AMENDMENT TO CONTRACT

2

The County of San Benito ("COUNTY") and <u>Biggs Cardosa Associates</u>, Inc., a <u>California Corporation</u> ("CONTRACTOR") enter into this agreement on the date stated next to the signatures below. In consideration of the mutual promises set forth herein, the parties agree as follows:

1. Existing Contract.

a. Initial Contract.

COUNTY and CONTRACTOR acknowledge that the parties entered into a contract, dated January 13, 2018.

b. Prior Amendments. (Check one.)

- The initial contract previously has not been amended.
- [The initial contract previously has been amended. The date(s) of prior amendments are as follows: November 14, 2021.

c. Incorporation of Original Contract.

The initial contract and any prior amendments to the initial contract (hereafter collectively referred to as the "original contract") are attached to this amendment as Exhibit 1 and made a part of this amended contract.

2. Purpose of this Amendment.

The purpose of this amendment is to change the agreement between the parties in the following particulars:

a. Term of the Contract. (Check one.)

- [] The term of the original contract is not modified.
- [The term of the original contract (Exhibit 1) is extended from the current expiration date of <u>June 30, 2022</u>, to a new expiration date of <u>June 30, 2025</u>.

b. Scope of Services. (Check one.)

- The services specified in the original contract (Exhibit 1) are not modified.
- [The services specified in the original contract (Exhibit 1) are modified as specified below: (Check one.)
 - [The services specified in the original contract are modified only as specified below:

Modified Scope of Services:

(Insert modified or new services.)

The document entitled "Additional Services Scope of Work" and Attachment A (Scope of Services) to the original contract, as previously amended (Exhibit 1) is hereby further amended to add the following additional services due to required updates for the construction documents related to the Union Road Bridge at the San Benito River.

ADDITIONAL SERVICES SCOPE OF WORK AMENDMENT NO. 2

The National Environmental Policy Act (NEPA) revalidation process and required updates to the construction documents have triggered additional services that are needed to complete the construction documents for the Union Road Bridge Replacement. These generally include the following, and are described in further detail below:

- Inclusion of bird nest deterrence services in the Special Provisions and Estimate
- Bat exclusion services
- NEPA Revalidation memorandum
- Final coordination between geotechnical, hydraulics and structural regarding scour and RSP
- Final updates to Final Foundation Report for retaining wall design updates, scour and final design loads
- Additional right of way and surveying services
- Additional utility coordination
- Bi-weekly coordination meetings with design team and COUNTY
- Additional project management services due to extension of project schedule by one (1) year

The following Scope of Services is based on certain assumptions as listed in blue below. Please also see additional assumptions indicated in blue in the detailed scope summary below. Any deviation from these assumptions will be coordinated with the COUNTY and a revised scope and fee established as agreed upon.

Exclusions

- Right of way acquisition services are not included.
- *Community meetings and public outreach are not included.*
- Regulatory permitting and coordination not explicitly noted in the detailed scope of services are not included
- Detailed preconstruction surveys for plants or animals are not included.
- *Nesting bird or roosting bat deterrence is not included.*

Assumptions

- Bidding is scheduled to take place in late summer / early fall of 2022, and a construction contract will be awarded by November 2022.
- Construction is scheduled to take place in 2023-2024.

PROJECT MANAGEMENT

Project Management includes the supervision and scheduling of project staff, review of work prepared by staff and subconsultants, project coordination, client liaison services, and the monitoring of the schedule and the budget. Also included, is preparation of invoices and progress reports, and attendance at design review meetings with the COUNTY to receive input and discuss the project at key design submittals. Please refer to the original scope of work in the original contract, as previously amended (Exhibit 1), for a more detailed description.

Extension of Project Schedule by 1-years

Additional project management services are needed due to the project schedule being extended by 1-year. As described above, work includes additional coordination with the COUNTY and design team, additional project administration and accounting services, schedule updates, and monitoring of the project budget.

Bi-Weekly Coordination Meetings

To assist with the process of final utility coordination, right of way acquisition questions, preparation for right-of-way certification, completion of final construction documents, and project authorization and bidding, the COUNTY has requested monthly coordination meetings with the design team. Hours are included for the bi-weekly meetings, as well as meeting preparation and meeting minutes, for a 8-month time period (mid-January through mid-September), for a total of 16 meetings.

NEPA REVALIDATION MEMORANDUM SUPPORT

The COUNTY requested that a memo be provided to support Caltrans efforts in revalidation of the NEPA conclusions for the project. To this end, the project as currently designed will be compared to impact assessments provided in the project's 2012 Natural Environment Study (NES) and Biological Assessment (BA). CAD files would be analyzed for the new extent of permanent and temporary impacts and overlain to determine where new areas of impact exist as well as where previously reported impacts were avoided, and updated exhibits that clarify these changes will be developed for inclusion in the memo. This task also includes time for a site visit to evaluate current conditions to report in the memo as unchanged, and to survey the site for host plants for the newly candidate species under the Federal Endangered Species Act, Monarch butterfly. CONTRACTOR will procure updated special status species lists from the U. S. Fish and Wildlife Service and National Marine Fisheries Service. All of the results of this analysis will be summarized in a memo for Caltrans' use.

ADDITIONAL PERMITTING ASSISTANCE

CONTRACTOR will assist the COUNTY with revalidation of the Project's Section 404 permit under the Clean Water Act, which expired in 2017. In discussing this revalidation with the USACE recently, the CONTRACTOR was informed that because the Project's Section 404 permit will now have been expired for two Nationwide Permit cycles (2012-2017 and 2017-2022), they now consider the 401 Water Quality Certification to also be expired and required reissuance. This task includes

time to coordinate with the Central Coast Regional Water Quality Control Board (CC RWQCB) to achieve re-certification under Section 401 of the Clean Water Act, including preparation of new application forms, if required. Regular contact with the CC RWQCB will be maintained during processing to achieve timely re-certification. The CC RWQCB may require a new application fee for the new 401 WQC, to be paid by the COUNTY. this task also includes time to update the Incidental Take Permit Application (ITPA) material with the new impact area assessed for the NEPA revalidation memo, which will reduce the COUNTY'S mitigation burden.

BAT EXCLUSION SERVICES

Bats were documented utilizing the bridge structure on the Project site as day-roosting habitat during previous studies of the project, as well as during a May 10, 2022 survey. Given that bats are day-roosting on the bridge, Condition 2.3 of the original Lake and Streambed Alteration Agreement (LSAA) from CDFW requires the preparation of a Bat Exclusion Plan. This plan would describe how bats will be excluded from roost sites, and it would need to be submitted to CDFW for approval at least 30 days prior to the start of construction activities. Features beneath the bridge where bats were found roosting during CONTRACTOR'S surveys could support nesting birds in addition to roosting bats. These features would therefore need to be sealed prior to February 1 (the start of the avian breeding season) in order to prevent birds from nesting there.

Bat exclusion activities should not be conducted during cold/wet conditions, and CONTRACTOR anticipate that CDFW will not allow them to be evicted from suitable habitat features beneath the bridge during the winter months. Recently, CONTRACTOR has seen a trend toward allowing bat exclusion only for a brief period in the spring (e.g., March 1-31) after temperatures have increased but before the bat maternity season starts on April 1, or for a brief period in the fall (September 1 to October 15) after the conclusion of the bat maternity season but before cooler/wetter conditions arrive. As a result, evicting bats during the nesting bird deterrence work in January or early February may not be allowed by CDFW. Rather, in order for bats to be evicted during appropriate weather conditions, but prior to the start of the avian nesting season, the bats would need to be evicted in the fall (e.g., September to mid-October) prior to the start of bridge work.

CONTRACTOR understands that the COUNTY intends to hire a Construction Contractor by late fall (e.g., around November). That will not be early enough to have the Construction Contractor's biologist prepare a Bat Exclusion Plan, obtain CDFW approval of the plan, and implement exclusion by mid-October. Therefore, CONTRACTOR will assist the COUNTY by preparing the Bat Exclusion Plan, obtaining CDFW approval of the plan, implementing exclusion by mid-October, and maintaining the bat eviction materials until the Construction Contractor has been retained. Once the Construction Contractor has been retained,

they would then maintain the bat exclusion measures moving forward, and bats will have been excluded from the bridge by the time nesting bird exclusion materials are installed in January or early February.

Bat Exclusion Plan:

CONTRACTOR will prepare a Bat Exclusion Plan per the requirements of the LSAA. Based on the assumption that bats are roosting in the expansion joints on the bridge and could possibly be gaining access to roost sites through openings located adjacent to the expansion joints as well as at both bridge abutments, the exclusion plan will involve installation of materials to create "oneway doors" in these roost entrances. For example, two layers of plastic sheeting, attached via adhesive to the underside of the bridge on either side of the expansion joints, would allow bats to exit the roost, but bats would not be able to re-enter the roost site. CONTRACTOR will prepare a draft plan, obtain comments from the Design Team and the COUNTY, revise the draft as needed, then submit the plan to CDFW for review. CONTRACTOR will then coordinate with CDFW as necessary to obtain their approval.

Exclusion of Bats:

After CDFW approved the Bat Exclusion Plan. CONTRACTOR will work with a subcontractor who has a lift that can be used to access the bat roost entrances to install bat exclusion materials. Bats will be excluded between September 1 and October 15. After bats have been evicted from their roosts on the bridge, CONTRACTOR will work with the lift subcontractor to ensure that all bat roost entrances are well-blocked (e.g., perhaps using expanding foam or other materials that are more permanent and easier to maintain than the original bat exclusion devices). Then, CONTRACTOR will work with the lift subcontractor to inspect these materials and re-install or repair them as necessary to ensure that they effectively exclude bats until the Construction Contractor has been retained (presumed to be by the end of November, so that the Construction Contractor will assume responsibility for maintaining the bat exclusion materials by December 1).

Key Assumptions:

• Construction Contractor will assume responsibility for maintaining the bat exclusion materials by December 1

FINAL FOUNDATION REPORT COORDINATION AND UPDATES

CONTRACTOR'S Geotechnical engineer will coordinate with the Final Hydraulic Report regarding scour depths and rock slope protection details. CONTRACTOR'S Geotechnical engineer will also coordinate with the structural engineer regarding scour, final pile design loads and required

retaining wall design information. Work will include review and update to nominal pile capacities and design tip elevations, verification of pile tip settlement under updated design loads, updates to retaining wall design information and updates to the Log of Test Borings sheets for the 100% PS&E. The completed Final Foundation Report will be updated to reflect the latest design information.

ADDITIONAL UTILITY COORDINATION

Through the course of utility companies completing their final relocation plans, changes to the 100% roadway design plans have been needed to accommodate the utility relocation work. PG&E has indicated that they have completed their relocation design and have requested that the CONTRACTOR attend two field meetings to ensure the proposed relocated pole locations do not conflict with the roadway design plans. Work includes preparation of necessary exhibits and attendance at two additional field meetings with PG&E.

ADDITIONAL RIGHT OF WAY AND SURVEYING SERVICES

Update to Plats and Legal Descriptions for the Bonnie Brae Property

The Bonnie Brae property owners requested that a small remainder segment be incorporated into the property take for the project. The additional segment will be incorporated into the Plat and Legal Descriptions and the three resulting segments will be combined into one Plat and Legal Description with associated closure calculations.

Preliminary Plotting of Existing Easement

CONTRACTOR will plot the existing Grant of Easement, attached hereto and incorporated herein by reference as Attachment A-1, on the project boundary to determine if it affects the project, in particular whether it supports an easement for the San Benito County Water District water line at the Cienega Road/Union Road intersection. CONTRACTOR will plot the two easements described in the deed. Locations provided will be approximate and will not be resolved surveyed locations.

Staking of PG&E Power Pole Locations

CONTRACTOR will set lath markers at the locations of six proposed power poles identified on the Union Road Bridge Utility Plan sheets U-1 thru U-4. Poles will be located in the new street alignment at the intersections of Union Road with San Benito Street and Cienega Road. It is assumed the Design Team will provide pole location coordinates for the six poles.

FINAL PS&E

Updates for Addition of Bird Nest Deterrence Work to the Project Special Provisions and Estimate

The COUNTY prefers to have the Construction Contractor perform the required preconstruction surveys, clearing and grubbing, netting

installation, regular site inspection for nests, and other tasks required for the bird nest deterrence work at the project site. CONTRACTOR will update the project special provisions and opinion of probable construction costs to reflect this modification. CONTRACTOR will also review related environmental special provisions to verify consistency and coordination amongst the pertinent environmentally related special provisions, as well as with the remainder of the special provisions document.

Key Assumptions:

- Please see the original agreement and prior amendments for additional assumptions and exclusions.
- Submittals will be in electronic format (Word or PDF).
- Coordination meetings will be held online.
- Plans or technical specifications not explicitly listed above are not included.
- Bidding is scheduled to take place in late summer / early fall of 2022, and a construction contract will be awarded by November 2022.
- Construction is scheduled to take place in 2023-2024.
- Wetland delineation or identification of other regulated habitats are not included.
- Regulatory permitting and coordination not explicitly listed above are not included.
- *Permit fees will be paid by the COUNTY when assessed by the state agency.*
- *Nursery coordination is not included.*
- Support during the 3-year plant establishment period is not included.
- Detailed surveys for plants or animals are not included.
- Nesting bird or roosting bat deterrence are not included.

[]	The	services	specified	in	the	original	contract	are	deleted	in	their	entirety	and
re	plac	ed w	ith the fo	llowing se	rvic	es:								

New Scope of Services:

(Insert new services.)

c.	Payment	Terms.	(Check	one.)
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- [] The payment terms in the original contract (Exhibit 1) are not modified.
- [\(\sqrt{} \)] The payment terms in the original contract (Exhibit 1) are modified as specified below: (Check one.)
 - $[\checkmark]$ The payment terms are modified only as specified below:

Modified or New Payment Terms:

(Insert modified or new payment terms.)

