

AMENDMENT NO. 1
OF
NAPA COUNTY AGREEMENT NO. 170635B
PROFESSIONAL SERVICES AGREEMENT

THIS AMENDMENT NO. 1 OF NAPA COUNTY AGREEMENT NO. 170635B is made and entered into as of this 13th day of July, 2021, by and between NAPA COUNTY, a political subdivision of the State of California, hereinafter referred to as “COUNTY” or “LOCAL AGENCY”, and BIGGS CARDOSA & ASSOCIATES, INC., a California corporation, whose mailing address is 865 THE ALAMEDA, SAN JOSE, CALIFORNIA 94126-5515, hereinafter referred to as “CONTRACTOR” or “CONSULTANT”. The COUNTY and CONSULTANT may be referred to below collectively as “Parties” and individually as “Party.”

RECITALS

WHEREAS, COUNTY entered into Napa County Agreement No. **170635B** with CONSULTANT on November 8, 2016 (the “Agreement”), to obtain specialized services, as authorized by Government Code section 31000, in order to provide civil, structural, traffic, and geotechnical engineering services; right-of-way acquisition; and construction support; and

WHEREAS, the parties now desire to amend the Agreement to increase the maximum compensation amounts payable to CONTRACTOR by \$371,054 from \$775,187 to \$1,146,231 to provide additional engineering and environmental services;

TERMS

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, COUNTY and CONSULTANT hereby amend the Agreement as follows:

1. Paragraph 1 of the Agreement is amended in its entirety to read in full as follows

Term of the Agreement. The term of this Agreement shall commence on the date first above written and shall expire on June 30, 2017, unless terminated earlier in accordance with Paragraphs 9 (Termination for Cause), 10 (Other Termination) or 23(a) (Covenant of No Undisclosed Conflict); except that the obligations of the parties under Paragraphs 7 (Insurance) and 8 (Indemnification) shall continue in full force and effect after said expiration date or early termination in relation to acts or omissions occurring prior to such dates during the term of the Agreement, and the obligations of CONTRACTOR to COUNTY shall also continue after said expiration date or early termination in relation to the obligations prescribed by Paragraphs 15 (Confidentiality), 20 (Taxes) and 21 (Access to Records/Retention). The term of this Agreement shall be automatically renewed for an additional year at the end of each fiscal year, under the terms and conditions then in effect, not to exceed nine additional years, unless either party gives the other party

written notice of intention not to renew no less than thirty (30) days prior to the expiration of the then current term. For purposes of this Agreement, "fiscal year" shall mean the period commencing on July 1 and ending on June 30.

2. Paragraph 3 (a) of the Agreement is amended in its entirety to read in full as follows

Compensation.

(a) Rates. In consideration of CONTRACTOR's fulfillment of the promised work, COUNTY shall pay CONTRACTOR at the rates set forth in Exhibit "B-3", attached hereto and incorporated by reference herein. The consideration to be paid to CONTRACTOR as provided herein, shall be in compensation for all of CONTRACTOR's expenses incurred in the performance hereof, including travel and per diem, unless otherwise expressly so provided.

3. Paragraph 3 (c) of the Agreement is amended in its entirety to read in full as follows

Compensation.

(c) Maximum Amount. Notwithstanding subparagraphs (a) and (b), the maximum payments under this Agreement shall be a total of ONE MILLION, ONE HUNDRED AND FORTY SIX THOUSAND TWO HUNDRED AND THIRTY-ONE DOLLARS (\$1,146,231.00); provided, however, that such amounts shall not be construed as guaranteed sums, and compensation shall be based upon services actually rendered and reimbursable expenses actually incurred. Each task set forth in Exhibit "A" shall be subject to the maximum not to exceed fee for the task as set forth respectively in Exhibit "B" and "B-3", unless prior written consent to exceed a task fee has been authorized in writing by the Project Manager. Any approval by the Project Manager to exceed a task fee shall not alter the maximum payments for services and expenses under this Agreement.

4. Exhibit "B-3", attached hereto, is hereby added to and incorporated into the Agreement.

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, COUNTY and CONSULTANT have executed this Amendment No. 1 of Napa County Agreement No. 170635B as of the date first above written.

BIGGS CARDOSA & ASSOCIATES, INC

By _____
STEPHEN A. BIGGS, President

By _____
MARK A. CARDOSA, Secretary

“CONSULTANT”

NAPA COUNTY, a political subdivision of
the State of California

By _____
ALFREDO PEDROZA, Chair
Board of Supervisors

“COUNTY”

<p>APPROVED AS TO FORM Office of County Counsel</p> <p>By: <u>John L. Myers (e-sign)</u> County Counsel</p> <p>Date: <u>July 1, 2021</u></p>	<p>APPROVED BY THE NAPA COUNTY BOARD OF SUPERVISORS</p> <p>Date: _____ Processed By: _____ _____ Deputy Clerk of the Board</p>	<p>ATTEST: NEHA HOSKINS Clerk of the Board of Supervisors</p> <p>By: _____</p>
--	--	--

EXHIBIT “B-3”

COMPENSATION AND EXPENSE REIMBURSEMENT

June 15, 2021
2015261A

Mr. Graham Wadsworth, PE
Napa County Public Works
1195 Third Street, Suite 101
Napa, CA 94559

Subject: Dry Creek Road Bridge Replacement at Dry Creek, Napa County, CA

Additional Work Request No. 1

[HBP Support / Code Update / AT&T Relocation / Environmental Update / Water Quality Redesign / Revegetation Creek Mitigation / ROW & Public Outreach Update]

Dear Mr. Wadsworth:

This additional work proposal is to include the additional effort required for the out-of-scope items outlined and subsequently described and elaborated upon below:

1. HBP Funding Support
 - a. Develop Approach Roadway HBP Participation Justification
 - b. Update HBRRP Funding Documents (LAPG Exhibits 6A, 6B, 6D, etc.)
2. Design Code Update
 - a. Update 35% Geometrics & TSR
 - b. Update 65% PS&E
3. Incorporation of AT&T Relocation Plans into PS&E
4. Environmental Clearance and Permit Requirements/Regulations Update
 - a. Assess YLF (potential newly State listed species) Requirements
 - b. Evaluate Environmental Mitigation Bank Feasibility
 - c. Update APE and BA
 - d. Perform Wetlands Only Practicable Finding Memorandum
 - e. Perform Supplemental Cultural Pedestrian Survey
 - f. Perform Tree Survey
 - g. Perform Early/Pre-Application Meetings with Regulatory Agencies
 - h. Perform Temporary Diversion Hydrology and Hydraulics
5. Water Quality Concept Plan Redesign
 - a. Evaluate Water Quality Mitigation Alternatives Feasibility
 - b. Update Local Drainage Design
 - c. Update Stormwater Management Plan, Water Quality Tech Memo, & SWPPP
6. Revegetation Creek Mitigation Requirements
 - a. Perform Creek Channel Restoration Bio-Engineering Design
 - b. Update Hydrology, Hydraulics and FHR
 - c. Incorporate Landscape Design PS&E
7. ROW Coordination and Public Outreach Plan Update
 - a. Update ROW Exhibit Information and ROE Requests
 - b. Perform Early One-on-One Stakeholders Coordination/Meetings
 - c. Evaluate Shefer Septic Plan Feasibility Alternatives

1. HBP Funding Support

The project consists of replacing Dry Creek Road Bridge over Dry Creek and provide a new straight alignment. Currently, the Dry Creek Road has a hair-pin alignment at the existing Dry Creek Bridge, and the project proposes to correct the alignment by removal the hair-pin and providing a straight alignment. The realignment of Dry Creek Road requires new approach roadway of approximately 542ft on the west and 246ft on the east of the proposed bridge to conform back to existing alignment. After the Type Selection Report was submitted to Caltrans, Caltrans DLA commented that HBP fund is not obligated to cover the cost of the approach roadway beyond the HBP guideline limit of 400-feet at the ends of the bridge, and that it should not be considered participatory HBP cost.

At the field review meeting on September 10, 2015, Caltrans requested BCA/BKF to evaluate alternative alignments to determine whether shorter roadway approach lengths were feasible before developing the Type Selection Report. Subsequently, the BCA/BKF developed Alignment Alternatives Comparison (attached) which indicated an alternative alignment that included a double back S-curve to run the bridge perpendicular to the creek and shorten the bridge. It was determined that the original straight alignment was preferable to the alternative double back S-curve alignment because it was safer without the double back S-curve and the roadway approaches were not much shorter. Based on the Alignment Alternatives Comparison, approval of the straight alignment was provided to complete the GAD and Type Selection Report. Therefore, it was our understanding and the County's understanding that Caltrans considered the approach roadway exceeding the guidelines as participating under HBP when Caltrans approved the straight alignment during the Field Review. However, Caltrans commented on Type Selection Report that approach roadway exceeding the guideline is considered non-participating under HBP even though they agreed that the proposed alignment is right choice. After conversation with Caltrans, it was determined that Caltrans does not consider the approach roadway participating under HBP is because the County never requested a special review and approval for approach roadway exceeding the HBP guidelines. Subsequently, the Structure Type Selection approval is pending due to approach roadway exceeding the guidelines. After several rounds of discussion with Caltrans and with the County, we prepared and submitted justification documents, the Local Assistance Procedure Guidelines (LAPG) Exhibits 6B and Exhibit 6D to Caltrans for approval on March 10, 2020. Caltrans responded provided comments on April 9, 2020, which we responded with corrected LAPG Exhibit 6B and Exhibit 6D on June 1, 2020. Coordinating with Caltrans for approval of approach roadway exceeding guideline was not included in the initial scope of work because our understanding was that proposed alignment was already reviewed and approved by Caltrans and additional effort was not required. However, we provided additional services per County's direction to get approval for approach roadway exceeding the guidelines.

Additionally, BCA will assist the County in preparing and submitting the LAPG Exhibits 6A, 6B, and 6D for the revise in scope of work as well as for request additional funding for the Preliminary Engineering (PE) phase for the scope of work described in this Additional Service Request (ASR) No.1.

[Additional Services to develop Approach Roadway HBP Participation Justification, and to update HBRRP Funding Documents \(LAPG Exhibits 6A, 6B, 6D, etc.\).](#)

[1.1.4 Local Program Compliance / Funding Assistance.](#)

2. Design Code Update

Design team prepared a Basis of Design Memorandum (BoD) after the team was awarded the project for a preliminary phase. The BoD was based on the current design standards, 2011 AASHTO minimum design criteria, available when the project was programmed with Caltrans. The BoD proposed a design speed of 25mph as required for a “minor collector” by 2011 AASHTO minimum design criteria. AASHTO released new design criteria in 2018, which requires a minimum design speed of 30mph for mountainous terrain. The Napa County Road and Street Standards (RSS), dated January 1, 2021, requires minimum design speed of 35 mph for “minor collectors”. The project is programmed with Federal Highway Administration’s (FHWA) Highway Bridge Program (HBP) which requires the design of the bridge and roadway to the current design standards. Since the design of the proposed bridge replacement is not yet completed, the HBP requires that the new alignment is designed for the design speed of 30mph per 2018 AASHTO minimum design criteria or 35mph per the RSS. After coordination with the County, County recommended design the roadway geometrics for the design speed of 30mph to meet the 2018 AASHTO minimum design criteria, and the County will provide a design exception to reduce a design speed from 35mph to 30mph. Updating roadway geometrics to accommodate design of speed of 30mph requires updating the 35% Roadway Plans, reconfirming Type Selection Report which is approved by Caltrans, updating the water quality design and drainage plans, and updating the 65% Plans, Specifications, and Estimate (PS&E) which were submitted to the County in May 2020. Updating the roadway geometrics will also require updating the limits of cut and fill in the Area of Potential Effects (APE) map. The effort required to update the PS&E and APE map, to prepare a design exception, to reconfirm a Structural Type Selection Report with Caltrans, and to update water quality and drainage plans due to the higher design speed was not included in the original scope of work.

