards. Plans will be prepared in English units and will be consistent with Caltrans' Standard Plans. All plans will be signed by the civil engineer (registered in the state of California) in responsible charge of the design, in accordance with the Local Programs Manual. The project is expected to consist of a single span concrete bridge, and is expected to include the following 27 plan sheets:

Roadway Plans (total 15)

Title Sheet and Location Map

Typical Section

Layout & Profile Sheet Construction Details (2) Water Pollution Control

Contour Grading Drainage Plan

Drainage Profile Utility Plan

Construction Area Signs

Detour Plan (2)

Pavement Delineation & Sign Plan

Quantities Sheets

Bridge Plans (total 12)

General Plan
Deck Contours
Foundation Plan
Abutment 1 Layout
Abutment 2 Layout

Abutment Details No.1
Abutment Details No.2

Typical Section
Miscellaneous Details

Barrier Details

Log of Test Borings (2)

Open communication between the County's staff and the Quincy design staff will provide both parties with the opportunity for input during the plan preparation stage. This will ensure that both roadway and bridge design parameters are adequately addressed. A meeting will be held upon completion of the unchecked bridge details to discuss both the bridge and the roadway plans. (This should save considerable time in the County's review of the Draft PS&E because most of the major issues will have been previously discussed and addressed.)

The 65% submittal shall consist of the following:

- Two (2) sets of full sized 22"X34" prints;
- Three (3) bound hard copies, one (1) unbound hard copy and one (1) electronic copy of 11"x17" prints;
- Three (3) copies of the Engineer's Estimate;
- Two (2) copies of the Foundation and Hydraulics Reports; and
- County's "red-lined" set of plans from the previous submittal.
- Specifications outline

Task 10.2 - Independent Design Check

Once the 65% plans have been submitted, an independent check will commence. A licensed engineer not previously involved with the project will review the plans, design calculations, and geotechnical reports provided by QEI. A comprehensive calculation package of the bridge and foundation systems will be prepared. If discrepancies are found between the calculations and plans, the two engineers will work to come to an agreement on required modifications, which QEI will make to the plans prior to the 100% submittal to Humboldt County.

Task 10.3 - Specifications

Our Team's special provisions submitted to the County shall be limited to those that deal with materials, order of work, and bridge/roadway items of work. We will develop project special provisions based on Caltrans Standard Special Provisions (SSP) (2010, Sections 8, 9 and 10) and County-provided boilerplate Special Provisions (CSP).

Task 10.4 - Construction Quantities & Estimate

Construction quantities and the Team's estimate of construction costs (Q and E) will be developed. Quantities will be calculated in accordance with Caltrans' practice and segregated into pay items. The estimate will show quantities, unit costs, and a project cost summary.

Task 10.5 - Quality Control & Constructibility Review

As an integral part of the Quincy QA/QC Program, a senior level engineer will review the entire draft PS&E (100% PS&E) package for uniformity, compatibility, and constructibility as well as conformance with the Federal HBP requirements.

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

Task 10.6 - Submittal of 100% (Oraft) PS&E

After the QA/QC review has been completed and the plans, specifications, and estimate have been updated, the Draft PS&E along with design, check, and quantity calculations will be submitted to the County for their review.



The 100% submittal shall consist of three (3) bound hard copies, one (1) unbound hard copy, and one (1) electronic copy of the following:

- Checked complete 22"x34" replacement structure/roadway and channel plans;
- County Boiler Plate and Special Provisions;
- Detailed construction estimate and working day schedule; and
- County's "red-lined" set of 65% plan comments.

Upon receiving review comments from the County and other agencies, each comment will be reviewed, discussed, and addressed in writing. All conflicts will be resolved, as necessary and appropriate modifications will be made to the plans, specifications, and estimate. Full-sized and halfsized contract plans as well as hard copy and computer files (MS Word format) of special provisions (for bidding purposes) will be provided. The County will compile and duplicate the actual bid documents for advertising.

Task 10.7 - Oraft 100% PS&E

Quincy Engineering will submit this set to the Caltrans Local Assistance Engineer. The submittal set will be stamped and signed by the project engineer and will include five sets of design plan prints (22"x34"), special provisions, three sets of quantity calculations, five copies of the cost estimates, and two copies of the independent check calculations.

