

**NINTH AMENDMENT TO AGREEMENT FOR PROFESSIONAL SERVICES
FOR DESIGN ENGINEERING AND PROJECT DEVELOPMENT FOR PINE HILL ROAD
BRIDGE (04C-173) OVER SWAIN SLOUGH
Project Number: 594020**

This Ninth Amendment to the Agreement for Professional Services dated April 3, 2012, as previously amended, by and between the County of Humboldt, a political subdivision of the State of California, hereinafter referred to as "COUNTY," and Quincy Engineering, Inc., a California corporation, hereinafter referred to as "CONSULTANT," is entered into this 10 day of September, 2019.

WHEREAS, on April 3, 2012, COUNTY and CONSULTANT entered into an Agreement for Professional Services regarding the provision of professional design engineering and project development services pertaining to the replacement of the Pine Hill Road Bridge over Swain Slough ("Professional Services Agreement"); and

WHEREAS, COUNTY and CONSULTANT subsequently amended the Professional Services Agreement on January 3, 2013, August 13, 2013, August 21, 2013, April 18, 2014, June 25, 2014, July 21, 2015, June 21, 2016 and December 5, 2017; and

WHEREAS, COUNTY and CONSULTANT now desire to further amend the Professional Services Agreement to extend the term thereof, expand the scope of services set forth therein and increase the maximum amount payable thereunder.

NOW, THEREFORE, the parties mutually agree as follows:

1. Article II – "Services of Consultant" of the Professional Services Agreement is hereby amended to read as follows:

**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," as amended on August 13, 2013, August 21, 2013, April 18, 2014, July 21, 2015, December 5, 2017 and September 10, 2019, which are 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 nature and purpose of the professional services set forth in Exhibit "A" and Exhibit "B," as amended on August 13, 2013, August 21, 2013, April 18, 2014, July 21, 2015, December 5, 2017

and September 10, 2019, 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 a form that is 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 that is 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 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 COUNTY's reuse of any materials prepared pursuant to this Agreement 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 CONSULTANT shall uphold claims of performance contained within the proposal submitted to COUNTY as part of the consultant selection process.
- 2.13 CONSULTANT shall perform the work contemplated with the resources available within its own organization and no portion of the work pertinent to this Agreement shall be subcontracted without written authorization from COUNTY, except that which is expressly identified in the CONSULTANT's Cost Proposal.

- 2.14 Any subcontract in excess of Twenty-Five Thousand Dollars (\$25,000.00) entered into as a result of this Agreement shall contain all the provisions stipulated in this Agreement 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.
2. Article IV – “Time of Completion” of the Professional Services Agreement is hereby amended to read as follows:

**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 Agreement.
- 4.02 CONSULTANT agrees to complete and deliver to COUNTY all work products associated with Exhibit “B,” as amended on August 13, 2013, August 21, 2013, April 18, 2014, July 21, 2015, December 5, 2017 and September 10, 2019, including final contract plans, specifications and cost estimates by December 31, 2021, unless extended by mutual agreement of both parties.
- 4.03 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 Thirty (30) days following receipt of bids by COUNTY unless extended by mutual agreement of both parties.
- 4.04 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.
- 4.05 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 CONSULTANT has been delayed. The COUNTY retains the right to cancel this Agreement if said delay affects project funding.
3. Article V – “Payment for Services” of the Professional Services Agreement is hereby amended to read as follows:

**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 Exhibit “C,” as amended on August 13, 2013, August 21,

2013, April 18, 2014, July 21, 2015, December 5, 2017 and September 10, 2019, which is 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 Six Hundred Ninety-One Thousand One Hundred Thirty Dollars (\$691,130.00) for the work set forth in Article II, as described in Exhibit "B" and Exhibit "C," as amended on August 13, 2013, August 21, 2013, April 18, 2014, July 21, 2015, December 5, 2017 and September 10, 2019.
 - 5.03 Payments to CONSULTANT shall be based upon itemized invoices submitted by CONSULTANT. Invoices shall identify all applicable current costs and summarize all previous 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 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 Twenty-Five Thousand Dollars (\$25,000.00) entered into as a result of this Agreement shall contain the provisions of this Article.
 - 5.08 If COUNTY substantially alters the scope of work, the maximum fee may be changed by Supplemental Agreement.
4. Exhibit B – "Scope of Services" of the Professional Services Agreement, as previously amended on August 13, 2013, August 21, 2013, April 18, 2014, July 21, 2015 and December 5, 2017, is hereby amended to include the additional services set forth in Attachment A – "Scope of Additional Services," which is attached hereto and incorporated herein by reference.
 5. Exhibit C – "Consultant's Fee Schedule" of the Professional Services Agreement, as previously amended on August 13, 2013, August 21, 2013, April 18, 2014, July 21, 2015 and December 5, 2017, is hereby amended to include the additional costs set forth in Attachment B – "Cost Proposal Summary," which is attached hereto and incorporated herein by reference.
 6. Except as modified herein, the Professional Services Agreement dated April 3, 2012, as previously amended, shall remain in full force and effect. In the event of a conflict between the provisions of