Additional Services to update the Basis of Design, the 35% Design (Geometrics and TSR), and 65% PS&E involves the following subtask breakdown.

1.1 Phase I Project Management

1.3.1 Roadway Approval Drawings

1.3.5 35% Bridge Type Selection Project Memorandum

2.1 Phase II Project Management

2.3.1 Unchecked Design Submittal (65% PS&E)

3. Incorporation of AT&T Relocation Plans into PS&E

The bridge replacement improvements require the AT&T conduit that is currently carried on the existing bridge across Dry Creek to be relocated into conduit hanging under the new bridge. Because the replacement bridge is proposed to be on a new straight roadway alignment, AT&T plans to relocate their new conduit beyond the ends of the bridge in an underground trench along the new roadway alignment to riser poles near the roadway realignment conforms. To avoid having to trench and patch over the County’s newly placed asphalt roadway, the County would like to coordinate AT&T’s relocation improvements to be performed prior to the final roadway paving. To avoid having to coordinate the timing of these two separate projects and two different general contractors, the County would like to coordinate to include AT&T’s relocation design improvements into the County’s bridge replacement improvement plans so it can be more easily coordinated and performed by one contractor. However, because AT&T under its franchise agreement with the County is obligated to relocate their facilities at their costs, AT&T’s will still need to perform their own relocation design (plans and specifications) and

pay for these improvements. However, these utility relocation improvements would need to be incorporated into the County's bridge replacement project construction documents and the construction bid item costs tracked separately. Once AT&T relocation design has been incorporated into the County's PS&E, AT&T will need to review and concur with the PS&E. Additional scope of work is required to coordinate the proposed inclusion of AT&T's relocation improvements into the County's bridge replacement project, develop the additional plans, specifications and estimate items from the AT&T design, incorporate them into the County's PS&E contract documents, and facilitate additional reviews and approvals of the composite utility plans, specifications and estimate with AT&T.

[Additional Services to incorporate AT&T Relocation Plans into PS&E involves the following subtask breakdown.](#)

- [2.1 Phase II Project Management](#)
- [2.2.6 Utility Relocation](#)
- [2.3.1 Unchecked Design Submittal \(65% PS&E\)](#)
- [2.3.2 Checked Design Submittal \(95% PS&E\)](#)
- [2.3.3 Final Design Submittal \(100% PS&E\)](#)
- [2.5 Services During Bidding](#)

4. Environmental Clearance and Permit Requirements/Regulations Update

After the contract was issued for the project, the regulatory status of the foothill yellow-legged frog (*Rana boylei*) (FYLF) was elevated from a state species of concern to state candidate species (for listing under the California Endangered Species Act). Because of this, additional efforts for species survey, analysis, agency coordination, development team coordination, and documentation were required to address this species in the Natural Environmental Studies. While the species has now since been downgraded, these efforts were performed when the species was elevated to a state candidate species. This ASR request the reimbursement for the efforts on coordinating and determining the mitigation requirements for FYLF.

The design team is in process of completing the CEQA/NEPA documentation and ready to commence on the preparing permit applications. These CEQA/NEPA documentation are based on the approved 35% Design (Geometrics and Bridge Type Selection Report) and previously proposed two bioretention facilities. However, the revised geometrics and eliminating a bioretention facility would require updating the CEQA/NEPA documentations. GPA had previously prepared and submitted the administrative draft and four subsequent rounds of the Biological Assessment (BA) as well as the Area of Potential Effects (APE) map for review in August 2019 and in May 2020. However, both the BA and APE Map will need to be revised to reflect changes with the updated geometrics and the bioretention facilities. Elimination of eastern bioretention facility also requires updating and resubmitting National Environmental Policy Act (NEPA) documentations including updating Local Drainage, Stormwater Pollution Prevention plan, Stormwater Management Plan and Water Quality Tech Memo.

NEPA and CEQA clearance require performing cultural studies within the project APE limits. The cultural studies consist of performing a pedestrian survey within the project limits to determine if there are potential archeological remains within the APE limits. GPA's subconsultant Paleo West performed the pedestrian survey prior to first preparation of APE map. However, as the project progressed, the limits of APE were revised, and have increase slightly. For the completion of cultural studies under

NEPA and CEQA, another pedestrian survey is required within the revised project limits and the old APE limits. The original scope of work included only one pedestrian survey, and a second pedestrian survey is out of scope effort.

Wetlands were identified during the jurisdictional delineation investigations for completion of Natural Environmental Study. It was determined that these wetlands were under the jurisdiction of United States Army Corps of Engineers (USACE), and Caltrans required preparing and submitting a Wetlands Only Practicable Finding Memorandum, pursuant to Executive Order 11990-Protection of wetlands. Preparation of Completion of this memorandum was not included in the original scope of work, and would be considered out of scope service.

Additional scope of work also includes performing a tree survey prior to submitting permit applications to regulatory agencies, specifically to California Department of Fish and Wildlife (CDFW) for Section 1602 Streambed Alteration Agreement. The 1602 permit application for CDFW requires documentation of the location, size, and species of all trees and shrubs equal to or greater than four inches in diameter at breast height (DBH) that would be removed or trimmed by construction of a project within their jurisdiction. This information was not known at the time field surveys were conducted and was not the intended action for the initial field survey. Also, the project impact limits aren't known at the preliminary design phase. We typically don't know if a tree survey is required until at least 65% design when the impact limits are known and the project construction impacts are defined.

Replacing the existing Bridge at the Dry Creek on the new alignment will require removal of existing trees and other vegetation. To mitigate for the tree removal and vegetation removal, the design team is anticipating that the various regulatory agencies, including NMFS, CDFW, ACOE, RWQCB will require revegetation plan. The revegetation plan requires a well outlined strategy to include but not limited to revegetation goals, success criteria, financial assurances, method for site preparation, and irrigation. The revegetation plan was not included in the original scope of work because the impact of the project was not fully determined. For example, the location and the impact of the bioretention facility was unknown when the project first programmed. The design team was not sure if the County would propose an on-site revegetation, off-site revegetation, or pay the mitigation bank. The design team will prepare the revegetation plan based on the assumption that the County will implement an on-site revegetation plan. However, the County requested information regarding the on-site mitigation, off-site mitigation, and the mitigation banks which requires reaching out to the regulatory agency and performing preliminary research. During the permitting phase, various mitigation alternatives will be further discussed in detail to assist the County in determining the most feasible mitigation alternative for the project. GPA will also coordinate with various regulatory agencies to inquire about mitigation alternatives. Per County's request during February PDT meeting, GPA will organize and lead completion of early/pre-application consultation with regulatory agencies to discuss the mitigation requirements, and to obtain permits. All the efforts regarding early/pre-application meeting with regulatory agencies, mitigation supports, and preparing revegetation plan was not included in our original scope of work, and will be performed under this ASR.

Additional efforts will be required for performing duration frequency analysis to determine the size of temporary stream diversion pipe. The permit applications require providing information, including description, construction method, barrier height for Temporary Stream Diversion system. After receiving comments on Biological Assessment from Caltrans, GPA recommended proposing open top

barrier type system for Temporary Stream Diversion to ensure that fish in the creek have a natural creek bed. Subsequently, BCA proposed using K-Rail or Water Filled Dam type system for stream diversion. However, during Section 7 Consultation with National Marine and Fisheries Services (NMFS), the agency suggested providing a traditional water diversion system consisting of pipe running between cofferdams. Since the temporary stream diversion will be constructed in the summer months, during the low flow, additional HEC-RAS analysis will need to be performed to determine the flow rate and the flow height in the summer months which will be extra effort. The original scope of work does not include performing hydraulic analysis for data based on summer months.

[Additional Services to perform the Environmental Clearance and Permit Requirements / Regulations Update involves the following subtask breakdown.](#)

[1.1 Phase I Project Management](#)

[1.4.1 Project Environmental Initiation & Agency Coordination](#)

[1.4.2 Biological Resources, Natural Environmental Study \(NI\) with Jurisdictional Delineation Forms](#)

[1.4.3 Cultural Resources, APE, HPSR, ASR](#)

[1.4.10 Endangered Species Act Consultation](#)

[2.1 Phase II Project Management](#)

[2.4.1 Agency Coordination and Prepare Permit Applications](#)

5. Water Quality Concept Plan Redesign

Realignment of the Dry Creek Road results in total new impervious area of approximately 38,000sqft. For new impervious area exceeding 5,000sqft, Bay Area Stormwater Management Agencies Association (BASMAA) requires storm water to be treated prior to releasing in the creek. The project proposed improvements on both sides of the creek, requiring bioretention facilities on both sides of the creek as well. After discussion with the County during various Project Development Team (PDT) meetings, we had proposed bio-retention facility south of existing bridge (west of proposed bridge), and another at south-east corner of the proposed bridge. The bioretention basin is linear and runs along the side of the road. Eastern bioretention facility would be require existing embankment to be excavated and provide approximately 15-foot tall retaining wall. Due to such a grade difference, the eastern bioretention facility poses a safety issue since it runs along the side of the roadway where cars are more apt to run off the road and into the bioretention basin. Furthermore, the linear bioretention basin on the east side would incur more maintenance for the County to fix the guard railing assuming that a guardrail is placed to protect from cars from veering off into the linear basin, as well as to clean out the basin. Additionally, the linear bioretention basin is being squeezed into a sliver of area between the roadway and the creek bank which may be a concern if the creek bank starts migrating toward the bioretention basin and undermining it. We believe that there is concern that the east bank is susceptible to lateral channel migration. The larger bioretention basin on the west side would capture more impervious area from the existing roadway above the new roadway section to justify the increased basin capacity. Due to contribution from these factor, County provided direction to eliminate eastern bioretention facility and enlarging the western bioretention facility to accommodate additional impervious area. Per County's direction, prior to eliminating the eastern bioretention facility, we coordinated with the Regional Water Quality Control Board (RWQCB) to ensure that modified design with a single bioretention facility is acceptable. During the meeting RWQCB on 1/25/2021, RWQCB requested a justification summary to be submitted for the approval of eliminating the eastern bioretention facility. Per discussion with

RWQCB during the meeting, the team studied to propose to swap equivalent impervious area on the west of the proposed bridge. However, due to lack of the additional impervious area on the west of the proposed bridge, BKF reached out to RWQCB asking if less than equivalents swap of impervious area would be acceptable. RWQCB did not accept the offer of treating less than equivalent impervious area on the west. Therefore, the team is proposing to use Perk-Filter type system for water quality treatment on the east of the proposed bridge. Perk-Filters would be installed in the proposed catch basins, and would treat the water run-off prior to releasing in the creek. Currently, the project has progressed beyond the 65% Plans, Specifications, and Estimate (PS&E) with the team submitting 65% PS&E in May, 2020. We had already completed internal Quality Assessment (QA) of the 65% PS&E. Additional QA will be required for the revised design of the bioretention facility.