Attachment B (Payment Schedule) to the original contract, as previously amended (Exhibit 1), is hereby further amended to increase the compensation by an additional amount not to exceed \$161,000.00, for the extension of services provided under the original contract through the terms of this amendment, for a total contract value not to exceed \$1,792,650.50, as follows:

Original Contract:	\$ 1,001,450.50
1 st Amendment:	\$ 630,200.00
2 nd Amendment:	\$ 161,000.00
Total:	\$ 1,792,650.50

Paragraph B-3 of Attachment B (Payment Terms) is hereby amended to read as follows:

COUNTY shall pay to CONTRACTOR: (Check one.)

B-3. COMPENSATION

[]	a total lump sum payment of \$, or
[√]	a total sum not to exceed \$1,792,650.50	

for services rendered pursuant to the terms and conditions of the original contract (Exhibit 1) and this amendment, and pursuant to any special compensation terms specified in paragraph B-4.

Paragraph B-4 (Special Compensation Terms) of Attachment B (Payment Terms) to the original contract, as previously amended (Exhibit 1), is hereby further amended to add the following tables to the end of Paragraph B-4:

Ą	dditional Se	rvices Reque	est - Final De	Sign					
		BIGG	PRIME CO						_
			PRIME CO	NSULTANT					
TASK	M. Harms Principal	S. Moyles Engineering Manager	Senior Engineer	Project Engineer	Senior CADD Drafter	Secretarial	Total BCA	Total BCA Dollars	Total BCA Dollars
Rate (unloaded)	\$121.49	\$66.92	\$61.01	\$55.20	\$51.05	\$40.34	Hours	without OH and Fee	with OH and Fee
1. PROJECT MANAGEMENT									
Project Administration, Coordination, Meetings	20	120	28	0	0	0	168	\$12,168	\$35,89
Project Management and Administration Design Coordination and Quality Assurance	8	48 24	24				56 56		
Meetings and Coordination with Design Team and County	4	48	24 4				56		
2. ENGINEERING AND REPORTS									
Engineering and Reports	4	28	28	0	0	0	60	\$4,068	\$12,0
NEPA Revalidation Memo Coordination Permitting Coordination	2	12 8	12 8				26 18		
Utility Coordination	_	8	8				16		
TOTAL HOURS									
TOTALTION									
Subtotal Hours Total BCA Direct Labor Cost	24 \$2,916	148 \$9,904	56 \$3,417	0 \$0	0 \$0	0 \$0	228	3 228 \$16,236	\$47,89
TOTAL HOURS	Ψ2,910	ψ3,904	ψ3,41 <i>1</i>	ΨΟ	Ψ0	228		\$10,230	ψ47,03
BCA TOTAL DIRECT LABOR AND DIRECT COSTS								\$48,282	\$48,28
A. Biggs Cardosa Associates									
Total BCA Direct Labor Cost Overhead (1.6316)								\$16,236 \$26,491	
Project Escalation (5% per year) 1 year								\$812	
A. SUBTOTAL BIGGS CARDOSA ASSOCIATES (\$)								\$43,540	
B. Subconsultants ¹									
AVILA ASSOCIATES (HYDRAULICS) DEWBERRY I DHA (CIVIL / ROADWAY DESIGN)								\$4,788 \$29,970	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL)								\$29,970 \$0	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING)								\$29,970 \$0 \$0	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS								\$29,970 \$0 \$0 \$67,820 \$5,452	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW)								\$29,970 \$0 \$0 \$67,820 \$5,452 \$4,688	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW) B. SUBTOTAL SUBCONSULTANTS (\$)								\$29,970 \$0 \$0 \$67,820 \$5,452	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW) B. SUBTOTAL SUBCONSULTANTS (\$)								\$29,970 \$0 \$0 \$67,820 \$5,452 \$4,688	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW) B. SUBTOTAL SUBCONSULTANTS (\$)								\$29,970 \$0 \$0 \$67,820 \$5,452 \$4,688	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW) B. SUBTOTAL SUBCONSULTANTS (\$) C. Direct Costs Plots Reproduction Delivery Services								\$29,970 \$0 \$0 \$67,820 \$5,452 \$4,688	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW) B. SUBTOTAL SUBCONSULTANTS (\$) C. Direct Costs Plots Reproduction Delivery Services Miscellaneous								\$29,970 \$0 \$0 \$67,820 \$5,452 \$4,688 \$112,718	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW) B. SUBTOTAL SUBCONSULTANTS (\$) C. Direct Costs Plots Reproduction Delivery Services Miscellaneous C. SUBTOTAL DIRECT COSTS (\$)								\$29,970 \$0 \$0 \$67,820 \$5,452 \$4,688 \$112,718	
DEWBERRY I DHA (CIVIL / ROADWAY DESIGN) DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING) HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN) PARIKH CONSULTANTS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW) B. SUBTOTAL SUBCONSULTANTS (\$) C. Direct Costs Plots Reproduction Delivery Services Miscellaneous C. SUBTOTAL DIRECT COSTS (\$)								\$29,970 \$0 \$0 \$67,820 \$5,452 \$4,688 \$112,718	

¹⁾ Includes 0% mark-up on subconsultant services.

²⁾ All ICRs and charge rates match the rates indicated in the contract.

MAN HOUR LEVEL OF EFFORT

	Tasks	Engineer, Range C	Total Additional Hours Requested	Total Hours
		DHA		
TASK	1 - Phase I: Preliminary Engineering & Reports			_
	1.1 Project Management/Coordination Meetings	48	48	48
	1.4 Utility Coordination	64	64	64
	1.7 Environmental Permitting Coordination	50	50	50
	Total Hours	162	162	162
	Rate	\$ 185		
	Total Additional Budget Request	\$ 29,970		\$ 29,970

Dewberry | drake haglan



Proposal Name: Union Road Bridge Replacement Project - NEPA Revalidation Memo, Additional Permitting Support, and PS&E Assistance

NON-OPTIONAL TASKS
Project Number: 4312-01

Staff Time Estimates

Personnel Hours by Task

	Kelly Hardwicke Principal, Plant Ecology	Joe Howard Principal, Landscape Architect	Megan Richards Landscape Architect	Kattie Gallagher Senjar Plant Ecologist	Stephen Peterson Senior Wildlife Ecologist	Allegra Watson Restoration Landscape Designer	Steve Rottenborn Principal, Wildlife Ecologist	Emily Malkauskas Wildlife Ecologist	Dave Johnston Associate Wildlife Ecologist	Senior GIS Analyst	Technical Support	HTH Cost by Task	H Direct Expenses (No Markup)	Subconfractors	General Administrative Expense Percentage on subcontractors work	Total
Task	\$247.02	\$304.66	\$163.44	\$148.47	\$155.43	\$104.94	\$349.96	\$121.56	\$215.56	\$204.85	\$156.46	Ξ	Ē	So	<u>დ</u> ლ	Project Cost
Task 1. NEPA Revalidation Memo	28									12	3	\$ 9,844	\$ 120			\$ 9,964
Task 2. Additional Permitting Assistance/Meeting Attendance	30			26			8	12		16	8	\$20,059	\$160			\$20,219
Task 3. Bird and Bat Deterrence PS&E		3	8		4	12	2				1	\$4,959	\$ -			\$4,959
Task 4. Bat Exclusion Assistance							8	32	16	2		\$10,541	\$137	\$20,000	\$2,000	\$ 32,678
													\$ -			\$ -
Total Labor Hours	58	3	8	26	4	12	18	44	16	30	12					
Total Cost	\$14,327	\$914	\$1,308	\$3,860	\$622	\$1,259	\$6,299	\$5,348	\$3,442	\$6,145	\$1,878	\$45,403	\$417	\$20,000	\$2,000	\$67,820

Billing Rates are subject annual increases and will be adjusted at the beginning of each calendar year.



		Proj. Mgr (eng)	Senior Engineer	Associate Engineer	Avila Staff Labor	Other Direct Cost	
		C. Avila	Remington	Callahan	Subtotal	(ODCs)	Total
	Rate (\$/hr)	\$189.59	\$140.21	\$105.33			
1	Update Bridge Scour Per MTD 16-1 (2018) and HEC-18 (2012)						
1.1	Final Coordination between FHR & Foundation Report regarding scour	4		4	\$1,180		\$1,180
1.2	Coordination with civil & environmental regarding final RSP details	4		2	\$969		\$969
1.3	Complete RSP estimate updates using HDM 870	4		4	\$1,180		\$1,180
	Subtotal (Task 1)						\$3,329
2	Revise Final Hydraulic Report						
2.1	Update RSP in finalize bridge Report	4	2	4	\$1,460		\$1,460
	Subtotal (Task 2)						\$1,460
3	Project Management						
3.1	Provide Project Management	2		2	\$590		\$590
	Subtotal (Task 3)						\$590
	GRAND TOTAL	18	2	16	\$5,379	\$ -	\$5,379

PARIKH CONSULTANTS, INC.

TOTAL Labor and Direct Costs

Job No: 2008-136-010

Client: Biggs Cardos Associates

Union Road Bridge Replacement

5/1/2022

Task: Final Foundation Report & LOT	B Sheets			Review	and Update	Design	Review and	Final Fo	undation								
Project: Union Road Bridge Replaceme	nt at San Beni	to River		Geotech	nnical Rec.	Consult	ation	Report a	and LOTB								
Location: San Benito County																	
				Task 1.	1	Task 1	2	Task 1.	2	Task 1.4		Task 1.5		Task 1.6		Task 1	1 7
	UNIT	HOURS	SUB-	HR	COST		COST		COST		COST		COST	HR	COST		CO
PERSONNEL	RATE		TOTALS		0001	****	0001		0001		0001		000.		0001		-
1. Project Manager - G. Parikh	107.33	1.0	107.33	0.0	0.00	1.0	107.33		0.00		0.00		0.00	0.0	0.00		0.0
2. Sen Soil Engineer (QA/QC)	77.78	16.0	1244.48	4.0	311.12	4.0	311.12	8.0	622.24		0.00		0.00	0.0	0.00		0.0
3. Sen. Proj. Soils Engineer	61.97	8.0	495.76	4.0	247.88		0.00	4.0	247.88		0.00		0.00	0.0	0.00		0.
4. Staff Engineer	39.39	0.0	0.00		0.00		0.00		0.00		0.00		0.00	0.0	0.00		0.0
5. Field Engineer	51.22	0.0	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.0
6. Technician	39.39	0.0	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.0
7. Draftsperson	45.02	3.0	135.06				0.00	3.0	135.06				0.00	0.0	0.00		
•		0.0	0.00										0.00		0.00		0.0
DIRECT LABOR	-	28.0	1,982.63	8.0	559.00	5.0	418.45	15.0	1005.18	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.0
OVERHEAD + FRINGES																	
(150.00% of direct labor)			2,973.95		838.50		627.68		1,507.77		0.00		0.00		0.00		0.0
FIXED FEE																	
(10% of labor + overhead + fringes)			495.66		139.75		104.61		251.30		0.00		0.00		0.00		0.0
Total Labor Costs Only		[\$5,452.23														
OTHER DIRECT COSTS																	
1. Travel Mileage	\$0.500	0.0	0.00		0.00	0.0	0.00										
2. Drilling mob-demob	\$175.00	0.0	0.00			0.0	0.00										
3. Drilling -Portable Drill Rig	\$180.00	0.0	0.00			0.0	0.00										
4. Drilling Rig-Truck (3 borings)	\$3,500.00	0.0	0.00			0.0	0.00										
5. Grouting of holes	\$2.00	0.0	0.00			0	0.00										
6. Per Diem	\$295.00	0.0	0.00		0.00	0	0.00										
7. Traffic Control		0.0	0.00			0	0.00										
8. USA Clearance		0.0	0.00			0.0	0.00					0.00	0.00	0.0	0.00		
9. Cutting Disposal	\$280.00	0.0	0.00		0.00	0	0.00										
10. Permit	\$500.00	0.0	0.00		0.00	0.0	0.00										
11. Handling charge 0%			0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.
MILESTONE SUBTOTALS	-				\$1,537.25		\$1,150.74		\$2,764.25		\$0.00		\$0.00		\$0.00		\$0.0
Total Direct Costs		1	\$ -														

\$5,452.23



Fee Estimate for Rosa Morada Bridge

		Bryan Pierce Senoir Suveyor	Other Direct Costs		
Task		Hours	NTE including Mark- up	Hours by Task	Cost by Task
	CUP				
1	Prepare P&L for Bonnie Brae areas	11.5	\$0	12	\$2,353.71
2	Plot water line easement	4		4	\$818.68
3	Stake 6 PG&E pole locations	1	\$1,181		\$1,385.83
6			\$130	0	\$129.95
				Total =	\$4,688.17
	Subtotal Hours =	16.5		•	
	Subtotal Dollars =	\$3,377.06	\$1,311.11		
	Hourly Rate =	\$204.67			
	OPTIONAL				

Assumptions and Conditions

- 1 Fees do not include provision of preliminary title report
- 2 Fees do not include assistance with right of way or easement acquisition
- 3 Borders to be delineated are shown in the scope document

3.

	All other provisions of Attachment B to the original contract (Exhibit 1) shall remain the same.
	[] The payment terms are deleted in their entirety and replaced with the following payment terms:
	New Payment Terms:
	B-1. BILLING
	Charges for services rendered pursuant to the terms and conditions of this contract shall be invoiced on the following basis: (Check one.) [] One month in arrears. [] Upon the complete performance of the services specified in the original agreement (Exhibit 1) and this amendment. [] The basis specified in paragraph B-4.
	B-2. PAYMENT
	Payment shall be made by COUNTY to CONTRACTOR at the address specified in paragraph 8 of the original contract, net thirty (30) days from the invoice date.
	B-3. COMPENSATION
	COUNTY shall pay to CONTRACTOR: (Check one.) [] a total lump sum payment of \$
	B-4. SPECIAL COMPENSATION TERMS: (Check one.) [] There are no additional terms of compensation. [] The following specific terms of compensation shall apply: (Specify)
d. Other [✓]	Terms. (Check one.) There are no other terms of the original contract that are modified. Other terms of the original contract are modified only as specified below:
Other Terms	
All other term	s and conditions of the original contract (Exhibit 1) which are not changed by this all remain the same.