this Ninth Amendment and the original Professional Services Agreement, or any prior amendments thereto, the provisions of this Ninth Amendment shall govern.

IN WITNESS WHEREOF, the parties hereto have entered into this Ninth Amendment as of the effective date indicated above.

*TWO SIGNATURES ARE REQUIRED FOR CORPORATIONS:
(1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; AND
(2) SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.*

QUINCY ENGINEERING, INC.:

By:  _____ Date: 8-8-19
Name: Chris Rajaram
Title: CEO

By:  _____ Date: 8-8-19
Name: Celeste Alvarez
Title: Corporate Secretary

COUNTY OF HUMBOLDT:

By:  _____ Date: 9/10/19
Rex Bohn
Chair, Humboldt County Board of Supervisors

INSURANCE REQUIREMENTS APPROVED:

By:  _____ Date: 9/16/19
Risk Management

LIST OF ATTACHMENTS:

- Attachment A – Scope of Additional Services
- Attachment B – Cost Proposal Summary

Attachment A – Scope of Additional Services



July 26, 2019

Tony Seghetti, Deputy Director
Humboldt County Department of Public Works
1106 2nd St
Eureka, CA 95501

Re: DESIGN ENGINEERING AND PROJECT DEVELOPMENT FOR PINE HILL ROAD BRIDGE (04C-0173)
OVER SWAIN SLOUGH FEDERAL PROJECT NO. BRL0-5904 (112)- Amendment 9 Request

Dear Mr. Seghetti:

As discussed, attached are the scope and cost for the various additional and extra work items required for the completion of the project development phase of this project. Project changes are required to:

- Secure project acceptance by the Coastal Commission by, among other things, removing RSP at the abutments, installing permanent sheet pile walls, changes to roadway drainage, updating environmental reports including the wetlands delineation report and conducting a farmland/wetland assessment.
- Reduce the significant public hardship due to road closure created by the long soil settlement surcharge time (6 months) before bridge construction can begin.
- Modify the abutment foundations to eliminate battered piles to accommodate removal of soil surcharge.
- Change the bridge barrier rail to meet the MASH compliance requirements per Caltrans.
- Implement Tsunami design requirements and details

If you have any questions or comments on this proposed amendment, please me at (916) 368-9181.

Sincerely,
Quincy Engineering, Inc.

A handwritten signature in black ink, appearing to read "James L. Foster", is written over a light blue horizontal line.

James L. Foster, P.E.
Project Manager

Attachment

developing YOUR vision delivering YOUR project

Amendment 9 Work Plan

Exhibit B9

DPW AGREEMENT NO. 594020

Amendment 9 Scope for Pine Hill Road Bridge at Swain Slough

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

- Additional project management, project coordination and project team meetings for agency, right of way and project design issue resolution.
- Additional bridge design and analysis as a result of the settlement surcharging changes, recent tsunami design loading requirements, guard railing MASH compliance requirements per CT.
- Additional bridge, roadway, sheet pile scour protections and drainage design modifications resulting from the Coastal Commission comments.
- Additional RW and Utility coordination with the Humboldt County Community Services District (HCCSD) regarding waterline relocation required for bridge replacement.

The additional and supplemental work required is described below in accordance with the original contract scope of work.

PHASE 1- PRELIMINARY ENGINEERING

TASK 1 - PROJECT MANAGEMENT

Task 1.1 - Project Management

Additional Project Management tasks are required due to an additional three-year project delay resulting from external agency input, utility company input, and property owner negotiations. This includes project 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).