Additional work will be required to update the local drainage calculations with revised Bioretention Basin size and location and drainage plans (not including basin and basin outlet design for Hydromodification requirements), update Stormwater Management Plan including updating Drainage Management Areas (DMAs), recalculating required basin size, and updating report (not including hydromodification memo). The additional scope will also include updating the Draft SWPPP including post-construction requirements (PCR), a discussion of existing and proposed drainage patterns, Erosion and Sediment Control Plan. Additionally, internal coordination will be performed regarding bioretention basin design, basin outlet design, and hydromodification analysis. Note, both water quality and hydromodification requirements must be met and one or the other may govern design. The additional scope will include coordination with RWQCB for alternative treatment locations.

Additional Services to incorporate the Water Quality Concept Redesign involves the following subtask breakdown.

- 2.1 Phase II Project Management
- 2.2.3 Preliminary Stormwater Management Plan
- 2.2.4 Final Stormwater Management Plan
- 2.2.5 Preliminary Stormwater Pollution Prevention - Draft SWPPP
- 2.3.1 Unchecked Design Submittal (65% PS&E)
- 2.3.2 Checked Design Submittal (95% PS&E)
- 2.3.3 Final Design Submittal (100% PS&E)
- 2.5 Services During Bidding

6. Revegetation/Creek Mitigation Requirements

The project proposes the remove the existing bridge, and the existing abutment on the south of the Dry Creek. Removal of existing abutment on the south of the creek would expose the creek embankment to the erosion. To protect the south embankment at abutment One, the channel slope would be restored using a “soil burrito” to re-establish the natural channel vegetation on the western bank. The original scope of work assumes that Rock Slope Protection (RSP) will be used be for embankment protection. Note that RSP design is relatively straightforward and the calculations are detailed and the use of engineering judgement is required for how deep to put the key and how far upstream & downstream to put the RSP. Bio-vegetation bank protection design will require more effort that the RSP design because the standards aren’t well documented and there’s more work involved such as what type of vegetation would be included in the soil-burritos. The effort required to design the bio-vegetation for embankment protection is considerably greater than the effort for the RSP design. Additionally, the bio-vegetation

will be used to provide channel restoration as well as to restore fish habitat. The original scope of work did not include the cost for bio-vegetation design for embankment protection, channel restoration, and to restore fish habitat. Avila will coordinate with GPA to determine the creek mitigation permit requirements for the creek restoration design which will be incorporated into BKF's erosion control plans and MMP's landscape plans.

Avila submitted Preliminary Hydraulics Report (PHR) to September 1, 2020 for review. The County, after reviewing the PHR, provided comments on January 5, 2021 which required performing additional analysis which were not included in the original scope of work. Based upon comments from Napa County, received after the Preliminary Hydraulic report, the additional scope of work will include update of the discharge analysis using HEC-HMS and taking Napa County comments into account. The HEC-RAS model will be updated based upon updated grading and rock riprap configuration and the updated hydrology estimated. The results of the HEC-RAS model will be used to update the scour and rock riprap design and to update and finalize LHS/SFER (if needed). The additional scope will also include recommendations and sketches for environmentally friendly bank protection at the existing and proposed bridges. All of the updated analyses will be documented in the revised draft Final Hydraulic Report

Replacing the existing Bridge at the Dry Creek on the new alignment will require removal of existing trees and other vegetation. To mitigate for the tree removal and vegetation removal, the design team is anticipating that the various regulatory agencies, including NMFS, CDFW, ACOE, RWQCB will require revegetation plan. The revegetation plan requires a well outlined strategy as well as signed and stamped construction plans and specification. For the preparation of the landscape plan, the design team has brought on a sub-consultant, Merrill Morris Partners (MMP), who would coordinate with the design team to incorporate the mitigation requirement by the regulatory agencies, and prepare construction documents for the landscape design. Preparing and submitting signed construction documents for landscape and revegetation was not included in the original scope of work. However, after coordinating with NMFS, the minimum anticipated mitigation (hydroseed, check dams, RSP, soil burritos, and willow cutting) will require signed and stamped landscape construction documents to implement the mitigation requirements. An Add Alternative Task has been included to incorporate any further mitigation more than the minimum anticipated including root wads, boulders, revegetation requiring irrigation systems, etc.

Additional Services for Revegetation Creek Mitigation Requirements involves the following subtask breakdown.

- 2.1 Phase II Project Management
- 2.2.2 Final Hydraulic Design and Report
 - 2.3.1 Unchecked Design Submittal (65% PS&E)
 - 2.3.2 Checked Design Submittal (95% PS&E)
 - 2.3.3 Final Design Submittal (100% PS&E)
 - 2.3.4 Final Storm Water Pollution Prevention Plan (SWPPP)
- 2.4 Environmental Permitting
- 2.5 Services During Bidding

7. ROW Coordination and Public Outreach Plan Update

Currently, the County does not have a right-of-way at the project location. Existing Dry Creek Road and the bridge are located in the Permanent Easement. At the start of the project, the County intended to acquire the right-of-way for the new roadway alignment and the new bridge, and relinquish existing permanent easement as required. After the change in the management in the County, the right-of-way acquisition was revisited and determined that right-of-way is not feasible and the County would like to acquire permanent easement instead. Additional effort is required to update the right-of-way exhibit to reflect the change in County's intention to acquire permanent easement instead of acquiring right-of-way in fee.

Additional scope of work also includes the additional efforts required for the public reach with the local property owners. The proposed roadway alignment splits existing properties 027-330-002 and 027-330-015 in two. At the start of the project, the parcels 027-330-002 was owned by a single owner, Herlihy. Property at 027-330-015 was owned by Kenney. However, both of these properties were sold to new owners, Shefer and Marusich, respectively. The new property owners were unaware of the proposed County project that would significantly impact their properties. Upon learning of the County's project that would run through both of their properties and require right-of-way permanent easement, both of these properties have become concerned of the impacts that the County's project will have to their properties and apparently developed innate opposition to the County's project with Shefer refusing to provide a requested Right-of-Entry for a cultural pedestrian survey required by the environmental clearance process and mentioning that his neighbor Marusich will have similar reluctance to provide the requested Right-of-Entry (ROE). ROE is required to perform additional cultural pedestrian survey for environmental clearance. After a phone conversation with Shefer, the design team understands that this property owner plans include permitting a septic tank for the property to be able to construct a single family house and to sell this property. Shefer is hoping to sell the property within the next month (June 2021) but had to disclose the County's project to the real estate agent and is worried that the project will jeopardize the pending sale of the property. The design team assured Shefer that the County's interest is to find an equitable solution and not to have to go down the eminent domain path and was able to obtain Shefer's septic tank permit plans. The team's recommendation is to evaluate various option to accommodate and/or mitigate conflicts with Shefer's future development and septic tank permit plans (as well as any future Marusich's plans of development). The current scope of work assumes that R/W will be able to be negotiated an equitable "Land Swap" with the property owners without having to go through eminent domain proceedings which will definitely delay the R/W phase and delay the completion of the project. By proceeding with one-on-one discussions with Shefer and Marusich (major stakeholders), the County will be able to better assess, evaluate and develop equitable mitigation to allow the project to be completed without having to go down the eminent domain path. The original scope of work did not anticipate a potential opposition to the project, and will likely require additional public outreach coordination. The design team will coordinate with the property owners to identify any conflicts between the County's project and the property owners planned future improvements, assess the impact to the value of the property, evaluate the feasibility of project alternatives to be able to accommodate the Shefer property septic tank, and accommodate them in the final design. One project alternative that might be able to accommodate the Shefer property septic tank includes new retaining walls along the northwest roadway approach which would require retaining wall design and retaining wall PS&E to be incorporated into the construction documents.

Additional Services for Right-of-Way Coordination and Public Outreach Plan Update involves the following subtask breakdown.

- 1.1 Phase I Project Management
- 1.4.8 Land Use and Community Impacts Memorandum, Visual Resources, Minor VIA
- 2.1 Phase II Project Management
- 2.2.7 Right-of-Way Engineering
- 2.2.8 Right-of-Way Appraisal and Acquisition
- 2.3.1 Unchecked Design Submittal (65% PS&E)
- 2.3.2 Checked Design Submittal (95% PS&E)
- 2.3.3 Final Design Submittal (100% PS&E)
- 2.5 Services During Bidding

Proposed Additional Budget

The role of BCA is the prime and structures consultant, the role of BKF is the civil/roadway subconsultant, the role of Avila is the hydraulics/hydrology and water quality subconsultant, the role of GPA is the environmental subconsultant, and the role of MMP is the landscape architectural subconsultant. We estimate that the additional budget required to perform the extra work associated with for the Contract Amendment for Additional Work Request (ASR) No. 1 [HBP Support / Code Update / AT&T Relocation / Environmental Update / Water Quality Redesign / Revegetation Creek Mitigation / ROW & Public Outreach Update] to be summarized and broken down as follows :

➤ Dry Creek Road Bridge (Replace) – Amendment No. 1

	Base Fee:	Add Alt Fee
○ BCA (See Attachment 1 for task/hourly breakdown)	\$90,880.00	\$0.00
○ Avila (See Attachment 2 for task/hourly breakdown)	\$26,956.00	\$4,996.00
○ BKF (See Attachment 4 for task/hourly breakdown)	\$89,218.00	\$0.00
○ GPA (See Attachment 3 for task/hourly breakdown)	\$117,505.00	\$0.00
○ <u>MMP (See Attachment 5 for task/hourly breakdown)</u>	<u>\$26,423.00</u>	<u>\$15,076.00</u>
TOTAL \$371,054.00		= (\$350,982.00 + \$20,072.00)

If approved, the additional budget of **\$371,054.00** for Dry Creek Road Amendment No. 1 will be added to the current Contract Agreement budget as follows.

➤ Contract Agreement (November 8, 2016)	\$775,177.00
➤ <u>Dry Creek Road Amendment No. 1</u>	<u>\$371,054.00</u>
Dry Creek Road Bridge (Replace)	\$1,146,231.00

We look forward to continuing to work with you on this project. Should you have any questions or require any additional information, please do not hesitate to contact me on my cell phone at (408) 781-4549, or by email at roen@biggscardosa.com.

Enclosures:

- Attachment 1 – BCA_ Additional Service Request No. 1 Fee Breakdown 06/15/21
- Attachment 2 – Avila_ Additional Service Request No. 1 Proposal 06/10/21
- Attachment 3 – BKF_ Additional Service Request No. 1 Proposal 06/15/21



- Attachment 4 – GPA_ Additional Service Request No. 1 Proposal 06/15/21
- Attachment 5 – MMP_ Additional Service Request No. 1 Proposal 06/14/21

Sincerely,

BIGGS CARDOSA
ASSOCIATES, INC.