CONTRACTOR Docustioned by:	
Malwash Harms	6/22/2022
Mahvash Harms, S.E., Principal	Date
COUNTY	
San Benito County Board of Supervisors	
Peter Hernandez, Chair	Date
APPROVED AS TO LEGAL FORM:	
San Benito County Counsel's Office	
July L. Murphy	6/23/2022
Shirley L. Murphy, Deputy County Counsel	Date

EXHIBIT 1 TO AMENDMENT # 2

ORIGINAL CONTRACT

(Please attach the initial contract and any prior amendments, from the most recent to the initial contract, in reverse chronological order.)

AMENDMENT TO CONTRACT

#___1___

The County of San Benito ("COUNTY") and <u>Biggs Cardosa Associates</u>, <u>Inc.</u>, a <u>California Corporation</u> ("CONTRACTOR") enter into this agreement on the date stated next to the signatures below. In consideration of the mutual promises set forth herein, the parties agree as follows:

Exis	ting Contract.
a.	Initial Contract. COUNTY and CONTRACTOR acknowledge that the parties entered into a contract dated January 13, 2018
b.	Prior Amendments. (Check one.) [X] The initial contract previously has not been amended. [] The initial contract previously has been amended. The date(s) of prior amendments are as follows:
c.	Incorporation of Original Contract. The initial contract and any prior amendments to the initial contract (hereafter collectively referred to as the "original contract") are attached to this amendment as Exhibit 1 and made a part of this amended contract.
The	pose of this Amendment. purpose of this amendment is to change the agreement between the parties in the following culars:
a.	Term of the Contract. (Check one.) [X] The term of the original contract is not modified. [] The term of the original contract (Exhibit 1) is extended from the current expiration date of, to a new expiration date of
b.	Scope of Services. (Check one.) [] The services specified in the original contract (Exhibit 1) are not modified. [X] The services specified in the original contract (Exhibit 1) are modified as specified below: (Check one.) [X] The services specified in the original contract are modified only as specified below: Modified Scope of Services: (Insert modified or new services.)
	a. b. C. Purp The partica.

The document entitled "Additional Services Scope of Work" and Attachment A (Scope of Services) to the original contract, (Exhibit 1) is hereby amended to add the following additional services due to required updates for the construction documents related to the Union Road Bridge at the San Benito River.

AMENDMENT NO. 1

Required updates to the construction documents have triggered additional services that are needed to complete the construction documents for the Union Road Bridge Replacement. These generally include the following, and are described in further detail below:

- Implementation of new stormwater treatment requirements
- Additional utility potholing and coordination
- Additional right-of-way coordination
- Incorporation of requirements and costs for a Contractor Supplied Biologist to perform biological monitoring during construction
- Incorporation of requirements and costs for Contractor to coordinate with a local nursery and supply plant material for mitigation planting
- Required updates to environmental permits
- Construction Support services

The following Scope of Services is based on certain assumptions as listed in blue below. Please also see additional assumptions indicated blue in the detailed scope summary below. Any deviation from these assumptions will be coordinated with the County and a revised scope and fee established as agreed upon.

Exclusions

- Right of way acquisition services
- Community meetings and public outreach
- Regulatory permitting and coordination not explicitly noted in the detailed scope of services
- Construction management, construction inspection and structural observation services
- Detailed preconstruction surveys for plants or animals
- Nesting bird or roosting bat deterrence

Assumptions

- All revegetation sites will be in the locations previously identified in the May 2013 plans, and that these sites are still suitable for the desired revegetation (substantial rains in 2016-17 may have altered site conditions such as soil or topography).
- Construction is scheduled to take place in 2022-2023.
- Nursery coordination will be initiated by the construction

- contractor in spring/summer 2022, for mitigation site installation in late summer/fall of 2023.
- Please see the original agreement and prior amendments for additional assumptions and exclusions.

PROJECT MANAGEMENT

Project Management for the scope included herein includes the supervision and scheduling of project staff, review of work prepared by staff and subconsultants, project coordination, client liaison services, and the monitoring of the schedule and the budget. Also included in this task is the preparation of progress reports and attendance at meetings with the County's staff to receive input, and to discuss and review the project during critical design and decision periods. Please see the original scope of work for a more detailed description.

ADDITIONAL ENVIRONMENTAL PERMITTING SUPPORT

This task includes time to apply for and secure a new Nationwide Permit (NWP) for the 2022-2027 NWP cycle to accommodate the anticipated updated construction schedule for 2022 – 2023 construction. This will require resubmittal of the original application materials and rapid processing to ensure a new valid permit is in hand by June 2022 when work within waters of the U. S. would commence. Additionally, the team will re-certify the new NWP with the Central Coast Regional Water Quality Control Board (CCRWQCB). Finally, this task includes time to request a new Lake and Streambed Alteration Agreement that will have success criteria more suitable for the project mitigation planting areas.

Key Assumptions:

- ✓ Wetland delineation or identification of other regulated habitats is not included.
- ✓ Regulatory permitting and coordination not explicitly listed above are not included.

ADDITIONAL UTILITY COORDINATION

The original contract scope assumed utility coordination would entail sending out Utility C Plans to the utilities and minor coordination to assist with their relocation efforts. After restarting the project and implementing the design changes required for the CCRWQCB requirements and working within the right of way the County acquired, it was determined that additional field meetings and utility potholing would be necessary to coordinate the utility conflicts and ensure that relocation efforts could occur prior to construction. Utility potholing will be performed at key conflict points with storm drain laterals (up to 20 potholes).

Utility coordination is ongoing and additional effort beyond the existing scope is needed to coordinate relocating the water line in conflict at the Union Road/Cienega Road improvements. Additional coordination is also required to work with the San Benito County Water District on the relocation of a vault and monitoring equipment that were not anticipated to be relocated in the original scope. Additional PG&E coordination effort is also required to apply for an electrical service connection for the proposed traffic signal at Union Road/San Benito Street.

ADDITIONAL RIGHT-OF-WAY COORDINATION

The existing scope assumed minor coordination between the roadway designer and the right of way team to reconcile the right of way that was previously acquired by the County and what was required for the project. However, after re-starting the project, it was discovered that the right of way the County acquired was not consistent with the previously developed 65% plans and several issues needed to be resolved regarding the type and size of easements previously acquired by the County. CONTRACTOR provided revised right of way requirement maps and coordination with the design team and County to resolve these issues but this effort required significantly more than the hours originally scoped.

FINAL PS&E

Updates for Addition of Construction Contractor Supplied Biologist

The County has determined that they would prefer to use a Construction Contractor Supplied Biologist to perform the required preconstruction surveys, training and other biological tasks that must be completed immediately prior to and during construction. CONTRACTOR will update the project special provisions and opinion of probable construction costs to reflect this modification. CONTRACTOR will also review and coordinate environmental special provisions for compliance with the final permit conditions and to verify consistency amongst all the environmentally-related special provisions, and proper coordination with the remainder of the special provisions document.

Updates for Addition of Construction Contractor Provided Mitigation Planting Material

The County has determined that, since there is sufficient time in the estimated construction schedule, they would prefer to have the Construction Contractor provide the plant material needed for the mitigation planting. The work will require coordination and contracting with a local nursery to take and grow native planting starts during the late Spring/early Summer of the first construction season, in order for them to be ready for planting by the following Fall. CONTRACTOR will update the project special provisions to incorporate the requirements

for the planting starts, either via additional information in the planting special provision or via a separate nursery coordination special provision. CONTRACTOR will review other special provisions that may be affected by this update to ensure consistency with the remainder of the special provisions document. CONTRACTOR will also update the opinion of probable construction costs to reflect this modification.

Updates for Protection of Water Main

With the recently conducted utility potholing effort, it was determined that the water main crossing Union Road at Cienega Road does not have adequate cover and will be in vertical conflict with the Union Road/Cienega Road improvements. As a result, additional services are required for the team to design and coordinate the relocation of the water main in conflict.

Implementing New Requirements from Central Coast Regional Water Quality Control Board (CCRWQCB)

The existing scope included implementing the new storm water discharge requirements of the CCRWQCB (CCRWQCB Resolution R3-2013-0032, July 12, 2013), and anticipated that the team would need to prepare the Stormwater Control Plan and implement storm water solutions for the project, such as vegetative swales. The assumed effort to accomplish this included preparing two additional plan sheets to show the storm water treatment and making minor modifications to the existing plan and detail sheets to account for the grading changes.

After conducting the new runoff calculations, it was apparent that the roadway profile would need to be changed to ensure the ditch runoff could be treated through the vegetated swales and meet the stringent requirements of the CCRWQCB. As the roadway profiles are typically set at the 35% stage of the plan development, the changes to the roadway profile essentially required that the plan/profile sheets be completely reworked at the 95% design stage, impacting both the road and bridge plans.

Additional Roadway Design Updates

With the recently conducted utility potholing effort, it was determined that the water main crossing Union Road at Cienega Road does not have adequate cover and will be in vertical conflict with the Union Road/Cienega Road improvements. As a result, the relocation of the water main in conflict will need to be designed and coordinated.

The following items required additional effort to address changes that occurred during the development of the 95% plans.

 West Conform Geometry - revised per County direction to further improve safety and conform to the existing nonstandard roadway approach. This change required re-working the geometrics for the western conform and redeveloping the plan and profile sheets.

- <u>Staging Plans</u> were modified in the vicinity of San Benito Street to improve the construction staging.
- <u>Design Exceptions</u> will need to be prepared for the County's approval to document any non-standard features.
- Roadside Slopes revised and flattened in areas where right of way permitted, to improve safety. Previous County direction was to use 2:1 for all slopes, and the grading and these were updated to 4:1 where feasible.
- <u>Cienega Intersection</u> geometrics were modified to accommodate CA Legal truck access from the north side of intersection. The previous design only accommodated CA Legal truck access from the south side of intersection but recent aerial images show that trucks are using the north leg as well. This design criteria change was discussed with County staff and they concurred it was needed.
- Grading and Curb Ramps modifications are needed to avoid storm drain lateral conflicts recently identified with the utility potholing effort noted above.
- Water District Pipeline and Tunnel Cover at Union/San Benito Intersection - In recent coordination with the San Benito County Water District, a new concern has arisen regarding the amount of cover over the existing 54" water line encased in a 120" RCP inspection pipe, as it also is crossing the Calaveras Fault at this location. The current design profile shows lowering the grade at the intersection of Union and San Benito by about 1', which when combined with reconstructing the pavement structural section, would reduce the cover over the pipe during construction by about 3.5'. The concrete pipe is 35+ years old and the Water District's concern is the unknown capacity of this pipe to handle the additional loads with reduced cover during construction. In discussions with the County and Water District, the group agreed that it would be best to adjust the proposed profile of San Benito Street upward to avoid this impact and minimize the risk to the County during construction. And instead of complete reconstruction of the pavement section, grade adjustments will be performed using pavement overlays. Adjusting the profile of San Benito Street may also have the following benefits:
 - Reduced pavement reconstruction and excavation costs by using an HMA overlay
 - Simplified construction staging and traffic handling
 - Reduced construction time and traffic delays.

Reduced retaining wall height and construction cost

Retaining Wall Design Update

As noted above, the profile of San Benito Street will be adjusted upward to avoid creating reduced cover over the 54" water line and 120" casing pipe during construction. This change in profile will increase the design height of Retaining Wall No. 2 by approximately 1 to 2 feet, on the east side of the proposed San Benito Street extension. The retaining wall design calculations will be revised as needed, as well as the opinion of probable construction costs. The plans and details for Retaining Wall No. 2 will also be updated according to the new roadway profile, and updated design calculations.

Key Assumptions:

✓ Plans or technical specifications not explicitly listed above are not included.

CONSTRUCTION SUPPORT SERVICES

Construction support services were not included in the original design contract, and County has requested they be added. These services will include attending periodic construction meetings, reviewing contractor submittals and RFI's, and clarifying the contract documents. CONTRACTOR'S design team will perform the following the scope of work:

- Attend preconstruction meeting
- Attend limited, periodic field visits, as required, to assist in the resolution of construction issues
- Review shop drawings and construction submittals
- Answer clarification questions pertaining to the plans and special provisions, if needed.
- Review contractor RFI's (Request for Information) and provide written responses.
- Review construction inspection reports prepared by the Resident Engineer.
- Provide field observation, engineering support and interaction by the Geotechnical Engineer of Record during construction of the CISS piles.
- Provide field observation of nursery coordination, riparian area non-native plant removal (2 seasons), temporary mitigation fencing, mitigation site preparation, planting layout and irrigation system layout, irrigation system testing, seeding and forced germination of seeing, plant installation and final acceptance. The work includes follow up coordination with the Design Team and

County, as well as preparation of field notes documenting field observations.

Prepare Final Site Grading & Water Quality Certification Letter

Prepare Biological As-Built Report:

The USACE, RWQCB, and CDFW permits require submittal of the as-built report prepared by the monitoring biologist within 8 weeks of the completion of mitigation site installation. The report will document the post-construction condition of the site in accordance with the project permits. The report will include plan view drawings of the aquatic riparian areas to show biologically significant deviations from the concepts outlined in the Project's Riparian Mitigation Plan (prepared September 2010 by H. T. Harvey & Associates) and other relevant information such as planting zones, plant palettes and quantities installed, and typical plant spacing. This report will outline observations made during construction relevant to the ecological aspects of the mitigation project, as well as establish permanent photo-documentation points for use as a baseline for the long-term monitoring of the site.

• Prepare Record Drawings for the County:

The basis of the revisions shown on the record plans will be a red mark construction set of plans provided by the project Resident Engineer. These construction red mark plans must show all revisions that were made during construction.