Task 10.8 - Independent Final PS&E Review

An independent final review of the PS&E package will be checked for conformance to specific state and federal design specifications. Our review will address constructability concerns as well as provide a review of the project cost estimates.

TASK 10.9 - Final PS&E (Final Submittal)

The final plans, specifications and estimate will be submitted to include three (3) bound hard copies, one (1) unbound hard copy, and one (1) electronic copy of the following:

- Final design plans with cover sheet stamped and signed by the project engineer in both full- and half --sizes (11"x17") with the cover printed on mylar and the rest printed on vellum);
- One original stamped and wet-signed signature page of the Special Provisions;
- Contract Specifications;
- Final design and design check calculations;
- Quantity and quantity check calculations;
- Working day schedule;
- County's "red-lined" set of 100% plan comments;
- Final Engineer's Estimate;
- Resident Engineer's File & 4-scale drawing produced in the County's format.

PHASE 4- BID PHASE ASSISTANCE

TASK 11 - BIDDING & POST-AWARD ASSISTANCE

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

Task 11.1 - Bidding Assistance

QEI will provide the following bidding assistance services for Humboldt County Public Works:

- Attend pre-bid and pre-construction meetings and answer bidder questions; and
- Respond to Requests for Information and prepare addenda, as needed.

Task 10 Products.

- Bridge & Roadway Design
- 65% Road & Bridge Plans
- 65% Road & Bridge Check Calculations
- Independent Design Check
- Comment Summary Forms
- Specifications
- Roadway & Structure Quantities
- Final Design Calculations
- Construction Cost Estimate
- QA/QC Checklist
- Draft 100% PS&F
- Independent Final PS&E Review
- 100% Final PS&E
- " REPending File

Task 11 Froducts:

- Pre-Bid & Pre-Construction Meeting Attendance (2)
- Plan Review
- Response to RFIs & CCOs
- Shop Orawing Review (Optional)
- Site Inspection (Optional)



Task 11.2 - Construction Design Assistance (Optional)

QEI will provide the following construction support services for Humboldt County Public Works if requested:

- Review and provide comments on shop plan drawings;
- Construction site observations; and
- Develop updated plans or plan revisions as needed.

PHASE 5- ENVIRONMENTAL AND PERMITTING SUPPORT

TASK 12 - ENVIRONMENTAL AND PERMITTING SUPPORT

Included in Task 7.1

DPW AGREEMENT NO. <u>594020</u>

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS EXHIBIT "C"

CONSULTANTS FEE SCHEDULE



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Pine Hill Bridge Hours

DPW ACREEMENT NO. 594020

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Cost Proposal Summary

Pine Hill Bridge Replacement Project

Project:

Project Name: Pine Hill Bridge over Swain Slough

Project No:

JP1510 2/21/2012

Date:

Direct Labor: \$76,356.96 Project Escalation (0% per year): \$0.00 Overhead (1.66): \$127,057.98

Subtotal:

\$203,414.94

\$290,000.00

\$290,000.00

Subconsultant Costs:

(1). WRECO (uDBE):

TOTAL Estimate=

5.3% uDBE \$15,430.00 \$44,955.00

(2). SHN:

Subconsultant Subtotal: \$60,385.00 Other Direct Costs: 5200 \$2,860.00 Travel @ \$0.550 per mi. Lodging/Meals \$150 \$2,100.00 Printing: Color Overnight deliveries 10000 0.07 \$700.00 8 @\$24.82/ea \$198.56 C. Direct Cost Subtotal: \$5,858.56 \$203,414.94 Fixed fee (10.0%): \$20,341.49 \$60,385.00 Fixed fee (0.0%): \$0.00 \$5,858.56 Fixed fee (0.0%): \$0.00

Notes

Labor Costs to be invoiced based on actual hourly rate plus overhead plus fee.

Quincy Engineering, Inc.