Ron Oen, PE, QSD
Principal

Attachment 1

BCA_ Additional Service Request No. 1 Fee Breakdown

Additional Service Request No.1		BCA										Total Hours	Total Fee		
DRY CREEK ROAD BRIDGE (REPLACE)		Project Management & Structural Engineering													
Engineering and Design Services		Principal-in-Charge (QA)	Principal (Project Manager)	Engineering Manager	Senior Engineer	Project Engineer	Staff Engineer	Assistant Engineer	Junior Engineer	Senior Computer Drafter	Secretarial Services				
Estimate of Labor Effort															
15-Jun-21		\$301	\$238	\$194	\$178	\$155	\$127	\$112	\$100	\$152	\$99	#	\$		
PHASE 1: PRELIMINARY DESIGN, ENVIRONMENTAL DOCUMENTS AND TECHNICAL STUDIES	Task Description	Staff Rate (Fully Loaded)													
	Task 1.1 Project Management														
	1.1.1 Project Administration/ Budgeting/ Cost Accountin		2									2	4	\$673	
	1.1.2 Meetings/Agency Coordinator		8			16							24	\$4,387	
	1.1.3 Project Schedule		2										4	\$786	
	1.1.4 Local Program Compliance		2			4							6	\$1,097	
	1.1.5 QA/QC		2										2	\$602	
	Subtotal		2	14	0	0	22	0	0	0	0	0	2	40	\$7,544
	Task 1.2 Planning and Project Development														
	1.2.1 Purpose and Need													0	\$0
	1.2.2 Research and Data Gathering													0	\$0
	1.2.3 Surveying													0	\$0
	1.2.4 Aerial Topography (OPTIONAL): See Reimb. Expenses													0	\$0
	1.2.5 R/W Mapping													0	\$0
	1.2.6 Utilities													0	\$0
	1.2.7 Base Mapping													0	\$0
	Subtotal		0	0	0	0	0	0	0	0	0	0	0	0	\$0
	Task 1.3 Preliminary Design Engineering / Concept Plans														
	1.3.1 Roadway Approval Drawings		2			4								6	\$1,097
	1.3.2 Water Quality, Hydrology and Channel Hydraulic		2			4								6	\$1,097
	1.3.3 Geotechnical Studies and Preliminary Repoi													0	\$0
	1.3.4 Traffic Memorandum													0	\$0
	1.3.5 35% Bridge Type Selection Project Memorandum		8			40	16							64	\$10,145
	Subtotal		0	12	0	0	48	16	0	0	0	0	0	76	\$12,339
	Task 1.4 CEQA/NEPA Environmental Approvals and Tech Studies														
1.4.1 Project Environmental Initiation & Agency Coordinatio		2			4								6	\$1,097	
1.4.2 Biological Resources, Natural Environmental Study (Minimal Impacts) with Jurisdictional Delineation Forms		2			4								6	\$1,097	
1.4.3 Cultural Resources: APE, HPSR, ASR - see reimb. Expenses (OPTIONAL)		2			4								6	\$1,097	
1.4.4 Hazardous Materials Technical Memorandum													0	\$0	
1.4.5 Water Quality Assessment Report Memorandum		2			4								6	\$1,097	
1.4.6 Traffic Technical Memorandum with Noise Analysis (Constructor)													0	\$0	
1.4.7 Full Natural Environmental Study with Noise Study Report (OPTIONAL)													0	\$0	
1.4.8 Land Use and Community Impacts Memorandum Visual Resources, Minor Visual Impact Assessment		16			32								48	\$8,774	
1.4.9 ISEA Administrative, Draft and Final Report													0	\$0	
1.4.10 Endangered Species Act Consultation (OPTIONAL)		2			4								6	\$1,097	
Subtotal		0	26	0	0	52	0	0	0	0	0	0	78	\$14,257	
PHASE 1 (REPLACE OPTION): ENGINEERING DESIGN (PLANS, SPECIFICATIONS AND ESTIMATES (PS&E)), R/W SERVICES & CONSTRUCTION BID SUPPORT	Task 2.1 Project Management														
	2.1.1 Project Administration/ Budgeting/ Cost Accountin		6									8	14	\$2,216	
	2.1.2 Meetings/Agency Coordinator		24			40							64	\$11,918	
	2.1.3 Project Schedule		4			6							10	\$1,883	
	2.1.4 Local Program Compliance		4			12							16	\$2,815	
	2.1.5 QA/QC		6										6	\$1,805	
	Subtotal		6	38	0	0	58	0	0	0	0	0	8	110	\$20,636
	Task 2.2 Final Design Reports and Studies														
	2.2.1 Final Foundation Report													0	\$0
	2.2.2 Final Hydraulic Design and Report					2								2	\$311
	2.2.3 Preliminary Stormwater Management Pla					2								2	\$311
	2.2.4 Final Storm Water Management Report					2								2	\$311
	2.2.5 Preliminary Stormwater Pollution Prevention Plan: Draft SWPPP					2								2	\$311
	2.2.6 Utility Relocation		2			4								6	\$1,097
	2.2.7 Right-of-Way Engineering		4			12								16	\$2,815
	2.2.8 Right-of-Way Appraisal and Acquistior													0	\$0
	Subtotal		0	6	0	0	24	0	0	0	0	0	0	30	\$5,154
	Task 2.3 Final Plans, Specifications & Estimate														
	2.3.1 Unchecked Design Submittal (65% PS&E)		8			80	16		8					112	\$17,159
	2.3.2 Checked Design Submittal (95% PS&E)		4			16	16		8					44	\$6,269
	2.3.3 Final Design Submittal (100% PS&E)		2			8	8		4					22	\$3,135
	2.3.4 Final Storm Water Pollution Prevention Plan (SWPPP)						2							2	\$311
	Subtotal		0	14	0	0	106	40	0	20	0	0	0	180	\$26,874
	Task 2.4 Environmental Permitting														
	2.4.1 Agency Coordination and Prepare Permit Applications		4			6								10	\$1,883
Subtotal		0	4	0	0	6	0	0	0	0	0	0	10	\$1,883	
Task 2.5 Services During Bidding (OPTIONAL)															
2.5.1 Respond to Questions - Issue Addenda		4			8								12	\$2,193	
2.5.2 Attend Pre-bid and Bid Opening													0	\$0	
2.5.3 Review Bids													0	\$0	
2.5.4 Attend Pre-Construction Meeting													0	\$0	
Subtotal		0	4	0	0	8	0	0	0	0	0	0	12	\$2,193	
Project Total Labor		8	118	0	0	324	56	0	20	0	10		536	\$90,880	
Total Hours Per Consultant						536							536		

Additional Service Request No.1		BCA										Total Hours	Total Fee		
DRY CREEK ROAD BRIDGE (Replace)		Project Management & Structural Engineering													
Engineering and Design Services		Principal-in-Charge (QA)	Associate (Project Manager)	Engineering Manager	Senior Engineer	Project Engineer	Staff Engineer	Assistant Engineer	Junior Engineer	Senior Computer Drafter	Secretarial Services				
SUMMARY Estimate of Labor Effort															
15-Jun-21															
REIMBURSABLE EXPENSES	Plotting, Printing, Postage, and Travel													\$0	
	Drilling													\$0	
	Geomorphology Study 2nd Tier Suit													\$0	
	Aerial Topography (OPTIONAL)													\$0	
	Cultural Resources: HPSR/ASR (OPTIONAL)													\$0	
	Traffic Control for Borings (OPTIONAL)													\$0	
Project Total Reimbursable Expenses														\$0	
PHASE 1 with Optional Tasks & Expenses	Task 1.1: Project Management					\$7,544								\$7,544	
	Task 1.2: Planning and Project Development					\$0								\$0	
	Task 1.3: Preliminary Design Engineering / Concept Plans					\$12,339								\$12,339	
	Task 1.4: CEQA/NEPA Environmental Approvals					\$14,257								\$14,257	
Total Project Fee Per Consultant						34,140								\$34,140	
PHASE 2 with Optional Tasks & Expenses	Task 2.1: Project Management					\$20,636								\$20,636	
	Task 2.2: Final Design Reports and Studies					\$5,154								\$5,154	
	Task 2.3: Final Plans, Specifications & Estimates					\$26,874								\$26,874	
	Task 2.4: Environmental Permitting					\$1,883								\$1,883	
	Task 2.5: Services During Bidding (OPTIONAL)					\$2,193								\$2,193	
Total Project Fee Per Consultant						56,740								\$56,740	
ASR No. 1 BCA FEE - TOTAL						90,880								\$90,880	

Attachment 2

Avila_ Additional Service Request No. 1 Proposal

PRINCIPALS

CATHERINE M.C. AVILA, P.E.
ERNESTO A. AVILA, P.E.

AVILA AND ASSOCIATES
CONSULTING ENGINEERS, INC.
712 BANCROFT ROAD, SUITE 333
WALNUT CREEK, CALIFORNIA 94598

TELEPHONE
(925) 673-0549
FACSIMILE
(415) 576-1235

June 10, 2021

Ron Oen, PE
Principal
Biggs Cardosa Associates, Inc.
865 The Alameda
San Jose, CA 95126

Subject: Proposal for Additional Services Request (ASR) for the Dry Creek Bridge over
Dry Creek Road in Napa County

Dear Ron:

Avila and Associates Consulting Engineers, Inc. (Avila and Associates) appreciates the opportunity to provide you with this letter proposal to provide additional services for the Dry Creek Bridge over Dry Creek Road in Napa County (County), California. The purpose of the analysis is to provide 1) update discharges and finalize the draft Final Hydraulic Report for the proposed bridge, 2) provide hydrology and hydraulic information for a temporary diversion, 3) update the local drainage based upon the updated roadway and grading plan set provided by BKF and 4) update the Water Quality Tech Memo and SWPPP for the environmental document. For your consideration, Avila and Associates proposes the following scope of work to complete the analysis and coordination:

Task 1 – Update Hydrology, Hydraulics and FHR. Based upon comments from Napa County, received after the Preliminary Hydraulic report, Avila and Associates will update the discharge analysis using HEC-HMS and taking Napa County comments into account. The HEC-RAS model will be updated based upon updated grading and rock riprap configuration provided by BKF and the updated hydrology estimated by Avila. The results of the HEC-RAS model will be used to update the scour and rock riprap design and to update and finalize LHS/SFER (if needed). Recommend and provide sketches for environmentally friendly bank protection at the existing and proposed bridges. All of the updated analyses will be documented in the revised draft Final Hydraulic Report.

Assumptions: Proposed revised creek grading is provided as a surface in an xml or other cadd file by BKF and this revised grading will not have adverse effects on the hydraulics. Napa County does not require any additional HMS analysis and the one-dimensional steady flow HEC-RAS model developed for the bridge replacement will be used as the base model for the updated hydraulic analysis. One additional round of scour and RSP analyses will be completed. RSP sizing recommendations at the proposed bridge will include consideration of including willow planting in the RSP and soil burrito/willow planting at the existing bridge. The LHS/SFER forms and FHR will be updated once more to document the updated analyses (if needed).

Deliverables: Graphics and tables to be provided in the FHR. The LHS/SFER forms, HEC-RAS results, and RSP and scour calculations will be provided in the appendices of the FHR.

Task 2 – Temporary Diversion Hydrology and Hydraulics: Avila will perform a duration-frequency analysis for Dry Creek using the U.S. Army Corps of Engineers' HEC-SSP (Statistical Software Package), Version 2.2 or later. Streamflow gage data from the Dry Creek gage (USGS #11457000) will be used for the analysis. The County gage at Dry Creek near Highway 29 from the One Rain database will be used to verify the results of the analysis.