This includes the following project management tasks:

- Critical Path Schedule updates;
- In person PDT meetings (total 2);
- Monthly teleconference meetings (12);
- Meeting Agendas, Minutes, and Action Item Summaries; and
- Monthly Invoices, Progress Reports, and Look-Ahead Summaries.

Task 1 Products:

- Schedule Updates
- Project Meetings (2)
- Project Progress Reports
- Monthly Teleconference Meetings (12)

TASK 5 - GEOTECHNICAL INVESTIGATIONS & FOUNDATION REPORT

Crawford and Associates (CAInc) will conduct a peer review of the Geotechnical Investigations and reports completed to date. The County believes that the public hardship due to road closure created by the extensive approach roadway settlement period of 6 months before bridge construction begins warrants a geotechnical peer review. The peer review will evaluate the geotechnical information and soil properties and evaluate the anticipated settlement, surcharge requirements, additional pile loading and tip elevations if a surcharge and settlement period is not implemented. The peer review will be with respect to: evaluation of liquefaction potential; ground settlement due to consolidation and secondary seismic effects including slope instability; evaluation of liquefaction potential; lateral spreading; ground settlement due to consolidation and secondary seismic effects; and steel pipe (PP24x0.75) pile recommendations (to include axial/lateral design pile tips, pile down drag, settlement waiting period, pile acceptance criteria and construction considerations) included in the cited report/memorandum. CAINc is also requested to provide drivability analysis for the steel pipe piles and geotechnical design parameters for use in permanent sheet pile wall design in front of abutments, in lieu of Rock Slope Protection.

CAInc will use the existing boring data, laboratory test data and seismic design data presented in the SHN report to evaluate and analyze the geotechnical project elements identified above. No additional field exploration, drilling or laboratory testing is proposed/included for this review. CAINc will use published correlations based on existing data to develop geotechnical parameters for our analysis, as needed. A drivability analysis will also be completed for the proposed pipe piles using the existing data.



CAInc will prepare a peer review letter that summarizes the results of our review/evaluation/analysis and provides an opinion on the adequacy of the geotechnical recommendations provided by SHN. Revised/alternative geotechnical recommendations will be presented if/as needed based on the results of our evaluation. The results of the pile drivability analysis will be included in the letter. Allowance is also made for one meeting to review/discuss the results of the peer review.

TASK 6 - UTILITY COORDINATION

QEI will perform additional coordination with the HCSD utility owners regarding the relocation of the existing water supply line currently attached to the existing bridge. This coordination includes evaluation and review of the horizontally directionally drilled (HDD) utility relocations, evaluation of the locations, assessment of the impacts to the bridge, roadway, right of way, and project design and construction schedule. We understand the utility will not be attached to the bridge.

PHASE 2- ENVIRONMENTAL DOCUMENT PREPARATION & PERMITTING SUPPORT

TASK 7 - ENVIRONMENTAL SUPPORT AND PERMITTING

Task 7.1 - Environmental Support

QEI and Stantec (formerly NSR) will coordinate with Humboldt County Public Works and the Natural Resources Department (NRD) as necessary to obtain environmental project permits. The Coastal Commission has recently indicated that updates are needed to the Wetland and Biological reports for permit acquisition. QEI will assist NRD by revising the mapping depicting the environmental habitat area types, impacted area designations, and mitigation areas. Additionally, existing impact area and proposed mitigation area calculations will be provided.

Task 7 Products:

- CAD files of Mitigation Area mapping and area calculations including:
 - Existing habitat
 - Proposed mitigation area and type
 - Proposed debris removal type and limits

Based on Stantec's understanding of the proposed project and guidance provided by Quincy and the County during the June 20, 2019 conference call, Stantec's scope of work is as follows:

Task 7.1.1 – Project Management/Coordination

Under this task, Stantec will maintain an open line of communication with Quincy and the County (as appropriate) throughout the duration of the project. This will be accomplished through a combination of up to four (4) one-hour conference calls, informal communications (e.g., e-mails), and submittals of pertinent written correspondence.

Deliverables: Meeting notes; emails summarizing conversations; project updates.

Meeting(s): Up to four (4) one-hour conference calls.