Key Assumptions:

- ✓ Please see the attached fee breakdowns for additional assumptions regarding number of submittals, etc.
- ✓ Construction is scheduled to take place in 2022-2023.
- ✓ Submittals and RFIs will be electronic, in either Word or Pdf format.
- ✓ Structural inspections, all other required inspections, and construction management and administration services will be provided by the County's Resident Engineer for the project.
- ✓ Structural Observation and Structural Inspection services are not included.
- ✓ Geotechnical Observation of CISS pile installation is included. It is
 assumed that the Geotechnical Engineer of Record will observe the
 installation of one CISS pile for each of the 6 bridge supports, and
 that each pile being observed will take up to three days (initial
 driving and restriking). One pile per support is required to receive
 dynamic monitoring using a Pile Driving Analyzer (PDA), and it is

- assumed that this is the pile the Geotechnical Engineer will observe. Observation of the remaining piles for each support will be observed by the County's Resident Engineer for the project.
- ✓ Geotechnical consultation for completion of the CISS pile installation is included.
- ✓ Signal pole locations will be reviewed in the field by the Electrical Engineer of Record prior to pole foundations being installed.
- ✓ Nursery coordination is not included.
- ✓ Support during the 3-year plant establishment period is not included.
- ✓ The regular earthwork and compaction inspections will be performed by the project Resident Engineer.
- ✓ Detailed surveys for plants or animals are not included.
- ✓ Nesting bird or roosting bat deterrence is not included.
- ✓ Remedial engineering design to determine corrective action required due to materials and/or the Construction Contractor's operations not meeting contract requirements is not included. Upon County request, CONTRACTOR can provide this work as additional services, following further amendment of this contract.
- ✓ Engineering advice and technical support for construction change orders to the plans and specifications for the project, preparation of change order documentation to include, where appropriate, changes to plans and specifications, and additional structural details are not included. Because the level of effort required to process change orders can vary widely depending upon the type of changes requested, per County request CONTRACTOR can provide this work as additional services, following further amendment of this contract.
- ✓ Record drawings will be based on a thorough and complete redmarked set of plans provided by the project Resident Engineer.
- ✓ CONTRACTOR'S construction support services fee proposal represents its best estimate of the costs involved. The construction support services costs are highly dependent on the construction schedule, the Construction Contractor's operations, the Construction Contractor's proficiency and performance. For these reasons, CONTRACTOR recommends that the County establish a contingency budget for construction support, which could be used if more support services are required.

[]	The services specified in the original contract are deleted in their entirety
	and replaced with the following services:

New Scope of Services:

(Insert new services.)

_	D	4 T	(Classia)
c.	ravmen	t 1 erms.	(Check one.)

- [] The payment terms in the original contract (Exhibit 1) are not modified.
- [X] The payment terms in the original contract (Exhibit 1) are modified as specified below: (Check one.)
 - [X] The payment terms are modified only as specified below:

Modified or New Payment Terms:

(Insert modified or new payment terms.)

Paragraph B-3 (Compensation) of Attachment B (Payment Schedule) to the original contract (Exhibit 1) is hereby amended to increase the compensation by an additional amount not to exceed \$630,200.00, for the extension of services provided under the original contract through the terms of this amendment, for a total contract value not to exceed \$1,631,650.50, as follows:

Original Contract:	\$1,001,450.50
1 st Amendment:	\$ 630,200.00
Total:	\$1,631,650,50

Paragraph B-3 of Attachment B (Payment Terms) is hereby amended to read as follows:

B-3. COMPENSATION

COUNTY shall pay to CONTRACTOR: (Check one.)

[]	a total lump sum payment of \$, or
[√]	a total sum not to exceed \$1,631,650.00	

for services rendered pursuant to the terms and conditions of the original contract (Exhibit 1) and this amendment, and pursuant to any special compensation terms specified in paragraph B-4.

Paragraph B-4 (Special Compensation Terms) of Attachment B (Payment Terms) is hereby amended to add the following tables to the end of Paragraph B-4:

UNION ROAD BRIDGE REPLACEMENT PROJECT

ADDITIONAL SERVICES REQUEST #1 FEE SUMMARY

TASK	BCA Structural	DHA Roadway	HTH Mitigation Planting	Parikh Geotechnical	Hexagon Electrical	Total
Finish Construction Documents	\$31,900	\$144,524	\$38,776	\$0	\$0	\$215,200
Construction Support	\$225,707	\$80,264	\$49,384	\$50,045	\$9,600	\$415,000
	\$257,607	\$224,788	\$88,160	\$50,045	\$9,600	\$630,200

Estimated Man Hours and Cost for the Union Road Bridge Replacement Additional Services Request - Final Design



		B	BIGGS CARDOSA ASSOCIATES	A ASSOCIATE	S				
			PRIME CONSULTANT	NSULTANT					
	M. Harms								
TASK	Principal	Engineering	Senior	Project	Senior CADD Drafter	Secretarial	Total	Total BCA Dollars	Total BCA Dollare
Rate (unloaded)	\$115.70	\$63.46	\$58.10	\$52.57	\$48.62	\$38.42	Hours	without OH and Fee	with OH and Fee
1. PROJECT MANAGEMENT									
Project Administration, Coordination, Management	28	64	32	0	0	0	124	\$9,160	\$27,021
Project Management and Administration Design Coordination and Quality Assurance Meetings and Coordination with Design Team and County	8 8 8	24 24 16	24				32 56	\$2,911 \$3,843 \$2,406	
2. FINAL DESIGN									
Final PS&E Submittal	-	2	. 8	6	9	0	26	\$1,472	\$4,343
Update Retaining Wall #2 Calculations Update Retaining Wall #2 Plans Update Retaining Wall #2 Quantities and Estimate	0 -		040	4 0 %	000		0 4 0 0	\$326 \$808 \$337 \$0	
TOTAL HOURS									
Subtotal Hours	29	99	40	6	9		150	150	
Total BCA Direct Labor Cost	\$3,355	\$4,188	\$2,324	\$473	\$292	\$0		\$10,633	\$31,363
TOTAL HOURS TOTAL DIRECT LABOR AND DIRECT COSTS						150		631 900	631 900
A. Biggs Cardosa Associates								006,104	006,106
Total BCA Direct Labor Cost								\$10,633	
Overhead (1.6316)								\$17,348	
Project Escalation (5% per year) 1 years								\$532	
A. SUBTOTAL BIGGS CARDOSA ASSOCIATES (\$)								\$28,512	
B. Subconsultants ¹									
AVILA ASSOCIATES (HYDRAULICS)								\$0	
DRAKE HAGLAN ASSOCIATES (CIVIL / ROADWAY DESIGN)								\$144,524	
DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL) GEOCON (HAZARDOUS MATERIALS TESTING)								Ŭ V	
HT HARVEY ASSOCIATES (MITIGATION PLANTING DESIGN)								\$38,776	
PARKH CONSULIANIS RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW)								S S	
B. SUBTOTAL SUBCONSULTANTS (\$)								\$183,300	

C. Direct Costs					
Plots Reproduction Delivery Services Miscellaneous					\$537
	C. SUBTOTAL DIRECT COSTS (\$)				\$537
TOTALS					
	₹			\$28	\$28,512
	FIXED FEE (10.0%)			\$2	\$2,851
	B+C			\$183,837	837
	FEE (0%)				\$0
	TOTAL NOT TO EXCEED =			\$215,200	200

¹⁾ includes 0% mark-up on subconsultant services. 2) All ICRs and charge rates match the rates indicated in the contract.

MAN HOUR LEVEL OF EFFORT

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Tasks rgineering & Reports for Environmental ination In Design & Coordinatio ray PS&E eering Support eering Support ile		DHA							9		4				10		\$ 2,760		
	Tasks		(1 - Phase I: Preliminary Engineering & Reports	1.3 Engineering Support for Environmental	1.4 Utility Coordination	1.5 PG&E Gas Line Coordination	1.6 Water Main Relocation Design & Coordination	(2 - Phase II - Final Design	2.1 - Prepare 95% Roadway PS&E	2.2 - Final Design	2.3 - Right-of-Way Engineering Support		2.5 - Resident Engineer File	2.6 - SWPP	Fotal Hours	Rate	Fotal Additional Budget Requested		

® Dewberry drake haglan



H. T. HARVEY & ASSOCIATES

Ecological Consultants

Proposal Name: Union Road Bridge Replacement Project -- Mitigation Site Design Additional Services [Final Design and Permitting Support]

Proposal Number: 9275 (Formerly 6871)

Project Number: 4312-02

Staff Time

Staff Time Estimates						Perso	unel Hou	Personnel Hours by Task	×							
	Dan Stephens Principal, Restoration Ecology	Max Busnardo Principal, Restoration Ecology	Joe Howard Principal, Landscape Architect	Karen Verpeet Senior Associate, Landscape Architect	Lauren De Silva Landscape Architect (Senior Ecologist 2)	Allegra Watson Restoration Landscape Designer (Field Biologist 2)	Steve Rottenborn Principal, Wildlife Ecology	Kim Briones Senior Wildlife Ecologist 1	Kelly Hardwicke	Mark Bibbo Senior Plant Ecologist 2	Ethan Barnes Senior Plant Ecologist	Kat Situlikova	Mark Lagarde Senior GIS Analyst	Joy DeBruyn Technical Support		Subtask Cost with Annual 5% Escalator
Task	\$ 388.19	271.56	\$290.15	\$218.62	\$ 157.50	\$ 99.94	\$ 333.30		5.26		\$ 143.14	12	60:0	12.	MIM Cost by Task	on 2021
Task 1. Plans, Specifications, and Cost Estimates																
95% Resubmittal															\$0	\$0
100% Submittal	2		2	9	8	16	9	4	9	2	9	4		-	\$ 11,212.56	\$11,213
Bid Set Submittal	2		-	3	4	8	4	2	8	-	Е	2		-	\$ 6,387.41	\$6,387
Task 3. Project Management and Meetings		2	4	80	16		4		91						\$ 11,070,10	\$11,624
Task 4. Permitting Support							2		16		28	4	4		\$ 9,551.92	\$9,552
															- 5	\$0
Total Labor Hours	4	2	7	17	28	24	16	9	41	3	37	10	4	2		
Total Labor Cost \$ 1,553		\$ 543	\$2,031	\$3,717	\$ 4,410	\$ 2,399	\$ 5,333	\$ 918	\$ 9,646	\$ 527	\$ 5,296	\$ 832	\$ 780	\$239	\$ 38,222 \$38,776	\$38,776

Direct Expenses TOTAL BUDGET

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38,776

s s

Estimated Man Hours and Cost for the Union Road Bridge Replacement Additional Services Request - Construction Support



			SIGGS CARDO	BIGGS CARDOSA ASSOCIATES	S				
			PRIME CO	PRIME CONSULTANT					
	M. Harms								
TASK	Principal	Engineering Manager	Senior Engineer	Project Engineer	Senior CADD Drafter	Secretarial	Total	Total BCA Dollars	Total BCA Dollars
Rate (unloaded)	\$121.49	\$66.63	Н	\$55.20	\$51.05	\$40.34		without OH and Fee	with OH and Fee
1. PROJECT MANAGEMENT									
Project Administration, Coordination, Management	24	52	0	0	0	0	76	\$6,381	\$18,821
Project Management and Administration	24	52					97	\$6,381	
3. CONSTRUCTION PHASE									
Bidding	0	0	0	0	0	0	0	0\$	0\$
Services During Bidding							0	0\$	
Construction Support	84	232	380	316	09	0	1072	\$69,353	\$204,576
Respond to RFI's, emails and telephone requests	24	80	120	100			324	\$21.087	
Review submittals and shop drawings	24	80	120	100			324	\$21,087	
Meetings/site visits Plans and Special Provisions Clarification	9 4		9 6	04 0			126	\$8,591	
As-Built Plans and Reports	4		20	16	09		112	\$6,452	
TOTAL HOURS									
Subtotal Hours	108	284	380	316	09	0	1148	1148	
Total BCA Direct Labor Cost	\$13,121	\$18,923	\$23,184	\$17,443	\$3,063	\$0		\$75,734	\$223,397
TOTAL HOURS						1148			
BCA TOTAL DIRECT LABOR AND DIRECT COSTS								\$226,707	\$226,707
A. Biggs Cardosa Associates									
Total BCA Direct Labor Cost								\$75,734	
Overhead (1.6316)								\$123,567	
Project Escalation (5% per year) 1 years								\$3,787	
A. SUBTOTAL BIGGS CARDOSA ASSOCIATES (\$)								\$203,088	
					1				

	D\$	¥	\$0	\$0	2	92	8	\$0			0 0	0			0	6	3	0	
	9	\$80,26	69	5	\$49,384	\$50,045	009'6\$	93	\$189,293		\$2,000	\$2,310		200	\$203,088	\$20,309	\$191,603	\$0	\$415,000
		ESIGN)	(DESIGN)			3 / ROW)	B. SUBTOTAL SUBCONSULTANTS (\$)			C. SUBTOTAL DIRECT COSTS (\$)		V	C 200 CEN LLL CLANE	FIXED FEE (10.0%)	D+8	FEE (0%)	TOTAL NOT TO EXCEED =
ultants 1	AVILA ASSOCIATES (HYDRAULICS)	DRAKE HAGLAN ASSOCIATES (CIVIL / ROADWAY DESIGN)	DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL)	GEOCON (HAZARDOUS MATERIALS TESTING)	HT HARVEY ASSOCIATES (MITIGATION PLANTING DESIGN)	PARIKH CONSULTANTS	HEXAGON TRANSPORTATION CONSULTANTS	RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW)	B. SUBTOTA	sts	n vices JS	C. SUBT							
B. Subconsultants	AVILA ASSC	DRAKE HAC	DAVID J. PC	GEOCON (F	HT HARVEY	PARIKH CO	HEXAGON	RUGGERI-J		C. Direct Costs	Plots Reproduction Delivery Services Miscellaneous		TOTALS						

¹⁾ Includes 0% mark-up on subconsultant services. 2) All ICRs and charge rates match the rates Indicated in the contract.