The duration frequency analysis will be used to calculate monthly flow exceedance levels, by month, for April through November. The monthly flow exceedance levels for the 0.1%, 1%, 2%, 5%, 10%, 15%, 25%, 50%, 80%, 90%, 95% and 99% flow levels will be provided.

After receiving proposed “grading” and plans for up to two alternative diversion configurations from BCA, Avila will model the low flows for the exceedance level prescribed by the County in HEC-RAS.

Avila will provide a Draft and Final Technical Memo describing the duration frequency and hydraulic modeling analyses. Responses to comments on the revised Draft Technical Memo will be prepared and a Final Technical Memo will be submitted.

Assumptions: Technical memos to be submitted electronically (no hard copies).

Deliverables: Technical Memorandum documenting the analysis with tabular and graphical representation of the Duration Frequency during specified time periods. Water surface elevation documenting the hydraulic analysis.

Task 3 – Update Local Drainage, SWPPP, Stormwater Management Plan and Water Quality Tech Memo: Update local drainage calculations with revised Bioretention Basin size and location and drainage plans by BKF (not including basin and basin outlet design for Hydromodification requirements), Update Stormwater Management Plan including updating Drainage Management Areas (DMAs), recalculating required basin size, and updating report (not including hydromodification memo). Update Draft SWPPP including post-construction requirements (PCR), a discussion of existing and proposed drainage patterns, Erosion and Sediment Control Plan (to be provided by BKF). Additionally, Avila will coordinate with BKF regarding bioretention basin design, basin outlet design, and hydromodification analysis. Note, both water quality and hydromodification requirements must be met and one or the other may govern design. Coordinate with RWQCB for alternative treatment locations.

Assumptions: The final, proposed grading for the project, including roadway cross slope and embankment grading will be provided by BFK and will not change appreciably after the drainage analysis is complete. The draft SWPPP will be completed to the extent possible with the information for the project that is currently available. All remaining sections will be left blank and will be the responsibility of the construction contractor. The contractor will also be responsible for providing the final project map for the SWPPP including the locations of water quality testing sites and stock piles. BKF will provide the Erosion Sediment Control Plan for the project. The project impervious area will be less than 1 acre and a Hydromodification Memo will not be required for the Phase II MS4 permit.

Deliverables: draft final SWPPP, Stormwater Management Plan, Drainage Report, and Water Quality Technical Memo.

Optional Task 4 – Provide Creek Channel Restoration using bio-engineering design.

Based upon comments from National Marine Fisheries Service, Avila and Associates will provide sketches for bio-engineered design that includes root wads, native riparian plantings, and boulders that aim to restore fish habitat while also providing bank stabilization. The restoration would follow the design guidance may be found in the California Department of Fish and Wildlife – Salmonid Restoration Manual (fourth edition) <https://ucanr.edu/sites/calfish3/files/227427.pdf> or the Washington State Aquatic Habitat Guidelines Program – Integrated Streambank Protection Guidelines (<http://wdfw.wa.gov/publications/00046/wdfw00046.pdf>).

Assumptions: If required, Avila and Associates would provide sketches to BKF to develop a plan sheet for the restoration. Further, Avila would sign the plan sheet which would include only bio-vegetation for channel restoration. If required, Avila would provide specification and sign/stamp those specification sheets.

Deliverables: Graphics and specifications for creek restoration

We estimate that the effort would take a total an additional of \$26,956 as outlined in the attached exhibit.

We anticipate completing the draft FHR 4 weeks following the receipt of the proposed creek grading from BKF.

We anticipate completing the draft SWPPP, Stormwater Management Plan, and Drainage Report 4 weeks following the receipt of final drainage details from BKF.

We anticipate completing the WQTM 1 week following the completion of the SWPPP and receipt of Erosion Sediment Control Plan from BKF.

Should you have any questions regarding this proposal, please feel free to contact me at (925) 673-0549 or e-mail at cavila@avilaassociates.com.

Very truly yours,

Avila and Associates Consulting Engineers, Inc.



Catherine M.C. Avila, P. E.
Principal

Attachment: Cost Estimate

Attachment 2

Avila_ Additional Service Request No. 1 Proposal

	Dry Creek Additional Services Request	Proj Mgr (eng)	Senior Engineer	Associate Civil Engineer	Avila Staff Labor	Other Direct Costs	Total
		Cathy A	Remington	Callahan	Subtotal	(ODCs)	
	Rate (\$/hr)	\$185.49	\$134.92	\$101.36			
1	Update hydrology (County comments), hydraulics (updated Q and surface), update FHR and LHS/SFER						
a	Update Hydrology based upon County comments	2	4	2	\$1,113		\$1,113
b	Update HEC-RAS based upon updated grading/RSP and discharges	2	4	4	\$1,316		\$1,316
c	Update Scour and RSP at the new bridge based upon updated grading. Provide recommendations on willow planting in RSP at the proposed bridge and soil burritos with willow planting at the existing bridge.	8		16	\$3,106		\$3,106
d	Update FHR based upon updated grading and discharges	2	6	2	\$1,383		\$1,383
e	Update LHS/SFER	2		2	\$574		\$574
	Subtotal (Task x.1)	16	14	26	\$7,492		\$7,492
2	Temporary Diversion H&H						
a	Exceedence Probability Analysis	2		20	\$2,398		\$2,398
b	Exceedence Probability Technical Memorandum	2		8	\$1,182		\$1,182
c	Hydraulic Analysis for 2 options	2		16	\$1,993		\$1,993
d	Update Technical memorandum to document hydraulic analysis	4	2	16	\$2,634		\$2,634
	Subtotal (Task x.2)	10	2	60	\$8,206		\$8,206
3	Water Quality Technical Memo and SWPPP						
a	Update Local Drainage (Mostly hydrology update) Calculations with revised Basin location and drainage plans by BKF (not including basin and basin outlet design for WQ requirements)	2	12		\$1,990		\$1,990
b	Update Stormwater Report including updating DMAs and recalculating required basin size and updating report (including hydromodification memo)	4		12	\$1,958		\$1,958
c	Update Draft SWPPP including PCR, existing/proposed drainage, Erosion and Sediment Control Plan (from BKF).	4		12	\$1,958		\$1,958
d	Coordination with BKF regarding basin and basin outlet design and hydromodification analysis (both WQ and hydromod requirements must be met and one or the other may govern design)	2	8	8	\$2,261		\$2,261
e	RWQCB coordination for alternative treatment options (i.e.,	6	6	6	\$2,531		\$2,531
	Subtotal (Task x.3)	18	26	38	\$10,698	\$0	\$10,698
4	Project Management						
a	Provide Project Management				\$0		\$0
d	Escalation					\$559	\$559
e	ODCs					\$0	\$0
	Subtotal (Task x.4)	0	0	0	\$0	\$559	\$559
	Grand Total:	44	42	124	\$26,396.67	\$559.08	\$26,955.75

Optional Services						
Root wad/woody debris/roughened channel "design"	8	8	24	\$4,996		\$4,996

Attachment 3

BKF_ Additional Service Request No. 1 Proposal



June 15, 2021
BKF No. 20151030-10

Ron Oen, P.E.
Principal
Biggs Cardosa Associates, Inc
865 The Alameda
San Jose, CA 95126

Transmitted Via Email

**Subject: Additional Service Request No. 01
Dry Creek Bridge (Br. No. 21C0056 Bridge Replacement Project, RDS 15-22)**

Dear Ron:

Per your request, we have prepared this additional service request that addresses work outside the limits of our current contractual scope of work. Below I have identified each item with the approximate level of effort needed to address the additional tasks.

I. ADDITIONAL SCOPE OF SERVICES

PHASE 1: PRELIMINARY ENGINEERING DESIGN, ENVIRONMENTAL DOCUMENTS AND TECHNICAL STUDIES

Task 1.1.4: Local Program Compliance – BKF will assist BCA and the County in preparing the Caltrans LAPM forms per Chapter 14 required for the Project, such as Notice to Owners (NTO), Report of Investigation (ROI), if required, and Utility Agreements (UA). We will coordinate with utility companies and the County to prepare the forms and assist in obtaining signatures for the Utility Agreements. We assume that the utility companies will have their own "Owner's Liability Claim Letter". BKF will compile all the necessary documents for the Right of Way agent to use to obtain the Right of Way Certification approval from Caltrans.

We have assumed four (4) meetings with the utility companies, County and the Design Team to discuss and finalize the Notice to Owners, Utility Agreements, and other LAPM forms required for each utility company.

Task 1.2.5 R/W Mapping – Several changes to the design and ownership of the properties from the time we initially prepared back in 2018 and submitted the right of way requirements map until now. APN 027-330-002 that was owned by Madeline Herlihy was sold and now owned by Shai Shefer. With this change in ownership, the right of way requirements map was revised to reflect the new proposed land swaps for the new owners. In addition, the proposed driveway access on the south side of Dry Creek Road to Herlihy and Kenney was revised to provide access only to the Kenney properties. Based on these changes, we have or will need to:

- Revised the requirements map to reflect the change in ownership
- Revised the driveway access to the Herlihy and Kenney properties
- Revise the storm drain system and catch basins configurations to capture the flow from the old Dry Creek Road, the Kenney and Herlihy properties

Meetings for this task have been separated from the PDT meetings with the County. Hours within this task include the three (3) meetings including the kick-off meeting listed below, and assumed one (1) additional meeting with the County and the Design Team to discuss the right of way requirements on the Project. This task also includes time to prepare for the meetings.



- 5/1/2020 (1 hour/E. Mohney only)
- 2/12/2021 (3 hours)
- 4/21/2021 (2 hours)

Task 1.2.7: Base Mapping – The change of the design speed, BKF will need to revise the base map of the geometrics, layout and profile. We will need to modify the curve data table and vertical curve lengths, and analyze the stopping and intersection sight distances for the 30 MPH design speed.

Task 1.3.1: Roadway Approval Drawing - The Basis of Design prepared by BKF is dated October 2017 using the design standards for AASHTO and the Napa County 2011 editions. With the Project extending beyond the expected construction date, the industry design standards have been updated to 2018 editions; Napa County and AASHTO design standards. The design changes with the 2018 edition include:

DESIGN CRITERIA (ADT 1348 veh/day)	2011 AASHTO	2011 COUNTY STD	2011 AASHTO	2018 COUNTY STD
Roadway Classification	Rural Collector Mountainous	Minor Collector	Rural Collector Mountainous	Collector
Design Speed	30 MPH	25 MPH	30 MPH	35 MPH
Travel Way Width	20 FT	26 FT	20 FT	28 FT
Shoulder Width (Each Side)	5 FT	7 FT	4 FT	6 FT

Task 1.3.4: Design Criteria & Geometric Memorandum – BKF will need to update and revise the Design Criteria and Geometric Memorandum to incorporate the changes to the basis of design and the geometrics correlated to the 30 MPH design speed. With the design speed change based on the more recent design standard edition, design changes include the:

- Cross section of the roadway,
- Horizontal and vertical geometries,
- Grading limits
- Drainage design

Task 1.3.5: Bridge Type Selection Project Memorandum: Preparation of the Geometric Approval Drawing (GAD) with the revised Type Selection Report, the Basis of Design Memo, and Design Exception Memo require revisions and resubmissions to Caltrans/the County for review and approval.