EXHIBIT C

DPW AGREEMENT NO. . 594020

Year 2012 Hourly Rates

Rates are effective January 1, 2012 through December 31, 2012

Labor by Classification	Hourly Rate
Principal Engineer/ Project Manager	\$50-80
Senior Engineer / Project Engineer Resident Engineer / Survey Manager	\$44-78
Senior Engineer / Design Engineer	\$40-73
Associate Engineer / Bridge Representative	\$35-68
Assistant Engineer Assistant Surveyor	\$25-46
Engineering Assistant/Technician Surveying Assistant/Technician	\$16-33
Engineering Detailer/ Draftsman	\$20-46
Drafting Technician	\$15-30
Administrative Assistant	\$15-36
Office Support Staff	\$10-26
Overhead	166.4%

Rate
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\$150 per day
\$2000 per month
\$1400 per month
\$100 per month
\$60 per month
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Note: Labor Costs to be invoiced based on actual hourly rate plus overhead plus fee. Other Direct Costs to be invoiced at actual cost plus fee.

AGREEMENT FOR PROFESSIONAL SERVICES EXHIBIT "D"

INSURANCE REQUIREMENTS

- I. THIS CONTRACT SHALL NOT BE EXECUTED BY COUNTY and the CONSULTANT is not entitled to any rights, unless certificates of insurances, or other sufficient proof that the following provisions have been complied with, and such certificate(s) are filed with the Clerk of the Humboldt County Board of Supervisors.
- II. Without limiting CONSULTANT'S indemnification obligations provided for herein, CONSULTANT shall and shall require any of its subcontractors to take out and maintain, throughout the period of this Agreement and any extended term thereof, the following policies of insurance placed with insurers authorized to do business in California and with a current A.M. Bests rating of no less than A:VII or its equivalent against injury/death to persons or damage to property which may arise from or in connection with the activities hereunder of CONSULTANT, its agents, officers, directors employees, licensees, invitees, assignees or subcontractors:
 - 1. Comprehensive or Commercial General Liability Insurance at least as broad as Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001), in an amount of \$2,000,000 per occurrence for any one incident, including, personal injury, death and property damage. If a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate shall be twice the required occurrence limit.
 - 2. Automobile and liability coverage in the minimum amount of one million dollars (\$1,000,000) combined single limit coverage including, but not limited to, owned, non-owned, leased and hired vehicles and trucks. Said coverage shall be at least as broad as Insurance Service Office Form Code 1 (any auto).
 - Workers Compensation Insurance compensation coverage, if required by California Law, and in accordance with the statutory limits set forth therein. Said policy shall contain or be endorsed to contain a waiver of subrogation against COUNTY, its officers, agents, and employees
 - 4. Employers Liability coverage in a minimum amount of one million dollars (\$1,000,000) per accident for bodily injury and disease.
 - 5. Professional liability insurance/errors and omission coverage in an amount no less than \$2,000,000 combined single limit (CSL). If insurance is written on a claim made basis, CONSULTANT agrees to maintain such insurance in effect for at least three (3) years following completion of performance under this Agreement.
 - 6. Insurance Notices:

County of Humboldt Attn: Risk Management 825 5th Street, Room 131 Eureka, CA 95501