Task 7.1.2 – Update Wetland Delineation Reports

Stantec will update the September 2013 wetland delineation reports (California Coastal Commission [CCC] and U.S. Army Corps of Engineers [Corps]), as needed, to reflect current project site conditions. Stantec will conduct a site visit to update boundaries of jurisdictional waters (CCC and Corps) based on changes in site conditions and/or changes due to more recent Corps guidance for delineating jurisdictional waters. New data forms will be completed for representative features and previously delineated feature boundaries will be revised as needed. The final products will be brief memos, one for the CCC and one for the Corps, with the updated jurisdictional waters mapping and data sheets provided as an appendix to each memo. Stantec assumes that a site visit with the Corps will not be required to support the re-verification process.

Deliverables: Electronic files (PDF) of draft and final addendums.

Meeting(s): N/A

Amendment 9 Work Plan

Exhibit B9

DPW AGREEMENT NO. 594020

Task 7.1.3 – Update Botanical Survey

Stantec will conduct a site visit to review the results of the 2013 botanical survey, to verify presence/absence of eel grass (*Zostera marina*) within Swain Slough, and to refine the boundaries of the previously recorded population of Lyngbye's sedge (*Carex lyngbyei*). Relative plant density and location relative to invasive dense flowered cordgrass (*Spartina densiflora*) will be recorded to address CCC comments on the Coastal Development Permit application. The results of the site visit will be summarized in a brief memo, with updated figures showing boundaries of the Lyngbye's sedge population, dense flowered cord grass populations, and eel grass (if observed).

Deliverables: Electronic files (PDF) of draft and final memo.

Meeting(s): N/A

Task 7.1.4 – On-call Permitting Support

To address a CCC concern with potential agricultural land conversion, Stantec will assess a portion of the project area for potential effects on agricultural use. The focus of the assessment is to determine the suitability of the land located along the western approach to the bridge, which is currently mapped as jurisdictional waters, for agricultural use (i.e., grazing). This assessment will consist of a site visit and review of available soil survey data to determine suitability. The results of the assessment will be summarized in a brief memorandum to be submitted to the CCC.

Deliverables: Electronic copy (PDF) of draft and final memo

Meeting(s): N/A

Task 7.1.5 – On-call Permitting Support

Stantec will provide up to 100 hours of technical staff time (mixture of regulatory analyst, botanist, wetland scientist, fisheries, and GIS analyst) to support the County and Quincy in addressing agency comments on the various permit applications. Specific tasks include update wetland impacts maps and sensitive plant population impact maps and participating in up to eight (8) one-hour conference calls to discuss agency comments and approaches to addressing comments.

Deliverables: Electronic copy (PDF) of updated impact mapping and other products

Meeting(s): Participation in up to eight (8) one-hour conference calls

TASK 8 - ENVIRONMENTAL MEETINGS

QEI attended one additional meeting for the environmental permitting phase of the project that was held in Humboldt County. This meeting with the CA Coastal Commission defined project requirements for maximizing use of on-site mitigation areas, construction method descriptions and limitations, and accommodation of future sea level rise. Accommodation of future sea level rise was agreed to allow the bridge, in the future, to be raised if sea level rise was experienced as expected. Future work would include raising the superstructure, raising the abutment back wall and wingwalls, and constructing additional roadway approach fills.

Task 8 Products:

- California Coastal Commission Meeting (1)

Task 9 Products:

- Additional Final Right-of-Way Delineation

TASK 9 - RIGHT-OF-WAY ASSISTANCE



QEI will develop additional revised right-of-way and/or temporary construction easement exhibits for the County to accommodate landowner requests and accommodate mitigation area requirements. Supplemental existing right of way mapping will be accommodated during the final right of way exhibit development process.

PHASE 3- FINAL DESIGN

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

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

Bridge Design: The final bridge designs will incorporate the recent tsunami analysis and design requirements recently developed by Caltrans, changes to the current soft soil settlement surcharge time, and changes to the bridge barrier rail type to follow the Federal MASH and CT requirements. Tsunami design loading requirements are evolving, and recent analysis methods and design requirements will be incorporated into the bridge design to account for the lateral and uplift loading from a tsunami. In order to reduce the amount of approach fill settlement and pile down drag loads, a 6-month surcharge fill is needed on the approach roadway before the bridge pile foundations can be installed. This creates an extended road closure and public hardship. The County seeks elimination of the surcharge loading before the bridge construction due to the public hardship. The requirement for the surcharge before bridge construction will be evaluated and the bridge foundations will be revised to account for the additional down drag force. The current ST-10 bridge railing is not acceptable since it is not crash tested, not in compliance with federal Mash and Caltrans requirements. The bridge railing will be changed to a reinforced concrete Type 85 railing. Permanent sheet piling will be installed instead of rock slope protection to minimize the project foot print within the channel.