This task includes coordination meetings with the Design Team and the County to discuss design parameters per County and AASHTO design standards. The PDT developed the Basis of Design based on the most current design standards available in the industry: County Design Standards 2018 and AASHTO A Policy on Geometric Design of Highways and Streets 2018.

PHASE 2: ENGINEERING DESIGN (PLANS, SPECIFICATIONS AND ESTIMATES [PS&E]), R/W SERVICES & CONSTRUCTION BID SUPPORT

Task 2.2.6: Utility Relocation – As requested by BCA, BKF will draft AT&T's relocated communication lines in the Composite Utility Plan. BKF will include this plan as part of the construction documents for bidding. We anticipated two (2) submittals (65%, and 100% Final Submittals) and one (1) set/round of review comments from AT&T and/or the County. BKF will submit an Additional Service Request for additional set of comments and submittals from AT&T and the County. We anticipate one (1) meeting with AT&T for design coordination.



Task 2.3: Unchecked Design Submittal (65% PS&E) – The revision of the design require the 65% plans to be revised based on the 35% Preliminary Design, which will also require the revisions of the quantities and estimates. Because of the geometric design changes and changes to the turn-out road, we have assumed one (1) day of survey work to capture additional areas outside of current Project limits. Several plan revisions will also be required with revisions to the quantities and estimates:

- Typical Sections (Assuming roadway cross section remain as is, no revisions required)
- Demolition Plan (1)
- Horizontal Layout Plans (3)
- Profile and Superelevation Plans (5)
- Erosion Control Plans (2)
- Grading Plan (1)
- Utility Plans (2)
- Drainage Plan and Profile Plans (7)
- Pavement Delineation Plan (1)
- Traffic Control Plans (4)

Develop Creek Mitigation Plans (incorporating GPA and Avila Permit requirements) – Based on discussions with the County, the Maintenance Division and the Design Team, the bioretention basin on the east side of the proposed Dry Creek Bridge on the south side of the road, poses safety and maintenance issues. The County and the Design Team decided to remove the proposed bioretention basin, and propose another approach to treat the storm water within the impervious areas east of the Bridge. Based on the removal of the southeast basin, we have or will need to:

- Increased the size of the bioretention basin on the northwest side of Dry Creek Road
- Redesigned the roadway and grading
- Performed site reconnaissance to use existing roadway and capture runoff from the west side of the Project limits
- Researched other alternatives from pervious pavement, as the County had suggested, and catch basins that have built-in filtration systems
- Redesign the catch basin areas to have a pull-out road for maintenance vehicles
- Redesign the storm drain system to accommodate the filtration system (use of Perk Filters east side of Dry Creek Bridge)

Meetings for this task have been separated from the PDT meetings with the County. Hours within this task include the four (4) meetings listed below averaging about an hour for each meeting, and assumed one (1) additional meeting with the Regional Water Quality Control Board (RWQCB). This task also includes time to prepare for the meetings.

- 1/25/2021 (2 hours)
- 3/26/2021 (1 hour)
- 3/30/2021 (1 hour)
- 4/1/2021 (1 hour)

In addition, as requested by BCA and Avila, BKF will prepare a grading and layout plan for the soil burrito slope stabilization and restoration elements of the project as designed by Avila & Associates. The plan will include defining the limits of the soil burrito feature and the extents of grading work required for its installation. The plan will also include details for the construction of the soil burrito as designed by Avila & Associates such as layer thickness, soil composition, wrap material configuration, and directions for initial plantings of the soil burritos required for their stability. We anticipate two (2) sheets of plans will be required to define the soil burrito feature for construction by the contractor, and these plans will be signed by Avila & Associates. BKF's task includes



drafting the design of the soil burritos onto the construction plans, coordination time to confirm the design details and communicate the overall layout to the design team and the County. Specifications and estimates are prepared and provided by Avila & Associates.

II. COMPENSATION

BKF proposes to provide the additional services on the basis of the current contract. We will continue to invoice for our services per task summarized as follows:

Phase Task	Description	Fee
1.1.4	Local Program Compliance	\$10,786
1.2.5	Right of Way Mapping	\$6,755
1.2.7	Base Mapping	\$1,727
1.3.1	Roadway Approval Drawing	\$8,684
1.3.4	Design Criteria & Geometric Memorandum	\$2,082
1.3.5	Bridge Type Selection Project Memorandum	\$12,423
2.2.3	Preliminary Storm Water Management Plan	\$8,390
2.2.6	Utility Relocation	\$5,355
2.3	Final PS&E	\$33,015
Total Labor Fee		\$89,218


Please contact me at 949-526-1042 if you have any questions regarding the additional scope items or if we need to meet to review them.

Respectfully,
BKF Engineers



Sheila Amparo, PE, QSD/P
Senior Project Manager



Additional Service Request No.1 DRY CREEK ROAD BRIDGE (Replace) Engineering and Design Services  SUMMARY Estimate of Labor Effort		BKF Civil, Roadway, Utilities, Survey, Traffic, and Right-of-Way Engineering								Total Hours	Total Fee
		Associate	Project Manager	Engineer/Surveyor III	Engineer/Surveyor II	Engineer/Surveyor I	Survey Manager	Surveying Crew (2 Men Crew)	Technician		
REIMBURSABLE EXPENSES	Plotting, Printing, Postage, and Travel	\$0								\$0	
	Drilling									\$0	
	Geomorphology Study 2nd Tier Sub									\$0	
	Aerial Topography (OPTIONAL)	66								\$0	
	Cultural Resources: HPSR/ASR (OPTIONAL)									\$0	
	Traffic Control for Borings (OPTIONAL)									\$0	
	Project Total Reimbursable Expenses		\$0								\$0
PHASE 1 with Optional Tasks & Expenses	Task 1.1: Project Management	\$10,786								\$10,786	
	Task 1.2: Planning and Project Development	\$8,482								\$8,482	
	Task 1.3: Preliminary Design Engineering / Concept Plans	\$23,189								\$23,189	
	Task 1.4: CEQA/NEPA Environmental Approvals	\$0								\$0	
	Total Project Fee Per Consultant		\$42,457								\$42,457
PHASE 2 with Optional Tasks & Expenses	Task 2.1: Project Management	\$0								\$0	
	Task 2.2: Final Design Reports and Studies	\$13,746								\$13,746	
	Task 2.3: Final Plans, Specifications & Estimates	\$33,015								\$33,015	
	Task 2.4: Environmental Permitting	\$0								\$0	
	Task 2.5: Services During Bidding (OPTIONAL)	50								\$0	
Total Project Fee Per Consultant		46,761								\$46,761	
ASR No. 1 BKF FEE - TOTAL		\$89,218								\$89,218	

Attachment 4

GPA_ Additional Service Request No. 1 Proposal



Amendment Request:
Environmental Services for
Dry Creek Road Bridge Replacement
Napa County, CA

I. PROJECT BACKGROUND AND UNDERSTANDING

The County of Napa (County) contracted with Biggs Cardosa Associates, Inc. (BCA) to provide design services for the Dry Creek Road Bridge Replacement project. GPA was subcontracted to BCA to provide environmental services, including CEQA and NEPA documentation and regulatory permit acquisition.

To date, GPA has completed preparation and finalization of the Natural Environment Study (NES), Traffic and Noise Memo, Hazardous Materials Memo, Land Use and Community Impact Memo, Equipment Staging Memo, and preparation and submittal of the Biological Assessment (BA). GPA has also completed investigations related to the remaining environmental topic areas identified in our contract scope of work, and is nearing completion of several technical studies for these topics. Finally, GPA has drafted the preponderance of the Administrative Draft Initial Study/Mitigated Negative Declaration required to comply with the California Environmental Quality Act (CEQA).

As a result of the biological investigations completed to support preparation of the NES and BA, including changes in the regulatory environment for certain species as well as requests from Caltrans for additional documentation subsequent to completion of these documents, additional effort and documentation related to biological investigations and documentation was required, and is anticipated to continue to be required, to support NEPA and CEQA approval and permitting for the project. Additionally, changes have been made to the project design, specifically related to the bioretention basins, that required revision of technical reports to address. GPA has also initiated coordination within the Project Team for compensatory mitigation support and guidance. Finally, the duration of the project development phase of the project has extended beyond what was originally anticipated, resulting in additional expenditures for project management and meeting attendance beyond what was included in GPA's contract.

Based on this, GPA is requesting an amendment to the current contract, as described below.

II. SCOPE OF WORK: Environmental Clearance and Permit Requirements / Regulations Update

Task 1.1: Project Management and Meetings

It is anticipated that an additional 26 monthly project team meetings will be required before the project is currently scheduled to complete Task 2.5 Construction Bidding Phase Support in March 2023. As a result, GPA requests additional budget to accommodate Project Manager telephone attendance in 26 additional project team meetings by telephone.



Additionally, due to the extension of the project schedule into the year 2022, additional project management hours are required related to project administration and cost accounting; as a result, GPA requests additional budget to accommodate additional time required by the Project Manager to complete these continued activities.

Deliverable: Project Manager and Project Director telephone participation in 26 additional PDT meetings. Each meeting will be up to 2 hours each.

Task 1.4.7: Full Natural Environment Study

After the contract was issued for the project, the regulatory status of the foothill yellow-legged frog (*Rayna byolii*) (FYLF) was elevated from a state species of concern to state candidate species (for listing under the California Endangered Species Act). Because of this, additional efforts for species survey, analysis, agency coordination, development team coordination, and documentation were required to address this species in the NES. While the species has now since been downgraded, these efforts were performed when the species was elevated to a state candidate species. GPA requests a budget amendment to recapture this additional expense.

Deliverable: Inclusion of evaluation of FYLF as a state candidate species in the NES.

Task 1.4.10: Endangered Species Act Consultation

Federal Endangered Species Act Consultation:

As part of the development of preliminary project design, the County requested that GPA organize and lead completion of an early/pre-application consultation meeting with regulatory agencies, including a representative of the National Marine Fisheries Service (NMFS), to discuss potential requirements for placement of creek erosion control measures in the Dry Creek channel. Additionally, GPA attended a separate field meeting with the project team to discuss the potential resources within the project footprint. This effort was not anticipated as part of our contract scope of work and budget; therefore, GPA requests a budget amendment to recapture this additional expense. It is assumed that additional field visits and/or coordination meetings with federal agency representatives or the project team will not be required to support completion of Section 7 consultation. If additional field visits or coordination meetings are required, GPA is available to participate in these meetings under an additional Task Order and budget, if desired by the County.

Deliverable: Pre-application site meeting with regulatory agencies and project team field meeting.

Assumptions: It is assumed that additional field visits and/or coordination meetings with federal agency representatives or the project team will not be required to support completion of Section 7 consultation. If additional field visits or coordination meetings are required, GPA is available to participate in these meetings under an additional Task Order and budget, if desired by the County.