MAN HOUR LEVEL OF EFFORT

3 - Phase III: Construction Support DHA DHA DHA DHA DHA DHA DHA DHA DHA PHA	Tasks	Principal-in-	Senior Engineer, Range C	Engineer, Sange C	Asst. Engineer, Bange B	Principal WaterWastew ster Engineer	IstoT IsnoitibbA enuoH Beteeted	Original Contract EnuoH	enuoH listoT
16 240 120 8 384 0 3 16 0 240 120 8 384 0 3 276 \$ 208 \$ 167 \$ 113 \$ 276 \$ 3 4,416 \$ - \$ 40,080 \$ 13,560 \$ 2,208 \$ \$ \$ \$ \$		DHA	DHA	DHA	DHA	DHA			
16 240 120 8 384 0 384 1 1 1 1 1 1 1 1 1	3 - Phase III: Construction Support								
Hours 16 0 240 120 8 384 0 3 Additional Budget Requested \$ 4,416 \$ - \$40,080 \$ 13,560 \$ 2,208 \$ \$ \$.1 Construction Support	16		240	120	8	384	0	384
Hours 16 0 240 120 8 384 0 3 Additional Budget Requested \$ 4,416 \$ 4,0080 \$ 13,560 \$ 2,208 \$ \$ 5,208 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$									
Hours 16 0 240 120 8 384 0 3 Additional Budget Requested \$ 276 \$ 208 \$ 167 \$ 113 \$ 276 \$ 276 \$ 226 \$ 226 \$ 226 \$ 226 \$ 226 \$ 226 \$ 226 \$ 226 \$ 226 \$ 326<									
Additional Budget Requested \$ 276 \$ 276 \$ 208 \$ 167 \$ 113 \$ 276 \$ \$ 4,416 \$ - \$40,080 \$ 13,560 \$ 2,208 \$ \$ \$	otal Hours	16	0	240	120	80	384	0	384
\$ 4,416 \$ - \$40,080 \$13,560 \$ 2,208	ate		မာ	ľ					
	otal Additional Budget Requested		_	\$ 40,080	\$ 13,560				\$ 80,26

© Dewberry drake haglan



H. T. HARVEY & ASSOCIATES

Ecological Consultants

Proposal Name: Union Road Bridge Replacement Project -- Mitigation Site Construction Support Additional Services Proposal Number: 9275 (Formerly 6871)

Project Number: 4312-02

Staff Time Estimates

Subtask Cost with Annual 5% Escalator	on 2021 rates		\$2,190	\$10,672	\$24,45	\$12,071	\$		49,384	1
Subta: with /	on 202								S	€4
HTH Cost by	Task		\$ 1,986.06	\$ 9,680.20	\$ 22,178.02	\$ 10,427.41	-		\$44,272	
Technical Support	\$ 119.28		-		-	2		4	\$ 477	
Senior GIS Analyst	195.09					2		2	390	
Allegra Watson Restoration Landscape Designet (Field Biologist 2)	99.94		8	04	09	20		128	12,792 \$	
ranten De Silva	157.50 \$		4	16	24	01		54	8,505 \$	
Karen Verpeet Senior Associate, Landscape Architect	\$ 218.62 \$		2	w	80	4		22	\$ 4,810 \$	
Joe Howard	\$ 290.15			m	5	-		6	\$ 2,611	
gestoration Ecologist i	\$ 112.93				99	40		901	\$ 11,970	
Max Busnardo Principal, Restoration Ecology	271.56			2	9	2		10	2,716	
	Task	Task 6. Construction Support Services	Attend kickoff meeting	Review submittals, respond to RFIs, and assist with design modifications	Attend site inspections (18)	Task 7. Biological As-Built Report		Total Labor Hours	Total Labor Cost \$	DirectExpenses

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TOTALBUDGET

PARIKH CONSULTANTS UNION ROAD CONSTRUCTION SUPPORT SERVICES

PERSONNEL 1. Project Manager 2. Senior Engineer 3. Field Engineer (Observation up to 6 CISS piles for the project) *	UNIT RATE \$285 \$210 \$140	HOURS/ UNITS 12 30 180	\$UB- TOTALS \$ 3,420.00 \$ 6,300.00 \$ 25,200.00
* Prevailing Wage			
		222	\$ 44,640.00
OTHER DIRECT COSTS			
1. Travel Mileage	\$0.57	1500	\$ 855.00
TOTAL DIRECT COSTS			\$ 855.00
			\$ 45,495.00
	TOTAL with 10% Contingency		\$ 50,044.50

HEXAGON TRANSPORTATION CONSULTANTS

UNION ROAD - CONSTRUCTION SUPPORT SERVICES

	Staff Hours					_		
Task	Principal	Sr. Assoc. II	Eng. II	Eng. I	Admin.	Hexagon Fees	Direct Costs	Total
Material Submittal Reviews	2	4	6	2	1	\$2,523.65	\$ -	\$2,523.65
Responding to RFIs	2	4	4			\$1,917.62	\$ -	\$1,917.62
Pre-Construction Meeting (1)		4				\$898.12	\$ 20	\$918.12
Construction Field Meetings (3)		9				\$2,020.77	\$ 60	\$2,080.77
Preparation of Record Drawings	2	2	4	4	1	\$2,062.23	\$ 98	\$2,160.23
TOTAL	6	23	14	6	2	\$ 9,422	\$ 178	\$9,600

Charge Rates:

\$259.05 \$224.53 \$125.35 \$119.17 \$116.99

All other provisions of Attachment B to the original contract (Exhibit 1) shall remain the same.

DocuSign Envelope ID: 47ACAB8A-724A-4F50-B244-0263CC314214

]	The payment terms are deleted in their entirety and replaced with the following payment terms:
	New Payment Terms:
	B-1. BILLING
	Charges for services rendered pursuant to the terms and conditions of this contract shall be invoiced on the following basis: (Check one.) [] One month in arrears. [] Upon the complete performance of the services specified in the original agreement (Exhibit 1) and this amendment. [] The basis specified in paragraph B-4.
	B-2. PAYMENT
	Payment shall be made by COUNTY to CONTRACTOR at the address specified in paragraph 8 of the original contract, net thirty (30) days from the invoice date.
	B-3. COMPENSATION
	COUNTY shall pay to CONTRACTOR: (Check one.) [] a total lump sum payment of \$, or [] a total sum not to exceed \$, for services rendered pursuant to the terms and conditions of the original contract (Exhibit 1) and this amendment, and pursuant to any special compensation terms specified in paragraph B-4.
	B-4. SPECIAL COMPENSATION TERMS: (Check one.) [] There are no additional terms of compensation. [] The following specific terms of compensation shall apply: (Specify)

d.

Other Terms. (Check one.)

[] [X]			rms of the original contract that are modified. riginal contract are modified only as specified below:
			Other Modified or New Terms: (Insert other modified or new terms.)
	addition of	Attachn	original contract (Exhibit 1) is hereby amended to reflect the nent D to this contract. Attachment D is attached to this aph 7 is hereby amended to read as follows:
	7.	Speci	fic Terms and Conditions (check one)
		[]	There are no other provisions to this contract.
		[X]	The rights and duties of the parties to this contract are additionally governed by the specific, additional terms mutually agreed to and listed in Attachment D. Attachment D is made a part of this contract.
		[]	The rights and duties of the parties to this contract are additionally governed by the specific, additional terms mutually agreed to and listed in Attachment E. Attachment E is made a part of this contract.
	All other pro	visions	of the original contract (Exhibit 1) shall remain the same.
3. Other Terms	s.		
	ns and conditions that the		ne original contract (Exhibit 1) which are not changed by this
CONTRACTOR Docusioned by:			
Malwash to	urms		9/3/2021
Mahvash Harms, S.E	E., Principal		Date
COUNTY San Benito County E	Board of Super	visors	
Soa (GARS		09/14/2021
Bea Gonzales, Chair			Date
APPROVED AS TO San Benito County C	Counsel's Offic		
Shirley J. M.	luphy		9/3/2021
Shirley L. Murphy, I	Deputy County	Counse	Date

DocuSign Envelope ID: 47ACAB8A-724A-4F50-B244-0263CC314214

EXHIBIT 1 TO AMENDMENT #_1_

ORIGINAL CONTRACT

(Please attach the initial contract and any prior amendments, from the most recent to the initial contract, in reverse chronological order.)

ATTACHMENT D Specific Terms and Conditions

Licensed Architects, Landscape Architects, Professional Engineers and Professional Land Surveyors

The rights and duties of the parties to this contract are additionally governed by the following specific, additional terms and conditions:

D-1. INDEMNIFICATION. With regard to the design services described in California Civil Code section 2782.8 only, Paragraph C-1 of Attachment C to this contract is hereby modified to read as follows:

To the fullest extent permitted by law, CONTRACTOR shall indemnify, defend and hold harmless the COUNTY and its officers, agents, employees and representatives, from and against any and all claims, actions, losses, injuries, damages or expenses of every name, kind, and description, including litigation costs and reasonable attorney's fees incurred, brought for or on account of, injury to or death of any person, including but not limited to workers, County employees, and the public, or damage to property, which arise out of, pertain to, or relate to the neglicence, recklessness, or willful misconduct of CONTRACTOR, its officers, agents, employees, volunteers, representatives, contractors and subcontractors. This duty of CONTRACTOR includes the duty of defense, inclusive of that set forth in California Civil Code Section 2778. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this contract. CONTRACTOR shall not be liable under this indemnification provision if the COUNTY has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence, recklessness or willful misconduct. The obligations set forth herein shall continue beyond the term of this contract.

The provisions of Paragraph C-1 of Attachment C shall remain in full force and effect and shall apply to CONTRACTOR'S provision of all other services under this contract.

- D-2. ADDITIONAL SPECIFIC TERMS AND CONDITIONS: (check one)
 - [X] There are no additional specific terms and conditions.
 - [] The following additional specific terms and conditions shall apply: (Specify)
- D-3. HARMONIZATION OF CONTRACT TERMS. Where the specific terms and conditions set forth in this Attachment D specifically conflict with the general terms and conditions set forth in Attachment C to this contract, the more specific terms and conditions shall be deemed to control. However, the general terms and conditions in Attachment C shall remain in full force and effect, to the extent they do not specifically conflict with the specific terms and conditions set forth in this Attachment D.

END OF ATTACHMENT D.

EXHIBIT 1 TO AMENDMENT # 1

ORIGINAL CONTRACT

(Please attach the initial contract and any prior amendments, from the most recent to the initial contract, in reverse chronological order.)

CONTRACT

The COUNTY OF SAN BENITO ("COUNTY") and <u>Biggs Cardosa Associates Inc.</u> ("CONTRACTOR") enter into this contract which shall be effective on the date stated in Paragraph 1.

1. <u>Duration of Contract</u>.

This contract shall commence on <u>January 1, 2013</u>, and end on <u>June 30, 2022</u>, unless sooner terminated as specified herein.

2. Scope of Services.

CONTRACTOR, for COUNTY's benefit shall perform the services specified on Attachment A to this contract. Attachment A is made a part of this contract.

3. <u>Compensation for Services</u>.

In consideration for CONTRACTOR's performance, COUNTY shall pay compensation to CONTRACTOR according to the terms specified in Attachment B. Attachment B is made a part of this contract.

4. General Terms and Conditions.

The rights and duties of the parties to this contract are governed by the general terms and conditions mutually agreed to and listed in Attachment C. Attachment C is made a part of this contract.

5. <u>Insurance Limits.</u>

CONTRACTOR shall maintain the following insurance policy limits of coverage consistent with the further insurance requirements specified in Attachment C.

(a)	Comprehensive general liability insurance:	\$1,000,000
	Professional liability insurance:	\$1,000,000
(c)	Comprehensive motor vehicle liability insurance:	\$1,000,000

6. <u>Termination</u>.

The number of days of advance written notice required for termination of this contract is 30 days.

7. Specific Terms and Conditions (check one)

- [X] There are no additional provisions to this contract.
- [] The rights and duties of the parties to this contract are additionally governed by the specific, additional terms mutually agreed to and listed in Attachment D. Attachment D is made a part of this contract.
- [] The rights and duties of the parties to this contract are additionally governed by the specific, additional terms mutually agreed to and listed in Attachment E. Attachment E is made a part of this contract.

8. <u>Information about Contract Administrators.</u>

The following names, titles, addresses, and telephone numbers are the pertinent information for the respective contract administrators for the parties.

Contract Administrator for COUNTY:	Contract Administrator for CONTRACTOR:
Name: John Guertin	Name: Mahvash H. Harms
Title: RMA Director	Title: Principle Engineer/Project Manager
Address: 2301 Technology Pkwy	Address: 865 The Alameda
Hollister, California 95023	San Jose, CA 95126-3133
Telephone No.: <u>831-636-4170</u>	Telephone No.: <u>408-296-5515</u>
Fax No.: <u>831-636-4176</u>	Fax No.: <u>408-296-8114</u>
CONTRACTOR	SIGNATURES 12/4/2018
Name/Title: Mahvash H. Harms / Project Ma	nager Date
COUNTY San Benito County Board of Supervisors Anthony Botelho, Chair APPROVED AS TO LEGAL FORM:	December 11,2018 Date
San Benito County Counsel's Office By: Michael Ziman Deputy County Counsel	December 5,2018 Date

SAN BENITO COUNTY UNION ROAD BRIDGE AT THE SAN BENITO RIVER SCOPE AND FEE FOR NEW CONTRACT

SCOPE OF WORK TO FINISH CONSTRUCTION DOCUMENTS

The following Scope of Services to complete the Construction Documents for the project is based on certain assumptions as listed in blue below. Please also see additional assumptions indicated blue in the detailed scope summary below. Any deviation from these assumptions will be coordinated with the County and a revised scope and fee established as agreed upon.

Exclusions

- ✓ See detailed scope below for additional exclusions
- ✓ Supplemental traffic studies and analyses
- ✓ Photometric analysis is not included.
- ✓ Right of way acquisition services are not included.
- ✓ Construction support services and preparation of as-built plans are not included.
- Community meetings and public outreach are not included.
- ✓ Vegetation removal and bird nest deterrence services are not included.

Assumptions

- ✓ See detailed scope below for additional assumptions
- ✓ Rock Slope Protection will be used for bank protection.
- ✓ Final design will be completed in 2018.