- III. <u>Special Insurance Requirements</u>. Said policies shall unless otherwise specified herein be endorsed with, the following provisions:
 - 1. The Comprehensive General Liability Policy shall provide that the COUNTY, its officers, officials, employees and volunteers, are covered as additional insured for liability arising out of the operations performed by or on behalf of CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to the COUNTY, its officers, officials, employees, and volunteers. Said policy shall also contain a provision stating that such coverage:
 - a. Includes contractual liability.
 - b. Does not contain exclusions as to loss or damage to property caused by explosion or resulting from collapse of buildings or structures or damage to property underground, commonly referred to "XCU Hazards".
 - c. Is primary insurance as regards to County of Humboldt.
 - d. Does not contain a pro-rata, excess only, and/or escape clause.
 - e. Contains a cross liability, severability of interest or separation of insureds clause.
 - 2. The policies shall not be canceled, non-renewed or materially reduced in coverage without thirty (30) days prior written notice being provided to COUNTY and in accordance with the Notice provisions set forth under Section 13. It is further understood that CONSULTANT shall not terminate such coverage until it provides COUNTY with proof satisfactory to COUNTY that equal or better insurance has been secured and is in place.
 - 3. The inclusion of more than one insured shall not operate to impair the rights of one insured against another insured, and the coverage afforded shall apply as though separate policies had been issued to each insured, but the inclusion of more than one insured shall not operate to increase the limits of the insurer's liability.
 - 4. For claims related to this project, the CONSULTANT'S insurance is primary coverage to the COUNTY, and any insurance or self-insurance programs maintained by the COUNTY are excess to CONSULTANT'S insurance and will not be called upon to contribute with it.
 - Any failure to comply with reporting or other provisions of the Parties, including breach
 of warranties, shall not affect coverage provided to COUNTY, its officers, officials,
 employees, and volunteers.
 - 6. CONSULTANT shall furnish COUNTY with certificates and original endorsements effecting the required coverage prior to execution of this Agreement by COUNTY. The endorsements shall be on forms as approved by the COUNTY'S Risk Manager or COUNTY Counsel. Any deductible or self-insured retention over \$100,000 shall be disclosed to and approved by COUNTY. If CONSULTANT does not keep all required policies in full force and effect, COUNTY may, in addition to other remedies under this Agreement, take out the necessary insurance, and CONSULTANT agrees to pay the cost of said insurance. COUNTY is also hereby authorized with the discretion to deduct the cost thereof from the monies owed to CONSULTANT under this Contract.
 - 7. COUNTY is to be notified immediately if twenty-five percent (25%) or more of any required insurance aggregate limit is encumbered and CONSULTANT shall be required to purchase additional coverage to meet the aggregate limits set forth above.

IV. HOLD HARMLESS/INDEMNIFICATION CLAUSE:

- a. Consultant shall hold harmless, defend and indemnify County and its officers, officials, employees and volunteers from and against all claims, damages, losses and expenses including attorney fees arising out of the performance of the work described herein, caused in whole or in part by any willful misconduct, negligent act or omission of the Consultant, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except where caused by the active negligence, sole negligence, or willful misconduct of the County.
- b. Acceptance of insurance, if required by this Agreement, does not relieve CONSULTANT from liability under this indemnification clause. This indemnification clause shall apply to all damages or claims for damages suffered by CONSULTANT's operations regardless if any insurance is applicable or not.

EXHIBIT "E"

DPW AGREEMENT NO. 594020

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29 DEBARMENT AND SUSPENSION CERTIFICATION

The ENGINEER and Subconsultant under penalty of perjury, each certifies that, except as noted below, he/she or any person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency with the past 3 years;
- · does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgement rendered against it by a
 court of competent jurisdiction in any matter involving fraud or official misconduct
 within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exemptions will not necessarily result in denial of award, but will be considered in determining ENGINEER'S responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Note: Providing false information may result in criminal prosecution or administrative sanctions.

The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall constitute signature of this Certification.

signature of ENGINEER

EXHIBIT "F"

DPW AGREEMENT NO. _594020

NON-LOBBYING CERTIFICATION

I HEREBY CERTIFY that I am the_	TRAVECT	- MANAGER	and duly
authorized representative of the firm of	of QUINCY	EVANCERING	INC. and that neither
nor the above firm I hereby represent l	has:		

- (A) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above ENGINEER) to solicit or secure this agreement:
- (B) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the agreement; or
- (C) paid, or agreed to pay, to any firm, organization, or person (other than a bona fide employee working solely for me or the above ENGINEER) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the agreement.

I acknowledge that this certificate is to be furnished to the California Department of Transportation in connection with this agreement involving participation of Federal and/or State funds, and is subject to applicable State and Federal laws, both criminal and civil.