SCOPE



Task 1.4.11: Wetlands Only Practicable Finding Memorandum

The jurisdictional delineation investigations completed in support of the NES identified wetlands under jurisdiction of the United States Army Corps of Engineers (USACE). During consultation with Caltrans as part of their review and approval of the NES, Caltrans identified that a Wetlands Only Practicable Finding Memorandum, pursuant to Executive Order 11990-Protection of Wetlands, would be required for project approval under NEPA. During coordination efforts with Caltrans, Caltrans indicated that Caltrans no longer prepares these documents in-house. As a document that has traditionally been completed in-house by Caltrans staff, this document was not included in GPA approved scope of work. GPA requests an amendment to support this additional work.

GPA will prepare a Wetland Only Practicable Finding memorandum for the project file. The memorandum will document project compliance with Executive Order 11990-Protection of Wetlands.

Deliverables: One electronic copy of the Wetland Only Practicable Memorandum

Assumptions: The Caltrans-provided example memorandum will be the appropriate level of analysis and documentation. If additional documentation is required, the scope and cost may need to be revised. Up to two rounds of comments will be sufficient for review and approval of the memorandum. If additional rounds of comments are required, the scope and cost may need to be revised.

Task 2.4: Environmental Permitting

Agency Permit Application Requirements

There have been substantial changes to the agency permit application requirements because of recently revised guidelines that were not in place when the original scope and fee were prepared. Based on GPA's experience, the current applications for the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) are requesting considerably more information and higher level of detail. Therefore, additional effort will be required to address new regulatory permit requirements. No field meetings are anticipated as part of the new regulatory permit requirements and are not included in this amendment.

Deliverables: One electronic copy of the updated permitting package format.

Assumptions: No field meetings are anticipated.

III. SCOPE OF WORK: Water Quality Concept Plan Redesign

Task 1.4.3: Cultural Resources APE, HPSR, ASR

After the Area of Potential Effects (APE) Map was drafted and submitted for Caltrans review in 2019, several changes were made to the bioretention basin design concept, which necessitated additional coordination and revisions to the APE Map. Due to these comments and revisions, the APE increased in size by approximately 1.4 acres. In accordance with Caltrans guidelines, the additional area (1.4 acres) added to the APE requires a field survey and revisions to the Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR). As a subconsultant to GPA, PaleoWest has initiated updates to the

SCOPE



APE Map to account for the revised design concept. The changes will also require PaleoWest to conduct a second pedestrian reconnaissance field survey to examine the new area not previously covered by the initial survey conducted in May 2019. PaleoWest will conduct a supplemental field survey of approximately 1.4 acres and revise the HPSR and Archaeological Survey Report ASR to incorporate the results of the design revisions and supplemental survey. GPA requests a budget amendment to recapture this additional expense.

Deliverable: Revisions to the APE Map, HPSR, and ASR to account for change in bio retention basins and supplemental field survey.

Assumptions: PaleoWest assumes the additional services described above will not exceed their original contract budget. This scope does not include any additional work necessary should an archaeological resource be discovered during the supplemental survey, and an additional scope and budget would be needed for that effort, if necessary.

Task 1.4.5: Water Quality Assessment Report Memorandum

Bioretention Basins Support – Additional Task

As part of the development of preliminary project design, the County and BCA requested GPA's attendance at meetings and to provide assistance with the bioretention basin options. This effort was not anticipated as part of our contract scope of work and budget; therefore, GPA requests a budget amendment to recapture this additional expense.

Deliverables: Meetings with the project team and RWQCB and bioretention basin coordination support

Task 1.4.10: Endangered Species Act Consultation

After the BA was drafted and submitted for Caltrans review, several changes were made to the bioretention basin design concept, which necessitated additional coordination and revisions to the Biological Assessment. The changes also extended the document revision period prior to re-submittal to Caltrans for approval. GPA requests a budget amendment to recapture this additional expense.

Deliverable: Revisions to the BA to account for change in bio retention basins.

IV. SCOPE OF WORK: Revegetation Creek Mitigation Requirements

Task 2.3.2: Plans and Specification Support for the Revegetation Plan - Additional Task

If planting plan sets, typical details, irrigation plans, specifications, and/or similar are required, others would prepare the plans and specifications, and GPA will provide biological support for the contents of those plans and specifications. GPA will coordinate with the project team to incorporate the plans and specifications as attachments to the Revegetation Plan. Once approved by CDFW, GPA will coordinate with the project team to confirm the commitments within the Revegetation Plan are incorporated into the plans and specifications. GPA will attend up to three meetings with the Project Team. GPA's review of the plans and specifications will be specific to the Revegetation Plan and does not include other specification review and support.

SCOPE



Deliverables: Biological Support for the Revegetation Plans and Specification

Assumptions: Up to two rounds of plans and specification review are expected during the Revegetation Plan approval phase and up to one round of plans and specification review following Revegetation Plan approval. GPA's review of the plans and specifications will be specific to the revegetation plan and does not include other specification review and support.

Task 2.4: Environmental Permitting

Tree Survey for 1602 Streambed Alteration Agreement – Additional Task

Notification of a Streambed Alteration to the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the California Fish and Game Code requires documentation of the location, size, and species of all trees and shrubs equal to or greater than four inches in diameter at breast height (DBH) that would be removed or trimmed by construction of a project within their jurisdiction. This information was not included as part of the scope of the survey effort completed for the project, and must be completed in order to inform the 1602 Notification. If agreed to by the County and BCA, GPA will complete the tree survey to generate the required information. GPA will record the tree species, trunk DBH, and GPS location of all standing trees, alive or dead, sized six inches or greater at DBH within the engineer-provided tree removal limits. Each tree will be given a tree tag with a unique identification number that will correspond with tree data collected. The survey results will be summarized in a table and the shapefiles containing the tree location data will be provided. If requested, GPA will create a figure showing the tree locations within the proposed tree removal limits.

Deliverables: One electronic copy of Tree Survey table; shapefiles with tree location data.

Assumptions: GPA will attempt to record each tree using a GPS unit with sub-meter accuracy. Due to the heavily vegetated nature of the project area, GPS signal strength may be limited, which may affect the ability to record all trees. Where recordation with a GPS unit is not possible due to site limitations, GPA will map tree locations based on aerial maps and field observations by staff to provide the most accurate information possible. GPA assumes that locations of removal limits will be provided by the design engineers prior to initiation of the survey.

Pre-Submittal CDFW Coordination – Additional Task

At County's request GPA conducted preliminary research to support potential options available to the County. GPA has also initiated coordination meetings with the BCA and the County to discuss compensatory mitigation options. GPA will attend up to three additional focused compensatory mitigation meetings with BCA and/or the County to discuss on-site compensatory mitigation options. If requested, GPA will reach out to CDFW to inquire if a potential mitigation option would not meet with their approval. It is GPA's understanding that the County's preference is an on-site mitigation option and off-site mitigation options would not be considered or discussed.

Assumptions: Each meeting will be up to 2 hours each and attended by up to two biologists and the PM. Any coordination with CDFW would be timed to be conducted during the permitting

SCOPE



phase of the project. This task does not include the following: preparation of a revegetation plan, purchase of credits/facilitation of credits; in-depth agency coordination. Should the County request that GPA prepare and/or facilitate these tasks, an additional scope and budget would be provided. Off-site mitigation would not be discussed or included as it is GPA's understanding that the County's preference is an on-site mitigation option; off-site mitigation options would not be considered or discussed.

CDFW Approved Revegetation Plan – Additional Task

A Revegetation Plan is expected to be required as a condition of the 1602 Streambed Alteration Agreement. Following receipt of the Final 1602 Streambed Alteration Agreement, GPA will prepare an on-site Revegetation Plan for submittal to CDFW. GPA will coordinate with the Project Team to receive confirmation of Revegetation Plan feasibility, discuss plan implementation and to confirm County preferences. The Revegetation Plan will include revegetation goals and success criteria; site baseline conditions; existing site functions and values; responsible parties and financial assurances; timing; rationale for expecting success; methods for site preparation (clearing and grading, non-native plant removal, soil preparation, erosion control); a plant palette; description of irrigation methods; and, proposed maintenance and monitoring methods and timing. GPA will submit the draft plan for review and approval to CDFW. GPA expects to provide coordination for up to two sets of comments from County and up to two sets of comments from CDFW. GPA will attend up to three meetings, two with the Project Team and one with CDFW. GPA assumes the County will implement an on-site revegetation plan. Planting plan sets, typical details, irrigation plans, specifications, and/or similar, should they be requested, would be prepared by others. GPA assumes up to two sets of comments from County and up to two sets of comments from CDFW. The Revegetation Plan will be prepared following receipt of the Final 1602 Streambed Alteration Agreement. This task assumes that NMFS will be a recipient of the CDFW-approved plan and no further coordination with NMFS will be required. This task only includes coordination with CDFW, and does not anticipate that the CDFW-approved on-site Revegetation Plan would need to be provided to RWQCB or USACE for review and approval.

Deliverables: One electronic copy of the CDFW approved Revegetation Plan

Assumptions: GPA assumes County will implement an on-site revegetation plan. If planting plan sets, typical details, irrigation plans, specifications, and/or similar are requested, others would prepare those elements. GPA assumes up to two sets of comments from County and up to two sets of comments from CDFW. The Revegetation Plan will be prepared following receipt of the Final 1602 Streambed Alteration Agreement. Coordination with RWQCB or USACE for review and approval of the CDFW-approved on-site Revegetation Plan is not anticipated. No field meetings are anticipated.

Dry Creek Road Bridge Replacement, Napa County

Tuesday, June 15, 2021

Biggs Cardosa Associates Inc.

Attachment 4
GPA_ Additional Service Request No. 1 Proposal

Activity Type/ Task	Type	Project Status/ Resource	Resource Hours/ Units	Billing Rate	Contract	Resource Contract
Amendment Request #1			1,047.0		117,505	117,505
Environmental Clearance and Permit Requirements / Regulations Update			502.0		55,207	
Task 1.1: Project Management and Meetings			74.0		8,544	8,544
Labor	Senior Environmental Planner	Laura Comstock	50.0	114.36		5,718
Labor	Senior Biologist	Angela Scudiere	24.0	117.76		2,826
1.4.7: Full Natural Environment Study-			166.0		19,035	19,035
Labor	Senior Associate Environmental Planner	Melissa Logue	8.0	134.33		1,075
Labor	Senior Environmental Planner	Karin Boulter	16.0	127.75		2,044
Labor	Senior Associate Biologist	Marieka Schrader	12.0	136.66		1,640
Labor	Senior Biologist	Angela Scudiere	70.0	117.76		8,243
Labor	Associate Biologist	Katherine Warner	40.0	101.76		4,070
Labor	Biologist	Joseph Vu	20.0	98.13		1,963
1.4.10: Endangered Species Act Consultation			104.0		11,837	11,837
Labor	Senior Associate Environmental Planner	Melissa Logue	4.0	134.33		537
Labor	Senior Environmental Planner	Karin Boulter	4.0	127.75		511
Labor	Senior Associate Biologist	Marieka Schrader	20.0	136.66		2,187
Labor	Senior Biologist	Angela Scudiere	44.0	117.76		2,355
Labor	Associate Biologist	Anastasia Shippey	24.0	81.65		1,306
Labor	Senior Environmental Planner	Laura Comstock	8.0	114.36		915
1.4.11: Wetlands Only Practicable Finding Memorandum– Additional Task			74.0		7,937	7,937
Labor	Senior Environmental Planner	Karin Boulter		127.75		
Labor	Senior Environmental Planner	Laura Comstock	8.0	114.36		915
Labor	Senior Associate Biologist	Marieka Schrader	6.0	136.66		820
Labor	Senior Biologist	Angela Scudiere	16.0	117.76		1,884
Labor	Associate Biologist	Joseph Vu	44.0	98.13		4,318
2.4: Environmental Permitting - Agency Permit Application Requirements			84.0		7,854	7,854
Labor	Senior Associate Biologist	Marieka Schrader	8.0	136.66		1,093
Labor	Senior Biologist	Angela Scudiere	24.0	117.76		2,826
Labor	Associate Environmental Planner	Adelyn Alanis	8.0	91.11		729
Labor	Associate Biologist	Joseph Vu	16.0	98.13		1,570
Labor	Biologist	Cory Quon	28.0	58.41		1,635
Water Quality Concept Plan Redesign			170.0		24,005	
Task 1.4.3: Cultural Resources APE, HPSR, ASR			42.0		8,803	8,803
Consultant	Subcontractor	PaleoWest	1.0	4,000.00		4,000
Labor	Senior Environmental Planner	Laura Comstock	42.0	114.36		4,803
1.4.5: Water Quality Assessment Report - Bioretention Basins Support– Additional Task			44.0		5,113	5,113