Approach Roadway Design: The final approach roadway design will be revised to accommodate the current Coastal Commission and other permit requirements including minimizing impacts to wetland and farmland. This may include approach roadway drainage changes including ditches and culvert pipes.

Other: The plan sheets will be revised as needed to accommodate the roadway and bridge design modifications and sheet pile walls. The plans will be prepared in CADD according to the County's and Caltrans' drafting standards. The single span concrete bridge is expected to include the following 29 plan sheets:

Roadway Plans (total 13)

- Title Sheet and Location Map
- Typical Section
- Layout & Profile Sheets
- Construction Details
- Erosion Control Plan
- Contour Grading
- Drainage Plan
- Drainage Profile
- Utility Plan
- Detour Plan
- Pavement Delineation & Sign Plan
- Quantities Sheets

Bridge Plans (total 16)

- General Plan
- Deck Contours
- Foundation Plan
- Abutment Layout
- Abutment Details No.1
- Abutment Details No.2
- Typical Section
- Girder Layout
- Wide Flange Girder Details No. 1
- Wide Flange Girder Details No. 2
- Construction Sequence
- Miscellaneous Details
- Barrier Details
- Log of Test Borings (3)

A review meeting with the County will be held upon completion of the revisions to the bridge and the roadway plans.

Task 10.2 - Independent Design Check

Once the revised 65% plans have been submitted, an update to the independent check will be completed. A licensed engineer not previously involved with the project will review the plans, supplement the existing design calculations, and include revised geotechnical recommendations and tsunami loading. A comprehensive calculation package of the bridge and foundation systems will be prepared.

Amendment 9 Work Plan

Exhibit B9

DPW AGREEMENT NO. 594020

Task 10.3 - Specifications

The updated draft special provisions (2018) will be submitted to the County and shall be limited to those that deal with materials, order of work, and bridge/roadway items of work. QEI will develop draft project special provisions based on Caltrans Standard Special Provisions (SSP) (2018, 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 updated. Quantities will be updated and calculated in accordance with Caltrans' practice and segregated into pay items. The updated 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 revised 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% (Draft) 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 plans;
- County Boiler Plate and Special Provisions;
- Detailed construction estimate and updated 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 half-sized 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 - Draft 100% PS&E

Quincy Engineering will submit this set to the County. 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;

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&E
- Independent Final PS&E Review
- 100% Final PS&E
- RE Pending File

Amendment 9 Work Plan

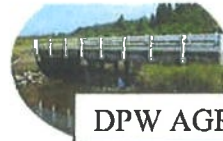


Exhibit B9

DPW AGREEMENT NO. 594020

- Working day schedule;
- County's "red-lined" set of 100% plan comments;
- Final Engineer's Estimate;
- Resident Engineer's File & bridge deck contour (4-scale) drawing produced in the County's format.



Attachment B – Cost Proposal Summary

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

Prime Consultant Subconsultant

Consultant **Quincy Engineering, Inc.**
Project Name Pine Hill Bridge over Swain Slough
Project No. BRLO-5904(112) Contract No. 594020 Date 7/26/2019