FIRM: GUNCY ENGINEERING INC.
BY: July of Little
TITLE: PRINCIPAL ENGINEER
DATE: 2-20-/2

EXHIBIT 10-O1 Local Agency Proposer UDBE Commitment (Consultant Contracts)

NOTE: PLEASE REFER TO INSTRUCTIONS ON THE REVERSE SIDE OF THIS FORM							
LOCALAGENC	LOCAL AGENCY: Humboldt County Public Works LOCATION Eureka, California						
PROJECT DESC	RIPTION: Design of Pine Hill Road	l Bridge (04C-0173)	Over Swain Slough				
PROPOSAL DAT	re:January 13, 2012	**************************************	The same of the sa				
PROPOSER'S NA	AME: Quincy Engineering, Inc.						
CONTRACT UD	BE GOAL (%): 0.9%			-			
WORK ITEM NO.	DESCRIPTION OR SERVICES TO BE SUBCONTRACTED (or contracted if the proposer is a UDBE)	UDBE CERT NO. AND EXPIRATION DATE	NAME OF EACH UDBE (Must be certified at the time proposals are due - include UDBE address and phone number)	PERCENT PARTICIPATION OF EACH UDBE			
Task 4	Hydrology/Hydraulics	8ART #30066 Exp. 8/13	WRECO (UDBE) 1243 Alpine Road, Suite 108 Wainut Creek, CA 94596 (925) 941-0017	5.3%			
				4100000			
				make the second control of the second contro			
	The second secon						
For Local A	gency to Complete:						
Local Agency Prop	osal Number: <u>594020</u>		Total Claimed UDBE				
Federal-Aid Project Number: BRLO-5904(112)		Commitment	<u>5.3</u> %				
Federal Share: 10	<u>00%</u>						
Proposal Date: Jar	nuary 13, 2012						
			Signature of Propager	at a			
	lies that the UDBE certifications have been older and accurate/unless noted otherwise.	verified and all	January 12, 2012 (916) 368-9181 Date (Area Code) Tel. No.				
thris Whitworth		wer 16 81412011	James L. Foster, Jr., P.E. Person to Contact (Please Type or Print)				
rini Name Local Agency Repre	Signature Septetive	Date					
(Area Codo) Telepho	ne Number: (707) 445-7377		Local Agency Proposer UDBE Commitment (Rev 6/27/09)	(Consultant Contracts)			

EXHIBIT 10-O2 Local Agency Proposer DBE Information (Consultant Contracts)

NOTE	: PLEASE REFER TO INST	RUCTIONS ON	THE REVERSE SIDE O	FTHIS FORM	
LOCALAGENC	Y: Humboldt County Public Wor	ks_ LOCATIO	N: Eureka, California	PROJECT	
DESCRIPTION:	Design of Pine Hill Road Bridge (04C-0173) Over Sw	aîn Slough		
TOTAL CONTRA	ACT AMOUNT (\$): Cost To Be Dete	rmined			
PROPOSER'S NA	ME: Quincy Engineering, Inc.				
WORK ITEM NO.	DESCRIPTION OR SERVICES TO BE SUBCONTRACTED (or contracted if the proposer is a DBE)	DBECERT NO. AND EXPIRATION DATE	NAME OF EACH DBE (Must be certified at the time proposals are due - include DBE address and phone number)	DOLLAR AMOUNT OF EACH DBE	
Task 4	Hydrology/Hydraulics	BART #30066 Exp. 8/13	WRECO (UDBE) 1243 Alpine Road, Suite 108 Walnut Creek, CA 94596 (925) 941-0017	\$15,430.00	
Local Agency Cont			Total Claimed DBE Participation	\$15,430.00 \$	
information is comp	Clark In		Signature of Proposer January 12, 2012	(916) 368-9181	
Print Name Local Agency Repre	Signature Signature	Date	Date (Area C	ode) Tel. No.	
(Acre Code) Telepho	me Number: (707) 465-7377		James L. Foster, Jr., P.E.		
For Caltrans	Review:		Person to Contact (Please	Type or Print)	
Print Name Caltrans District Loc	Signature cal Assistance Engineer	Date	Local Agency Proposer DBE informati (Rev 6/27/09)	on (Consultant Contracts)	

Distribution: (1) Copy - Fax or scan a copy to the Caltrans District Local Assistance Engineer (DLAE) within 15 days after contract execution.

Failure to scan a copy to the DLAE within 15 days after contract execution may result in deobligation of funds for this project. (2)

Original - Local agency files