SCOPE OF SERVICES

Biggs Cardosa Associates' approach for Union Road Bridge Replacement Project is as follows:

O Project Management and Local Program Compliance

Phase I: Preliminary Engineering and Reports

Phase II: Final Design

Phase III: Construction Services:

Bidding Support
Construction Support (NIC)

0. PROJECT MANAGEMENT

(BCA, DHA)

Project Management includes the supervision and scheduling of project staff, review of work prepared by staff and subconsultants, project coordination, client liaison and the monitoring of the schedule and the budget. Also included in this Task is the preparation of project reports and attendance at meetings with the staff of San Benito County to receive input and discuss and review the project during its critical design periods.

Revised 3/21/2018

Union Road Bridge (Replace) - Scope to Finish Design and Construction Documents

Project Administration: Supervise, coordinate, and monitor design for conformance with Caltrans standards and policies. Prepare monthly progress reports and invoices. Make arrangements with and obtain permission from County for Consultant to work on the County road. Assist the County in obtaining permission to enter private property for environmental and engineering studies. Employ and monitor subconsultants. Coordinate Consultant's work with the County's work. Close and archive the project records at the end of the project.

Local Program Compliance: The Biggs Cardosa Associates team will prepare all of the required local programs forms, including the scope/cost/schedule change, request for right of way authorization, right of way certification, construction authorization request and project closeout forms.

Project Re-Initiation: Upon receipt of Notice to Proceed, a project meeting will be held to review the project scope, the project approach, the goals and the schedule. Items to be addressed include a review of the key issues associated with completion of the project, a discussion of strategy for management of these issues, review of environmental approvals status, and review of the right-of-way acquisition status.

Coordination Meetings: To facilitate comprehensive input from the County during the critical design periods, the Consultant's Project Manager and selected Team Members will attend coordination meetings with the County staff members.

Design Review Meetings: The Consultant's Project Manager and selected Team Members will attend design review meetings with County staff which will be scheduled to coincide with the completion of the preliminary design and final design phases.

Extended Project Duration: (Design Team)

Due to the contract lapse the project has been stalled for approximately 3 years. Scope includes additional time for the design team to become re-familiarized with the project and coordinate with each other about the work remaining to be completed. This work would include determining the project status when it was stopped, assessing outstanding design and coordination issues, assessing updated design and other requirements, reviewing previous plans, details and reports, etc.

1. PHASE I: ENGINEERING AND REPORTS

1.1 GEOTECHNICAL INVESTIGATION

(Parikh)

Bridge Foundation Report:

Update Final Foundation Report: The draft final foundation report prepared in 2011 will be updated based on the AASHTO Bridge Design Specifications 6th Edition with California Amendments, and the Caltrans Seismic Design Criteria version 1.7. We will review and update the geotechnical design criteria against these current applicable standards and will review and update the foundation recommendations based on the updated foundation design information.

Log of Test Borings: Using the bridge General Plan as a base map, boring log sheets will be updated for the plan set.

Special Provisions Consultation and Review: Review and consultation will be provided for the geotechnically related project special provisions.

Ongoing Design Consultation and Review: Design review and consultation will be provided through final design.

Deliverables:

Final Foundation Report

LOTB plan sheets

Revised 3/21/2018

Union Road Bridge (Replace) - Scope to Finish Design and Construction Documents

1.2 HYDRAULICS INVESTIGATION

(Avila)

Update Final Hydraulics Report: Update the 2011 draft final hydrology, hydraulics and scour report as needed per current design criteria. The Final Hydraulic Report (Design Hydraulic Study Report) will follow the Caltrans Final Hydraulic Report Format in Memos to Designers 16-1 and be prepared in accordance with the Caltrans Local Assistance Program Guidelines.

Update Scour Estimate: Update the scour analysis using the 5th edition (2012) of the FHWA publication HEC-18. Update report to include Scour Data Table per the new MTD 16-1.

Update Bank Protection Design: Estimate rock size using the HDM 870 criteria and compare to the California Bank and Shore Protection Manual to see if updates to the rock size/configuration should be included.

Ongoing Design Consultation and Review: Design review and consultation will be provided through final design.

Assumptions:

✓ The Location Hydraulic Study / Floodplain Evaluation Report has been completed and will not require modification.

Deliverables:

Final Hydraulic Study Report (Pdf format)

1.3 ENVIRONMENTAL DOCUMENTS

(BCA, BKF, David J. Powers, H.T. Harvey)

Permits:

It is anticipated that the proposed project will require regulatory approvals from the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB) and California Department of Fish and Game (CDFG). H.T. Harvey & Associates' (HTH) staff will prepare the necessary permit applications for submittal to the resource agencies. It is anticipated that the following permits will be necessary:

- Section 404 Permit (USACE)
- Section 401 Certification (CCRWQCB)
- Streambed Alteration Agreement (CDFW)

The first-review administrative draft permit packages will be submitted for review and comment. After incorporation of any changes, the packages will be submitted to the resource agencies. Throughout the permit process, staff will maintain regular contact with regulatory staff in order to identify any concerns that need to be addressed prior to the issuance of permits. This task includes time to conduct an informal conference/consultation with USFWS staff regarding special status species.

Services also include quantity calculations for fill and structures within the floodplain, a dewatering plan, and detailed cross sections of the area to be dewatered.

Incidental Take Permit for California Tiger Salamander: Prepare a California Endangered Species Act (CESA) Section 2081 Incidental Take Permit (ITP) application requesting take approval for the California tiger salamander (Ambystoma californiense) at the project site. This permit application will include a description of the project, the biology of the California tiger salamander, the potential for occurrence of the salamander at the project site, the potential impacts of the project on the species, and avoidance, minimization and compensatory mitigation measures proposed to offset project impacts.

The scope for this task includes preparation of a draft of the 2081 application and two rounds of revisions based on comments from the project team. It also includes time for coordination with the California Department of Fish and Wildlife (CDFW) following submittal of the 2081 application, and to coordinate with the County, CDFW and others as necessary regarding the application.

Revised 3/21/2018

Union Road Bridge (Replace) - Scope to Finish Design and Construction Documents

USACE – Wetland Delineation Report: U.S. Army Corps of Engineers (USACE) requires that a formal Wetland Delineation Report be submitted to support the permit materials. In past years this has not been required for sites that do not support wetlands, but it is now required for all sites. It is assumed that a site visit will not be required.

LSAA Updates for ITP: Ongoing coordination with California Department of Fish and Wildlife (CDFW) to update and finalize the project Lake and Streambed Alteration Agreement. An LSAA was issued for the project in December 2013, but this included provisions to avoid take of the California tiger salamander that would have made the project impossible to build. Due to the subsequent application for an Incidental Take Permit, the LSAA must be updated to remove the avoidance provisions.

Assumptions:

- ✓ It is our understanding that land for compensatory mitigation for impacts to the tiger salamander has been set up by the County for this project and other projects.
- ✓ This scope assumes that CDFW will find the site acceptable for compensatory mitigation of potential impacts to California tiger salamander habitat, or that on-site mitigation will be feasible.
- ✓ This scope includes time for a moderate level of coordination between HTH and CDFW but does not include the cost of investigating other potential mitigation sites or of designing and implementing on-site habitat restoration for the California tiger salamander.
- ✓ Permit fees are not included in the attached fee for services.

Deliverables:

USACE, CCRWQCB, CDFW and Incidental Take Permits

USACE Wetland Delineation Report

1.4 WATER LINE RELOCATION

(DHA)

The existing 20-inch water line that crosses Union Road at San Benito Street will need to be relocated during construction. A draft water line relocation plan will be provided for review by the Water District and the County, and the approved plan incorporated into the final plan set. The project estimate will be updated accordingly.

1.5 UTILITY COORDINATION

(DHA)

As required in Chapter 13 of the Caltrans, Right of Way Manual, the Consultant will resend the Letters to Owners Requesting Positive Location (Utility "B Letters and Plans"), which identifies claim of liability from the potentially affected agencies. Coordination for any relocation and will be provided at this time. The Utility Agency Coordination Log will be updated as necessary.

2. PHASE II: FINAL DESIGN

CONSTRUCTION DOCUMENTS

Construction Documents will be prepared by BCA's team. The Construction Documents package will include specifications and construction plans and will conform to the County's and Caltrans' Standards with Federal requirements. Final design calculations and a construction cost estimate for the bridge will also be prepared and submitted for County staff review. BCA will coordinate and incorporate utility agencies future needs in the bridge. The Consultant will design all channel transitions or alterations that may be required, as well as all street transitions to the bridge.

Bridge Design Criteria: Bridge Design: Final bridge design will be performed in accordance with AASHTO LRFD Bridge Design Specification 6th Edition with California Amendments, and other Caltrans Design Manuals.

Revised 3/21/2018

Design will be based on the "Load and Resistance Factor Design" method, with HL93 and permit truck design live loads. Seismic design will be performed in accordance with Caltrans Seismic Design Criteria version 1.7

Approach Roadway Design: The final approach roadway design will be performed in accordance with County Standards, AASHTO, Caltrans Highway Design Manual, and Caltrans Standard Specifications. Final grading and drainage details will be developed as well as new/existing roadway conformance details, as required. Cross sections will be developed on approximately 50-foot intervals.

Utility Relocation: Consultant will provide communication and coordination with the utility companies during the preliminary and final design process. We will coordinate the relocation and protection of the existing utilities for the project based on the information obtained from the County and various affected utilities. BCA's team will also provide adequate openings for the utilities in the bridge. It will be the responsibility of each utility owner to provide a design of their facility.

Mitigation Planting Design: Based on the Riparian Mitigation Report, mitigation planting design will be included in the plans, specifications and estimate. Mitigation planting will include native riparian planting design of impacted bank slopes, and will be performed in accordance with County and Caltrans Standards. Other environmental mitigation requirements will also be included in the specifications and estimate.

Assumption:

- ✓ Because the updated permits have not been obtained, any significant alteration to the project's mitigation approach may require revisions to the existing mitigation planting design scope of work.
- ✓ This scope also assumes that all riparian mitigation sites will be located onsite, that the County will be responsible for acquiring any additional property needed to accommodate the mitigation plants, that the contractor will be responsible for providing plant material for the project, and that water for the plants will be supplied to the irrigation system via a standpipe point of connection.
- ✓ It is assumed the following are not included in this scope of work: detailed surveys for special status plant or animal species, wetland delineation or identification of other regulated habitats.

Plan Sheets and Details: The plan sheets will be prepared in AutoCAD. Plans will be prepared in English units and will be consistent with Caltrans' Standard Plans. All plans will be signed by the civil engineer or structural engineer (registered in the State of California) in responsible charge of the design, in accordance with the Caltrans Local Programs Manual. Two submittals will be made during the preparation of the Construction Documents as follows: When documents are 95% complete and when the final documents are complete. Each submittal will incorporate the review comments from the previous submittal by the County staff as well as those of all other reviewing agencies.

<u>Specifications (Special Provisions)</u>: Technical Specifications will be updated based on the Caltrans Standard Specifications 2015, and the Caltrans Standard Special Provisions 2015. Per the County's request, the complete special provisions document will be coordinated and assembled, including incorporation of the environmental and wildlife protection provisions, County boilerplate provisions, bid forms, FHWA provisions, and Caltrans provisions for Divisions I and II.

Assumption:

✓ It is assumed that the County boilerplate provisions, bid forms, and FHWA provisions will be provided by the County, and will already have been edited by the County for the project and for Caltrans 2015 Standards and current FHWA standards, will not require editing by the Consultant and will be ready for incorporation into the specifications document "as is".

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2.1 REASSESSMENT AND RESUBMITTAL OF 95% PS&E PER NEW STANDARDS (BCA, DHA, Hexagon, H.T. Harvey)

Revised Design Codes: Since the original 95% PS&E was submitted in February 2014, the bridge design codes have been revised, as have the Caltrans Standard Specifications, Plans and Special Provisions. Because of this, the 95% PS&E will be revisited, updated and resubmitted.

Supplemental 95% Design Calculations: As noted above, the design calculations will be reviewed and updated for conformance with the revised design criteria in AASHTO LRFD 6th Edition with California Amendments, and with Caltrans Seismic Design Criteria Version 1.7. As noted below, supplemental design calculations will be subjected to an independent check and revised as required prior to submittal.

Update 95% Design Plans: Plans will be updated to reflect any changes required by the updated design calculations. Updated plans will be independently checked, revised as required, and submitted to the County, utility companies and other agencies for final review and comment. Agencies will thoroughly review the details of the project and provide the design team with review comments. The Consultant will work with the County and other agencies to resolve any conflicts between the comments of different reviewers.

Update 95% Technical Special Provisions: The technical special provisions will be updated to the 2015 Caltrans Standard Special Provisions. The special provisions will be independently checked, revised as required, and included in the 95% submittal to the County. Please see the Specifications paragraph above for discussion of the Consultant and County roles in compiling the complete special provisions document.

Update 95% Opinion of Probable Construction Costs: The Opinion of Probable Construction Costs will be updated to 2015 standards and cost levels for use in the Bid Documents. Standard County and/or Caltrans items will be used.

Independent Quality Assurance Review: An internal quality assurance review of the updated plans, specifications, and estimate will be conducted per the updated design criteria noted above. The Consultant's quality assurance program provides for independent checking of individual tasks, as well as an independent review by experienced senior staff. The purpose of this review is to provide oversight to specific project details by professionals who are not closely involved in the design, and to review the constructability, cost-effectiveness and completeness of design features relative to the normal standard of professional care. This independent check will include a red, green and yellow check of the structural calculations and plans.

Response to Comments Memorandum: If the County has comments on the previous 95% Design submittal, responses to these comments will be incorporated into the Updated 95% Design submittal, and a memo with "response to comments" will be provided.

Assumptions:

- ✓ County will provide comments on the plans, specifications and Opinion of Probable Construction Costs in the form of one, consolidated set of markups and or written comments.
- ✓ Independent design check will be a red-yellow-green check of the 95% revisions only. Should an independent review of the complete construction documents, rather than the document updates, and/or independent check calculations be required, these may be provided as additional services.
- ✓ All revegetation sites will be in the locations previously identified in the May 2013 plans and that these sites are still suitable for the desired revegetation.