DIRECT LABOR

Classification/Title	Name	Initials	Range	Hours	Initial Hourly Rate	Total
Principal Eng.	John Quincy	JQ	\$70-\$120	0	\$ 92.30	\$ -
Principal Eng. *	James Foster	JF	\$70-\$120	154	\$ 92.30	\$ 14,214.20
Assoc Pr. Eng.	Jason Jurens	JJ	\$70-\$105	154	\$ 87.00	\$ 13,398.00
Senior Eng.	Scott McCauley	SMc	\$50-\$95	132	\$ 68.40	\$ 9,028.80
Assoc Eng.	Krassimir Panayotov	KP	\$35-\$65	60	\$ 60.50	\$ 3,630.00
Assoc Eng.	Juan Cruz	JCr	\$35-\$65	70	\$ 52.20	\$ 3,654.00
Assist Eng. I	Ashley Hansen	AHA	\$26-\$46	20	\$ 33.00	\$ 660.00
Assist Eng. I	Carl Hughes	CH	\$26-\$46	0	\$ 36.00	\$ -
Senior Eng. Tech	Craig Polglase	CP	\$33-\$62	0	\$ 59.40	\$ -
Assist Eng. II	Carlos Silva	CS	\$34-\$62	30	\$ 55.70	\$ 1,671.00
CAD Manager	Bob Maechler	BM	\$34-\$56	0	\$ 50.00	\$ -
CAD Tech	Patrick Kenney	PK	\$25-\$40	68	\$ 34.80	\$ 2,366.40
Senior PM	Carolyn Davis	CD	\$60-\$100	8	\$ 82.60	\$ 660.80
Senior Eng.	Leland Mason	LM	\$50-\$95	6	\$ 73.40	\$ 440.40
Senior Eng.	Kerry Theran	Kth	\$50-\$95	0	\$ 78.40	\$ -
Admin Asst	Phyllis Jordan	PJ	\$15-\$62	2	\$ 39.80	\$ 79.60
				704		\$ 49,803.20

LABOR COSTS

a) Subtotal Direct Labor Costs \$49,803.20
 b) Estimated Salary Increases for Multi-Year Project \$621.92 (see calculation page attached)
 c) **TOTAL DIRECT LABOR COSTS [(a) + (b)]** \$50,425.12

INDIRECT COSTS

d) Fringe Benefits (Rate: 45.95%):
 e) Total Fringe Benefits [(c) x (d)] \$23,170.34
 f) Overhead (Rate: 123.84%):
 g) Overhead [(c) x (f)] \$62,446.47
 h) General Administration (Rate: 0.0%):
 i) Gen & Admin [(c) x (h)] \$0.00
 j) **TOTAL INDIRECT COSTS [(e) + (g) + (i)]** \$85,616.81

FIXED FEE

k) Fixed Fee (10.0%):
 l) **TOTAL FIXED FEE [(c) + (j)] x (k)** \$13,604.19

CONSULTANT'S OTHER DIRECT COSTS (ODC)

Travel (@ active IRS mileage rate)	1950 miles @	\$0.580	\$1,131.00
Pier Diem/ Hotel	6 days @	\$150.00	\$900.00
Delivery	0 @	\$20.00	\$0.00
Vendor Reproduction			
	Vellum @		\$0.00
	8 1/2 X 11 Reproduction @		\$0.00
	11 X 17 Reproduction @		\$0.00
	Mounting Boards for Presentations @		\$0.00
	Newspapers (Translation and printing) @		\$0.00
	Subtotal Vendor Reproduction		\$0.00
Title Report	0 @	\$0.00	\$8.30
Miscellaneous			
m) TOTAL OTHER DIRECT COSTS			<u>\$2,039.30</u>

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

Stantec	\$28,703.56
Crawford	\$43,571.02
0	\$0.00
0	\$0.00
0	\$0.00
0	\$0.00
0	\$0.00
0	\$0.00
0	\$0.00
0	\$0.00
	<u>\$72,274.58</u>

o) TOTAL COST [(c) + (j) + (l) + (m) + (n)] \$223,960.00

NOTES:

- 1 Key personnel marked with an asterisk (*)
- 2 Employees subject to prevailing wage marked with two asterisks (**).
- 3 Anticipated salary increases calculation (Item "b") on attached page
- 4 Note: Invoices will be based upon actual QEI hourly rates plus overhead at 169.79% plus prorated portion of fixed fee. Subconsultant and Direct Costs will be billed at actual cost. The overhead rate (ICR) shall remain fixed for the contract duration or until both parties agree to modify the rate in writing.

EXHIBIT 10-H1 COST PROPOSAL
ACTUAL COST-PLUS-FIXED FEE CONTRACTS
 (CALCULATIONS FOR ANTICIPATED SALARY INCREASES)

Consultant Quincy Engineering, Inc.