Labor	Senior Environmental Planner	Laura Comstock	20.0	114.36		2,287
Labor	Senior Biologist	Angela Scudiere	24.0	117.76		2,826
Task 1.4.10: Endangered Species Act Consultation- Amendment			84.0		10,088	10,088
Labor	Senior Associate Environmental Planner	Melissa Logue	4.0	134.33		537
Labor	Senior Environmental Planner	Karin Boulter	4.0	127.75		511
Labor	Senior Environmental Planner	Laura Comstock	18.0	114.36		2,058
Labor	Senior Associate Biologist	Marieka Schrader	8.0	136.66		1,093
Labor	Senior Biologist	Angela Scudiere	50.0	117.76		5,888
Revegetation Creek Mitigation Requirements			375.0		38,293	
Task 2.3.2: Plans and Specification Support for the Revegetation Plan-Additional Task			28.0		3,007	3,007
Labor	Senior Environmental Planner	Laura Comstock	2.0	114.36		229
Labor	Senior Biologist	Angela Scudiere	14.0	117.76		1,649
Labor	Senior Associate Biologist	Marieka Schrader	4.0	136.66		547
Labor	Associate Biologist	Lizbeth Orozco	8.0	72.89		583
Task 2.4: Environmental Permitting– Tree Survey for 1602 Agreement			134.0		15,176	15,176
Labor	Senior Environmental Planner	Laura Comstock	8.0	114.36		915
Labor	Senior Associate Biologist	Marieka Schrader	4.0	136.66		547
Labor	Senior Biologist	Angela Scudiere	48.0	117.76		5,652
Labor	Associate Biologist	Joseph Vu	74.0	98.13		7,262
Expense	Mileage		1,000.0	0.58		580
Expense	Meals		4.0	55.00		220
Task 2.4: Environmental Permitting– CDFW Approved Revegetation Plan-Additional Task			167.0		15,028	15,028
Labor	Senior Environmental Planner	Laura Comstock	6.0	114.36		686
Labor	Senior Biologist	Angela Scudiere	41.0	117.76		4,828
Labor	Senior Associate Biologist	Marieka Schrader	8.0	136.66		1,093
Labor	Senior Biologist	Sheri Mayta	16.0	88.91		1,423
Labor	Associate Biologist	Lizbeth Orozco	96.0	72.89		6,997
Task 2.4: Environmental Permitting– Compensatory Mitigation Support-Additional Task			46.0		5,082	5,082
Labor	Senior Environmental Planner	Laura Comstock	6.0	114.36		686
Labor	Associate Biologist	Joseph Vu	16.0	98.13		1,570
Labor	Senior Biologist	Angela Scudiere	24.0	117.76		2,826

Attachment 5

MMP_ Additional Service Request No. 1 Proposal



Dry Creek Bridge Replacement Project

June 14, 2021

Merrill Morris Partners Landscape Scope of Work

Overview and Approach

The Dry Creek Bridge Replacement Project in Napa County consists of realigning (straightening) Dry Creek Road and replacing the existing bridge at the hairpin curve of the existing roadway alignment with a new bridge where the straightened alignment crosses over Dry Creek. The construction will be staged to allow for continuous roadway access and temporary diversion of the creek. As a part of the road realignment and bridge replacement, bioretention facilities will be added and creek restoration & revegetation is required. Per the Biological Assessment report, natural vegetation restoration methods will be used for creek channel restoration.

Revegetation plans will be developed in coordination with the design team to ensure erosion control and bank stabilization requirements are met for creek channel restoration. The plans will include hydroseed, check dams, soil burritos, and tree and shrub replacement planting to areas 1) disturbed by construction and 2) areas requiring restoration after bridge removal. Replacement trees will be needed to mitigate trees removed for construction.

Revegetation plans will be designed for seasonal planting in order to forego designing a temporary irrigation system for plant establishment. Alternatively, irrigation will be provided by County Maintenance or an irrigation system design. An add alternate is provided for irrigation design should the construction schedule affect the planting season.

The design team has completed 65% design. The landscape design portion of the project includes 95% through IFB plans, specifications and estimate. Landscape assistance during bid and construction is limited in the landscape design scope. The 95% design submittal is planned for February 2022.

BASE FEE

1.0 - Project Setup and Control

MMP will review the current design progress and project schedule, including conformation of existing drawings and reference material. A site visit is included to review existing conditions.

Deliverables: Field report for site visit.

2.0, 3.0 - 95% and 100% Construction Documents

MMP will develop the revegetation plans for the site which will include tree planting, hydroseeding, creek planting and stabilization. Plans will utilize base information provided by the design team.

Erosion control methods, limited to hydroseeding, soil burritos and check dams will be detailed and drafted in the landscape plans. Layout and location by Civil engineer.

It is expected that MMP will coordinate with the design team as needed in areas of erosion control and hydrology to confirm layout of the creek channel. Additionally, MMP will

participate in up to 6 team meetings for plan review with City staff. At each submittal milestone MMP will provide a landscape construction cost estimate with quantities and unit pricing.

Deliverables: Plans, Specifications (Caltrans format), and landscape construction cost estimate in MS Word, MS Excel, Autocad and PDF format at 95% and 100% milestones.

4.0 - Bid Period & Construction Assistance

MMP will provide limited assistance during the bid period and construction phases. MMP will review material submittals and respond to contractor requests for information.

Deliverables: Submittal review reports and RFI response.

ADD ALTERNATES

5.0 Additional Creek Landscape Features

Add creek bank stabilization features, such as root wads, boulders and other features beyond those included in the base scope above. Draw details and provide plan updates.

6.0 - Irrigation Design

MMP will design a temporary surface-drip irrigation system connected to a new permanent standpipe with quick-connector to irrigate new planting during the plant establishment period.

Deliverables: Plans, Specifications (Caltrans format), and landscape construction cost estimate in MS Word, MS Excel, Autocad and PDF format at 95% and 100% milestones.

6.1 - Irrigation Bid & Construction Assistance

Additional Bid Period and Construction Assistance will be necessary when proceeding with irrigation design to allow for submittal review and RFI responses.

Deliverables: Submittal review reports and RFI response.

Assumptions:

1. Proposal created for seasonal planting, otherwise supplemental watering will be necessary. Irrigation design.
2. Tree protection details and methods will be included in other sheets and reviewed by Merrill Morris.
3. Tree survey and removal recommendations to be completed by Environmental Consultant.
4. Layout and location of erosion control methods to be documented in the engineering plans.
5. Site lighting, layout, grading, site surveys, fencing, signage, and assembly of the construction documents are by other consultants.
6. No printing to be provided by MMP/all submissions are to be electronically stamped, signed and transmitted.
7. No photo simulations or other illustrative images to be provided by MMP.

ATTACHED: COST PROPOSAL

COST PROPOSAL
Ron Oen, Biggs Cardosa Associates
Dry Creek Bridge Replacement Project, Napa CA
Site Landscape Revegetation and Restoration
June 14, 2021

Merrill Morris Partners / Landscape Architects / 249 Front Street / San Francisco, CA 94111 / 415.291.8960

BASE FEE - DISTRIBUTION OF HOURS

TASK/ SUBTASK	ACTIVITY	MMP, Inc.				Tot Hrs by Task	Tot Cost by Task
		Principal \$201.00	Senior LA. II \$165.00	LA III \$147.00	LD III \$115.00		
1.0	Project Setup, Scheduling and Control	1	0	16	2	19	\$2,783.00
	Project Setup and Coordination	1		2		3	\$495.00
	Document review and conformations for plant palette, erosion control & hydrology details			6	2	8	\$1,112.00
	Site Visit			8		8	\$1,176.00
2.0	95% Construction Documents	1	5	41	62	109	\$14,183.00
2 Shts	Creek & Upland Revegetation Plan	1		8	24	33	\$4,137.00
2 Shts	Creek bed features - Plan Enlargements		1	4	16	21	\$2,593.00
1-2 Shts	Revegetation Legends and Details			4	12	16	\$1,968.00
	Inculding soil burritos and check dams.			8		8	\$1,176.00
	Planting specifications			2	4	8	\$1,084.00
	95% Internal QA/QC		2	1	4	5	\$607.00
	95% Design Team QA/QC crosscheck			6	2	10	\$1,442.00
	Cost estimate & takeoffs		2	8		8	\$1,176.00
	Team meetings (4)						
3.0	100% Final Construction Documents	1	3	23	28	55	\$7,297.00
	Update to PS&E at 100%	1	1	16	24	42	\$5,478.00
	100% Internal QA/QC		1	1	2	4	\$542.00
	Cost estimate & takeoffs		1	2	2	5	\$689.00
	Team meetings (2)			4		4	\$588.00
4.0	Bid & Construction Assistance	0	0	10	6	16	\$2,160.00
	Bid Period - RFIs			2	2	4	\$524.00
	Submittal review and RFI response			8	4	12	\$1,636.00
	BASE FEE - SUBTOTAL	3	8	90	98	199	\$26,423.00

ADD ALTERNATE FEE - DISTRIBUTION OF HOURS

5.0	Additional Landscape Features	0	0	4	6	10	\$1,278.00
	Additional creek landscape details and plan updates, including root wads, boulders and other creek landscape features			4	6	10	\$1,278.00
6.0	Irrigation Design	0	4	36	54	94	\$12,162.00
2 Shts	Temporary Irrigation plans for 95% & 100% CDs		2	16	32	50	\$6,362.00
3 Sht	Irrigation notes, legend and calculations sheets			6	16	22	\$2,722.00
	Specifications			8		8	\$1,176.00
	QA/QC for 95% and 100%		2	2	6	10	\$1,314.00
	Cost Estimate			4		4	\$588.00
6.1	Additional Bid Period & Construction Assistance for Irrigation	0	0	8	4	12	\$1,636.00
	Submittal Review & RFI Response			8	4	12	\$1,636.00
	ADD ALTERNATE - SUBTOTAL FEE	0	4	36	54	94	\$15,076.00
	TOTAL FEE						\$41,499.00