Updated 95% Deliverables:

- 4 95% Plan Sets (11" x 17" plots)
- 1 95% Plan Set (Pdf format)
- 1 95% Opinion of Probable Construction Cost (Pdf format)
- 1 95% Project Technical Specifications (Pdf format)

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1 – Response to Comments Memo (Pdf format)

2.2 FINAL DESIGN SUBMITTAL (100% PS&E)

(BCA, DHA, Hexagon, H.T. Harvey)

100% Final Plans: After agency review of the Checked Design Submittal (95%), we will prepare the Final Contract Documents in accordance with the County's instructions and provide the County and other agencies the opportunity to review the completed Bid Documents and direct minor revisions.

100% Opinion of Probable Construction Costs: The Opinion of Probable Construction Costs will be finalized. Standard County and/or Caltrans items will be used.

Response to Comments Memorandum: Response to Comments: Prepare and submit a memo with "response to comments" received from the Checked Design Submittal.

Bid Documents: After County review of the 100% Final Submittal, incorporate any minor final revisions and prepare 6 sets of Completed Contract Documents in accordance with the County's instructions. Submit final bid documents for signature.

Assumption:

✓ County will provide comments on the plans, specifications and Opinion of Probable Construction Costs in the form of one, consolidated set of markups and or written comments.

100% Deliverables:

- 4 100% Plan Sets (11" x 17" plots)
- 1 Final Opinion of Probable Construction Cost (Pdf format)
- 1 100% Project Technical Specifications (Pdf format)
- 1 Response to 95% Comments Memo (Pdf format)

Bid Set Deliverables:

- 4 Bid Plan Sets (11" x 17" plots, signed)
- 1 Bid Plan Set (Pdf format, signed)
- 1 Final Opinion of Probable Construction Cost (Pdf format)
- 1 Bid Set Project Technical Specifications (Pdf format)
- 1 CD of Final Project Documents

2.3 RIGHT-OF-WAY ENGINEERING SERVICES

(RJA)

The Consultant will provide engineering support services for the right-of-way acquisition process. This may include the preparation of appraisal maps, right-of-way maps and legal descriptions, as necessary. The County or its agent will make contact with the property owners for the purpose of acquiring property rights to accommodate construction.

Coordination: Consultant will assist the County in the coordination of items related to the project processing, coordination of Right of Way appraisals and exhibits, and coordination of property title questions for "triangular" remnant parcel, as well as the Bianchi-Ridgefield parcels and the Agredano parcel.

Assumption:

√ 12 hours of labor are assumed to be sufficient to complete the coordination work.

Plats and Legal Descriptions for use in Right-of-Way and Easement Acquisitions: Amendment #2 scope for the Union Road Bridge provided exhibits for assessment and acquisition of temporary construction easements and roadway right-of-way for up to seven (7) parcels, and a total of 28 exhibits. During the course of the project, it was determined a total of eight (8) parcels are being affected. Additionally, in order to more clearly delineate proposed easements and right-of-way, each exhibit has been separated into multiple sheets for the

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acquisition process. Scope and fee for this item now includes up to a total of forty-five (45) exhibits over the eight (8) affected parcels for the County to use in right-of-way and easement acquisition and construction staging easement areas.

Exclusions:

- ✓ Plats and legal descriptions beyond those noted above.
- ✓ Processing of the recording of documents after Agency approval.
- ✓ Provision of preliminary or final title reports.
- ✓ Assistance with any property, right-of-way, or easement acquisition.
- ✓ Services do not include services pertaining to right of way acquisition services such as assistance with property or easement acquisition, assistance with signatories, or preparation of deeds.

2.4 UTILITY COORDINATION: OWNER AND/OR UTILITY AGREEMENT

(DHA)

As required in Chapter 13 of the Caltrans, Right of Way Manual, the Consultant will send Notice to Owner and/or Utility Agreement (Utility "C Letters and Plans") of which covers the positive location, relocation, removal, and abandonment of facilities and who is responsible for costs of relocation from the affected agencies. Incorporation of any relocation design plans, specifications, and estimate will be performed at this time. The Utility Agency Coordination Log will be updated as necessary.

2.5 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

(DHA)

A Risk Level I Storm Water Pollution Prevention Plan (SWPPP) will be prepared, which will be in effect for the duration of the project. This will include the design and implementation of sediment and erosion control best management practices (BMPs) as well as Stormwater Post Construction Requirements (PCRs). Stormwater PCRs include calculations to determine pervious and impervious surfaces before and after construction and the design of post construction BMPs. Consultant will file the Notice of Intent (NOI) through the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) and upload the necessary Permit Registration Documents (PRDs) in order to obtain a Waste Discharge Identification Number (WDID) number. PRDs include the Risk Level I SWPPP, the Risk Determination Spreadsheet, and post construction calculations and BMPs. The Risk Determination Spreadsheet and Post Construction Requirements are included in the SWPPP but are also uploaded into SMARTS separately.

2.6 RESIDENT ENGINEER'S PENDING FILE

(BCA, DHA)

The Resident Engineer's Pending File will be prepared per the OSFP Information and Procedures Guide, including the following items:

- Quantity summary sheets for excavation, backfill, concrete, reinforcing, piles and miscellaneous metal
- Joint movements calculations
- Notes on special details, and special construction sequences or requirements, as needed
- Final foundation report
- Final hydraulics report
- As-built plans for existing bridge
- 4-Scale deck contour plots

2.7 CONSTRUCTION CROSS SECTIONS AND SLOPE STAKING NOTES

(DHA)

Construction cross sections and slope staking notes for earthwork will be provided at 25-foot intervals, with additional locations as required due to constraints or roadway features. Information provided on

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the cross-sections will include alignment (stationing), finish grade, sub-grade, original ground, existing and proposed edge of pavement, hinge point, catch point and right-of-way.

3. PHASE III: CONSTRUCTION

3.1 BIDDING PERIOD SERVICES

(BCA, DHA, Hexagon, H.T. Harvey)

The County will advertise the project for bidding and distribute the plans to prospective bidders. The County's project coordinator will be the designated person to receive contractor inquiries. The BCA team will assist the County as requested during the bidding. The work may include answering questions, providing consultation and interpretation of the construction documents, and assisting the County in preparation of addenda to the PS&E during the advertisement period. Attending pre-bid meetings or bid opening and analysis of bids will also be provided, if requested.

OPTIONAL TASK 3.2 - CONSTRUCTION SUPPORT AND STRUCTURAL OBSERVATION (NIC) (DHA, BCA, HT Harvey, Hexagon, Parikh)

Construction Support Services may be added to the scope of work at the County's request, and would include the following:

- Attend preconstruction meeting
- Review shop drawings and submittals
- Answer clarification questions pertaining to the plans and special provisions, if needed.
- Perform structural observation for critical portions of the work
- Attend periodic field visits, as required, to assist in the resolution of construction issues.
- Review contractor RFI's (Request for Information) and provide written response.
- Review construction inspection reports prepared by the Resident Engineer.
- Prepare record drawings and provide hard copies to the County. The basis of the revisions shown on the record plans will be a red mark construction set of plans provided by the project Resident Engineer. These construction red mark plans shall show all revisions that were made during construction.

OPTIONAL TASK 3.3 - BIRD NEST DETERRENCE SERVICES (NIC)

(HT Harvey)

The bird nest deterrence services for the project will need to start in January of the first year of construction and carry on until the construction contractor is established on site and is starting the pile driving or other similar, noisy work. It may also be required for the start of the second year of construction, depending on the level of construction activity, disturbance and noise that continues on the site through the first winter. The work involved is described in detail below. Please note that the scope of services provides for bird nest deterrence services being provided from January through July — if project construction reaches its peak level of disturbance prior to the end of July, nest surveying and deterrence activities can be scaled back.

The intended approach to the bird nest deterrence work is to make it part of the bridge construction work and have the construction contractor perform this work as part of the construction scope. In order for this to be feasible, the County would need to execute a contract with the construction contractor by November of the fall before the construction start, to provide sufficient time for scheduling, approval of submittals, coordination with the County, preconstruction surveys, training and mobilization for bird nest deterrence work by the beginning of January.

The optional bird nest deterrence scope is described below and an optional fee for these services is included in the fee breakdown, should the County require that these services be started prior to the execution of the contract with the construction contractor. It was our understanding from prior discussions with the County,

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that Caltrans had approved this approach of having the County start the bird nest deterrence work in 2015, when it was thought construction would start that Spring but the construction contract would not be executed before January.

Site Vegetation Removal: Brush clearing and tree removal services within the temporary and permanent impact areas designated in the attached map (Attachment A) are not included in this proposal. It is assumed that the County will be completing this work.

Services are included for outlining the brush and tree removal area on site, ESA fencing for river access points, as well as an onsite biologist to conduct pre-vegetation removal surveys of special status animals and provide worker training and monitoring of vegetation removal activities. Please see below for further details.

Approval of Biologists' Qualifications: Per the requirements of the Biological Opinion (BO) and Natural Environment Study (NES), a summary of the qualifications of each biologist who will be proposed to conduct activities required by the Project's BO will prepared. At least 30 days prior to the onset of any construction related activities at the site, such as the vegetation clearing, the names and credentials of biologists who would conduct activities pursuant to the USFWS BO will be submitted to the USFWS for approval.

Worker Environmental Awareness Program Training: Per the requirements of the BO and NES a Worker Environmental Awareness Program (WEAP) will be prepared and presented to vegetation-clearing crews and contractors prior to the initiation of any Project activities at the site. The training will include a brief review of listed species and other sensitive species/resources that may exist in the Project area. It will include the life history of each species, field identification, habitat requirements, locations of sensitive biological resources, and a description of the legal status and protection under the Federal Endangered Species Act and California Endangered Species Act for each species. The training will include materials concerning the following topics: sensitive resources, resource avoidance, permit conditions, and possible consequences for violations of State or Federal environmental laws. The training will cover the Project's conservation measures, environmental permits, and regulatory compliance requirements. It will include printed material and an oral training session by a qualified biologist.

Following the initial training session, additional training will be conducted as needed (e.g., as additional personnel begin to work on vegetation-clearing activities for the Project). The budget for this task includes the development of printed training materials and the initial presentation to Project personnel. All subsequent training will be given by the biological monitor already present on the site during vegetation-clearing activities and thus the cost of providing subsequent training is included in the costs associated with the monitoring of vegetation removal.

A record of all personnel trained during the Project will be maintained, and this record will be made available to the County and relevant agencies for compliance verification.

Pre-Activity Surveys: A qualified biologist will conduct pre-activity surveys for special-status animals in accordance with the requirements of the Natural Environment Study (NES), biological opinion (BO), and incidental take permit (ITP). Pre-activity/pre-construction surveys for the California red-legged frog (Rana draytonii), California tiger salamander (Ambystoma californiense), western pond turtle (Actinemys marmorata), horned lizard (Phrynosoma coronatum), and San Joaquin whipsnake (Coluber flagellum ruddocki) will be conducted by a qualified biologist within 48 hours of the scheduled start of vegetation-clearing activities.

In addition, a qualified biologist will conduct a pre-activity survey for San Joaquin kit fox (*Vulpes macrotis mutica*) dens no less than 14 days and no more than 30 days prior to the beginning of any vegetation-clearing activities that include ground disturbance, and will conduct a pre-construction survey for American badger (*Taxidea taxus*) dens within 2 weeks prior to the start of any such vegetation-clearing activities.

Further, a wildlife ecologist will conduct pre-activity clearance surveys for burrowing owls (*Athene cunicularia*) based on the California Department of Fish and Wildlife's (CDFW's) 2012 Staff Report on Burrowing Owl

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Mitigation. During the initial site visit, which shall be conducted no more than 30 days prior to any soil-altering activity or development within the Project site, a wildlife ecologist will survey the entire Project site and (to the extent that access allows) the area within 500 feet of the site for burrowing owl habitat (i.e., ground squirrel [Spermophilus beecheyi] burrows). If no burrows suitable for use by burrowing owls are present, no additional surveys will be required. However, if suitable burrows are determined to be present, a wildlife ecologist will visit the site an additional three times to investigate each burrow for signs of owl use and to determine whether owls are present in areas where they could be affected by the proposed activities. The final site visit shall take place no more than 24 hours prior to the start of construction.

Within one day following the completion of each pre-activity survey, a letter report documenting the survey findings will be prepared.

Monitoring of Vegetation Clearing: A qualified biologist will be present during all vegetation-clearing activities. The biological monitor will ensure compliance with all biological resources-related conditions of the BO and ITP. The construction monitor will maintain a daily log describing construction activities, sensitive species observed, animal relocations, and any injury or mortality of animals that occurs during construction.

Bat Exclusion and Installation of Bird Exclusion Netting: Bats should be excluded after the maternity season (i.e., after 31 August) or after the winter season (i.e., after 15 February) and before the maternity season (i.e., before 15 March). Thus, bats will be evicted in early-mid February immediately prior to the installation of bird exclusion netting. An exit count will be made to determine the number of bats in the bridge before demolition occurs.

Bats using the existing bridge as a day roost will be evicted, and access to the crevices used will be blocked to prevent the establishment of a maternity roost. Bats will be evicted by installing one-way doors and/or filling the voids where bats roost. Bats will be evicted under the direction of a bat biologist.

Bird exclusion netting will be installed on the existing bridge to prevent active bird nests from becoming established. The underside of the bridge has "girder recesses" allowing for multiple locations throughout the underside of the bridge to be suitable for birds such as cliff swallows (*Petrochelidon pyrrhonota*) to build mud nests. Because of this, the bridge will require a perimeter cable and attachments to hold netting flush against the ceiling keeping bats and birds from entering the recesses for nesting or roosting. The netting's mesh will be ½ inch or smaller to prevent bats from accessing the bridge. The bridge also has pipelines on both sides that carry across the bridge and cause difficulty in keeping swallows from using the 90-degree angle at each side under the railing. This will require separate netting on the underside span ceilings and bridge overhangs. This will also require that the seven piers be addressed at the 90-degree angles that are created.