Contract No. 594020

Date 7/26/2019

Pine Hill Bridge over Swain Slough

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

Direct Labor <u>Subtotal</u> per Cost Proposal	Total Hours per Cost Proposal	=	Avg Hourly Rate	5 Year Contract Duration
\$ 49,803.20	704		\$70.74	Year 1 Avg Hourly Rate

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

	Proposed Escalation =		5.0%			
	Avg Hourly Rate		Proposed Escalation			
Year 1	\$70.74	+	2.5%	=	\$72.51	Year 1 Avg Hourly Rate
Year 2	\$72.51	+	5.0%	=	\$76.14	Year 2 Avg Hourly Rate
Year 3	\$76.14	+	5.0%	=	\$79.95	Year 3 Avg Hourly Rate
Year 4	\$79.95	+	5.0%	=	\$83.95	Year 4 Avg Hourly Rate
Year 5	\$83.95	+	5.0%	=	\$88.15	Year 5 Avg Hourly Rate

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

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	50.00%	*	704.0	=	352.0	Estimated Hours Year 1
Year 2	50.00%	*	704.0	=	352.0	Estimated Hours Year 2
Year 3	0.00%	*	704.0	=	0.0	Estimated Hours Year 3
Year 4	0.00%	*	704.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	704.0	=	0.0	Estimated Hours Year 5
Total	<u>100%</u>		Total	=	704.0	

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

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$70.74	*	352	=	\$24,901.60	Estimated Hours Year 1
Year 2	\$72.51	*	352	=	\$25,523.52	Estimated Hours Year 2
Year 3	\$76.14	*	0	=	\$0.00	Estimated Hours Year 3
Year 4	\$79.95	*	0	=	\$0.00	Estimated Hours Year 4
Year 5	\$83.95	*	0	=	\$0.00	Estimated Hours Year 5
				=	Total Direct Labor Cost with Escalation	
				=	\$50,425.12	
				=	Direct Labor Subtotal before Escalation	
				=	\$49,803.20	
				=	Estimated total of Direct Labor Salary Increase	
				=	\$621.92	Transfer to Page 1

NOTES:

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

Cost Proposal

Project Number: JP		Project Name: Pine Hill Bridge over Swain Slough											3/4/2020						
TASKS		Principal Eng	Assoc Pr Eng	Senior Eng	Assoc Eng	Assoc Eng	Assoc Eng	Assist Eng I	Assist Eng II	CAD Tech	Senior PM	Senior Eng	Admin Asst	Quincy Total Hours	Quincy Total Labor	Quincy NLF Budget	Stanlec	Crawfort	Subsistant Subtotal
No.	Initial Hour Rate	JF	JJ	SMC	KP	JCR	AHA	CS	PK	CD	LM	PJ			Direct Labor	Actual Labor Multiplier			
PHASE 1- PRELIMINARY ENGINEERING																			
1 PROJECT MANAGEMENT AND REVIEW MEETINGS																			
1.1	Project Management (12 mo 1 hr/wk)	48											2		\$4,510	\$13,384			\$0
1.2	Project Review Meetings (12 phone, 2 safe)	52	44	28										124	\$10,543	\$31,288			\$0
5 GEOTECHNICAL INVESTIGATIONS & FOUNDATION REPORT																			
5.5	Peet Review	2	2	4										0	\$0	\$0			\$43,571
6 UTILITY COORDINATION																			
6		4	26											0	\$0	\$0			\$0
PHASE 2- ENVIRONMENTAL DOCUMENT PREPARATION & PERMITTING SUPPORT																			
7 ENVIRONMENTAL SUPPORT																			
7.1	Environmental Support													0	\$0	\$0			\$0
7.1.1	Environmental Project Management / Coordination	2												0	\$0	\$0			\$28,704
7.1.2	Update Wetland Delineation Reports	2												2	\$185	\$548			\$0
7.1.3	Update Biological Survey	2												2	\$185	\$548			\$0
7.1.4	On-Call Permitting Support (Coastal Commission, CDFW, USFWS, NOAA)	12	24											36	\$3,195	\$9,084			\$0
8 TASK 8 - ENVIRONMENTAL MEETINGS																			
8		15	15											30	\$2,690	\$7,982			\$0
9 RIGHT-OF-WAY ASSISTANCE																			
9		5	24											30	\$2,642	\$7,840			\$0
PHASE 3- FINAL DESIGN																			
10 FINAL DESIGN & DETAILING																			
10.1	Update Design & Submittal of 65% Plans (Unchecked Details)	2	4	76	50				60					162	\$10,844	\$32,182			\$0
10.2	Update Independent Design Check	2			50			20						70	\$3,724	\$11,052			\$0
10.3	Update Specifications	2	10	16										28	\$2,149	\$6,378			\$0
10.4	Update Construction Quantities & Estimate	1	3	6	10	20	20	10						70	\$3,630	\$10,772			\$0
10.5	Update Quality Control & Constructability Review	2								8				10	\$645	\$2,509			\$0
10.6	Submittal of 100% (Draft) PS&E	1	1	1					4					7	\$397	\$1,148			\$0
10.8	Independent Final PS&E Review										6			6	\$440	\$1,307			\$0
10.9	Final PS&E (Final Submittal)	1	1	1					4					7	\$387	\$1,148			\$0
Subtotal - Hours		164	154	132	60	70	20	30	68	8	6	2		704	\$49,800.20	\$147,806.46			\$0
Estimated Salary Increases for Multi-Year Project															\$21,192	\$1,845.67			\$0
Other Direct Costs															\$2,038.36	\$1,845.67			\$0
Total Cost		\$14,214	\$13,395	\$9,029	\$3,630	\$3,654	\$660	\$1,671	\$2,366	\$681	\$440	\$80		\$49,803	\$56,425	\$151,685		\$58,704	\$72,375



accounts:

- Ability to accumulate and segregate allowable direct costs by project, contract and type of cost;
- Internal controls to maintain integrity of financial management system;
- Ability to account and record costs consistently and to ensure costs billed are in compliance with FAR;
- Ability to ensure and demonstrate costs billed reconcile to general ledgers and job costing system; and
- Ability to ensure costs are in compliance with contract terms and federal and state requirement

Cost Reimbursements on Contracts:

I also understand that failure to comply with 48 CFR Part 16.301-3 or knowingly charge unallowable costs to Federal-Aid Highway Program (FAHP) contracts may result in possible penalties and sanctions as provided by the following:

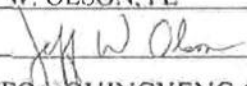
- Sanctions and Penalties - 23 CFR Part 172.11(c)(4)
- False Claims Act - Title 31 U.S.C. Sections 3729-3733
- Statements or entries generally - Title 18 U.S.C. Section 1001
- Major Fraud Act - Title 18 U.S.C. Section 1031

All A&E Contract Information:

- Total participation amount \$60,435,000.00 on all State and FAHP contracts for Architectural & Engineering services that the consultant received in the last three fiscal periods.
- The number of states in which the consultant does business is 6.
- Years of consultant's experience with 48 CFR Part 31 is 26.
- Audit history of the consultant's current and prior years (if applicable)

<input type="checkbox"/> Cognizant ICR Audit	<input type="checkbox"/> Local Gov't ICR Audit	<input checked="" type="checkbox"/> Caltrans ICR Audit
<input checked="" type="checkbox"/> CPA ICR Audit	<input type="checkbox"/> Federal Gov't ICR Audit	

I, the undersigned, certify all of the above to the best of my knowledge and belief and that I have reviewed the Indirect Cost Rate Schedule to determine that any costs which are expressly unallowable under the Federal cost principles have been removed and comply with Title 23 U.S.C. Section 112(b)(2), 48 CFR Part 31, 23 CFR Part 172, and all applicable state and federal rules and regulations. I also certify that I understand that all documentation of compliance must be retained by the consultant. I hereby acknowledge that costs that are noncompliant with the federal and state requirements are not eligible for reimbursement and must be returned to Caltrans.

Name**: JEFF W. OLSON, PE
 Signature: 
 Email**: JEFFO@QUINCYENG.COM

Title**: CHIEF FINANCIAL OFFICER
 Date of Certification (mm/dd/yyyy): 03/16/2018
 Phone Number**: 916.368.9181

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

Note: ***Both prime and subconsultants as parties of a contract must complete their own Exhibit 10-K forms. Caltrans will not process local agency's invoices until a complete Exhibit 10-K form is accepted and approved by Caltrans Audits and Investigations.***

- Distribution:**
- 1) Original - Local Agency Project File
 - 2) Copy - Consultant
 - 3) Copy - Caltrans Audits and Investigations