Single lane closure will be required during installation of the netting. The entire installation would never block both lanes, and work can be accomplished at night with one lane closed at a time over the course of two weeks. After the netting has been installed, weekly inspections will be conducted throughout the nesting bird season to check the integrity of the exclusion netting, and biologists conducting the nest deterrence and monitoring will check the netting whenever on-site.

Installation and Monitoring of Artificial Bat Roost: Per the requirements of the NES, a bat biologist will coordinate and complete the construction of a freestanding bat condominium (bat condo) adjacent to the existing bridge. The bat condo will be approximately 4 feet x 4 feet x 6 feet with at least 10 vertical feet between the ground surface and the bottom of the roost. In accordance with the Project's NES, the bat biologist will monitor the bat condo for up to three years following completion of the Project. Monitoring will cease prior to Year-3 if it is determined that the condo has been occupied by at least 50 percent of the number of bats observed during pre-demolition summer-time surveys.

The biologist will conduct temperature monitoring during the first year following installation of the bat condo, including up to three site visits (midsummer for the maternity season, fall, and winter) to download the temperature data. During the site visits, the bat biologist will visually assess bat occupancy of the condo. The

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biologist will analyze the temperature data and prepare a brief tech memo summarizing the results of the monitoring at the end of Year-1. The tech memo will compare the average measured temperatures in the condo (as a function of daytime, nighttime, and season) to the suitable temperature range for bat use (85–105 degrees Fahrenheit). The tech memo will include recommendations to modify the condominium, if needed, to optimize the internal temperature of the condo for bat use. In Year-2 and Year-3, the bat biologist will conduct one site visit during the maternity season to visually assess bat occupancy at the bat condo.

Nesting Bird Surveys and Deterrence: To prevent Project impacts on nesting birds, and to prevent the presence of nesting birds from constraining the Project, an initial nesting bird survey will be conducted, followed by monitoring and deterrence from 1 February through 1 August. Site monitors (qualified biologists) will search all vegetation within the work area and a protective buffer zone (300 feet for raptors and 100 feet for other nesting birds, where access allows), including trees (both the foliage and cavities), shrubbery and hedges, and ground cover, for active nests. Monitors will also check the integrity of the exclusion netting on the bridge, visually scanning for gaps or holes that require repair to maintain its efficacy. The biologists will observe birds present in both the work areas and surrounding buffers to detect behavior indicative of nesting and follow birds to find nest starts. Monitors will use long poles with scrapers and hooks, ladders, and adaptive measures to find and remove nest starts and discourage nesting. Notably, a few of the tall trees within the survey area are more than 25 feet tall (i.e., beyond the reach of a ground-based monitor with a telescoping pole). Nest starts located high in trees cannot be reached with poles and ladders from the ground and would necessitate a hydraulic lift to manually remove nest starts. A 10 percent contingency has been included in the budget to allow for hiring a hydraulic lift and deterrence technician to account for the possibility that a nest is found in a tall tree that cannot be reached with a ladder and telescoping pole. Because active nests (i.e., a nest with at least one egg) cannot be disturbed per California Fish and Game Code regulations, if any active nests are observed, buffers zones (typically 300 feet for raptors and 100 feet for other species) or other measures to avoid impacts on the nest will be established via coordination with the County. However, the deterrence efforts are aimed at minimizing the potential for such nests to become established.

The level of effort needed to adequately survey the Project site is expected to vary throughout the nesting season in accordance with the level of nesting activity displayed by birds in the area. It is estimated that one site monitor will be required 3 days/week in February, 3.5 days/week in March, 4 days/week in April and May, 3.5 days/week in June, and 3 days/week in July to adequately cover the work area and adjacent buffer areas, for a total of 91 eight-hour workdays. The frequency of monitoring is determined in part by the amount of time necessary for birds to construct a nest and lay an egg. Although for most birds, this process takes more than two days, it has been observed on other projects that birds have been able to build a nest and lay an egg in less than two days, thus necessitating the frequency of visits proposed. At a lower survey frequency, the risk of establishment of an active nest would increase. Nevertheless, the effort will be scaled to the nesting effort observed in the field, so that if it is determined that nesting effort is lower than anticipated (e.g., due to the combination of vegetation removal, netting, and deterrence efforts), the frequency of site visits or the time spent in the field by the biologists will be reduced.

If Project construction reaches its peak level of disturbance prior to 1 August, surveying and deterrence activities can be scaled back, as it is our opinion that no buffer should be required around new nests established at this point as long as the nest and its substrate are not physically disturbed and as long as construction activities do not increase in intensity (e.g., with a significant increase in noise or human/equipment activity) or occur closer to the nest after the nest has been established. By moving into areas with a certain level of existing activity and disturbance, the birds will have demonstrated their tolerance of such activities. Thus, continuing the same level (or a reduced level) of activity should not cause the abandonment of the nest. Concurrence has been obtained from CDFW on this approach for similar projects.

Assumption:

For the sake of providing a cost estimate for this task, we have assumed that deterrence may be needed through August 1, but it is likely that the contactor will be out on the site in April/May and that

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peak levels of disturbance will be reached before August 1, shortening the period during which deterrence activities are needed and reducing the actual budget needs.

Monthly reports documenting all of the findings discussed in the initial survey report, as well as the monitoring efforts, will be provided. These reports will include the dates and locations of monitoring and deterrence efforts, as well as descriptions of any deterrence measures that were implemented for nesting birds. 2 hours have been budgeted for coordination with the CDFW regarding site-specific issues such as reduced buffers, should the need arise.

Close coordination with the design team, the County, the County's construction manager and the bridge replacement contractor will be provided as needed to ensure that the deterrence efforts are as efficient and cost-effective as possible, and that information regarding any netting repair work or active nests is conveyed to the appropriate parties in a timely manner.

Environmental Site Management and Coordination for Bird Nest Deterrence: Given the numerous biological resources permits, avoidance and minimization measures, and mitigation measures for the Project, it is anticipated that environmental site management and coordination for bird nest deterrence, and possibly meetings with the design team and others (possibly including the County and its construction manager and contractors) to discuss the Project, will be required. A limited amount of time for this coordination, and attendance at up to two meetings has been included in the budget. If more extensive coordination or attendance at additional meetings is required, these may be provided as additional services.

Bird Nest Deterrence Assumptions and Exclusions:

- ✓ Vegetation clearing services are not included. It is assumed these would be provided by the County.
- ✓ It is assumed that the vegetation-clearing activities, and therefore the biological monitor, will take a maximum of 10 days. If the biological monitor is required for more than 10 days due to an extended period of vegetation-clearing activities, these services may be provided at additional cost.
- ✓ It is assumed that once the County has hired a contractor for the bridge construction work, the responsibility for biological resources-related mitigation measures will become the responsibility of the contractor, and it is assumed that this will occur no later than 1 August. Therefore, preconstruction surveys and monitoring related to bridge demolition and construction activities are not included in this scope of work. A proposal for these services may be provided at the County's or the contractor's request.
- ✓ Nesting bird surveys and deterrence services will be provided for the period of 1 February through 1 August.
- Weekly inspections of the bird exclusion netting will be provided from the date of installation through 1 August. In addition, biologists will check the netting each day they are on the Project site to perform other tasks.
- It is assumed that the County will assist in expediting encroachment permits for the roadway use during installation of the netting on the bridge.
- ✓ Costs for traffic control and roadway safety during lane closure are included.

Please refer to the following page for our hours and fee proposal for this project.

ATTACHMENT A Scope of Services

BACKGROUND INFORMATION:

The Federal Highway Administration (FHWA) has approved replacement of Union Road Bridge at San Benito River crossing as a result of severe erosion surrounding the bridge footing called "scour condition". On December 11, 2006, the Board of Supervisors approved replacement of the Union Road Bridge pursuant to staff's report explaining the scour critical condition. As part of the procedure and following a comprehensive selection process mandated by the Caltrans Local Assistance Procedure Manual, County Staff selected Biggs Cardosa Associates Inc. (CONTRACTOR) to provide engineering, design and environmental services for the project. The following is a summary of Contractor's contracts and contract amendments with the county:

Original Contract	12/16/2008 to 6/30/2011		\$1,279,000.00
Amendment #1	06/22/2010 to 6/30/2011		\$ 374,760.00
Amendment #2		_	\$ 0.00
Amendment #3	08/02/2011 to 6/30/2013	_	\$ 728,330,00
Amendment #4			\$ 309,800.00
Amendment #5			
	iment #5)	-	\$ 130,000.00
(6. co 1 mieri	TIME TO THE TANK THE		\$2,821,890.00

The project had experience delays due to unforeseen circumstances encountered along the way in the design process which necessitates additional scope of services by the CONTRACTOR. The additional scope of services were necessary and inevitable for the project and were approved by Caltrans.

Amendment #6 had been prepared but had not been processed, hence, the following Scope of Services of this New Contract covers the scope of services listed in the proposed amendment #6 plus the remaining services necessary to bring the project to completion.

SCOPE OF SERVICES:

- 1.0 Work performed outside of contract amount and while Contractor were assisting the County with obtaining approval from Caltrans for additional design and environmental services. This work has not been billed to the County due to the County's request that Contractor stop invoicing in July 2014:
- 1.1 Additional PG&E Gas Line Coordination, Design of Supports for Large Seismic Movements:

Additional management, coordination and plan review required for design of gas line and required supports for the portion of gas line to be carried on the bridge structure. Preparation for and participation in additional design and coordination meetings with PG&E, in-depth discussions and verification of understanding of the complex bridge seismic movements, and discussions about various potential approaches to design of the gas line, casing, and the casing supports. Additional casing support detailing required for aliding supports that accommodate casing movement, and additional research required to assist PG&E with construction specifications for materials needed in the aliding supports.

1.2 Additional Environmental Services;

1.21 Incidental Take Permit for California Tiger Salamander
Preparation of a California Endangered Species Act (CESA) Section
2081 Incidental Take Permit (ITP) application requesting take approval for
the California tiger salamander (Ambystoma californiense) at the project
site. This permit application includes a description of the project, the
biology of the California tiger salamander, the potential for occurrence of
the salamander at the project site, the potential impacts of the project on
the species, and avoidance, minimization and compensatory mitigation
measures proposed to offset project impacts. Work also included
coordination with the design team, the County and the California
Department of Fish and Wildlife (CDFW), as well as incorporating
revisions based on design team and CDFW comments.

1.22 Additional Permit Processing with Central Coast Regional Water Quality Control Board (CCRWQCB)

1.221 The Central Coast Regional Water Quality Control Board (CCRWQCB) implemented new storm water discharge requirements that were not in place when the original contract was scoped. As of July 12, 2013 the CCRWQCB requires projects that create 5,000 square feet or greater of new/replaced net impervious area to submit a Storm Water Control Plan to obtain coverage under the General Permit for discharges of storm water associated with construction activities (CRWQCB Resolution R3-2013-0032, July 12, 2013).

1.222 To comply with the new regulations, performed additional project site storm water runoff calculations required by the CCRWQCB, as well as additional detailed analysis of bridge deck runoff and deck drainage detailing, prepared the Storm Water Control Plan and implemented storm water solutions for the project, such as vegetative swales to capture and treat all runoff

from the bridge and roadway. Modified existing grading and drainage sheets to account for the above grading changes, and prepared additional plan sheets for storm water treatment.

1.223 Also provided coordination and assistance in responding to extensive comments from the Central Coast Regional Water quality Control Board (CCRWQCB) regarding the storm water runoff calculations, the drainage treatment areas, construction equipment and practices, as well as their requests for various quantities calculations and other inquiries required for permit to be finalized.

1.23 Additional Permit Processing with USACE and CDFW

1.231 Additional permit processing work, coordination with agencies and answering questions.

1.232 U.S. Army Corps of Engineers (USACE) requires that a formal Wetland Delineation Report be submitted to support the permit materials. In past years this has not been required for sites that do not support wetlands, so this constitutes a new permitting requirement that was not included in the previous scope for the project.

1.233 Ongoing coordination with California Department of Pish and Wildlife (CDFW) to update and finalize the project Lake and Streambed Alteration Agreement (LSAA). An LSAA was issued for the project in December 2013, but this included provisions to avoid take of the California tiger salamander that would have made the project impossible to build. Due to the subsequent application for an Incidental Take Permit, the LSAA must be updated to remove the avoidance provisions.

1.24 Management and Coordination of the Additional Permitting Process

Due the additional permitting requirements noted above, and the ongoing complexity of the biological issues at the site, a variety of project management and coordination activities were required, including meetings and coordination with the involved agencies, the County and the project design team, as well as review and coordination of responses to comments, tracking and review of edits to the environmental permit application documents, scheduling, etc. Also included multiple coordination and strategy meetings with the County to discuss the Incidental Take Permit, the required mitigation and associated issues, and strategies for resolving them.

1.3 Additional Right-of-Way Engineering Services

1.31 Coordination

Assisted the County in the coordination of items related to the project processing, coordination of Right of Way appraisals and exhibits, and coordination and research for property title questions about "triangular" remnant parcel.

1.32 Additional Plats and Legal Descriptions for Right-of-Way and Easement Acquisition

Current scope provided exhibits for assessment and acquisition of temporary construction easements and roadway right-of-way for up to seven parcels, and a total of twenty-eight exhibits. During the course of the project, it was determined a total of eight parcels are being affected. Additionally, in order to more clearly delineate proposed easements and right-of-way for the appraiser, each exhibit had to be separated into multiple sheets, for a total of forty-five exhibits over the eight affected parcels for the County to use in right-of-way and easement acquisition, and construction staging easement areas.

1.4 Additional Design Coordination with Caltrans:

Due to the additional fault rupture design requirements from Caltrans, additional design calculations and detailing beyond what were originally anticipated were equired. The process for obtaining Caltrans approval for the design also involved more coordination meetings and responses to more Caltrans comments than originally estimated in Contract #1 and its Amendments.

1.5 Additional Funding Application and Approval Work

Assisted the County with funding and scope change applications to Caltrans and the coordination required for obtaining approvals in 2009, 2011 and 2014. The 2011 application included five rounds of revision with Caltrans, plus an additional two rounds of revision with the Federal Highway Administration over a course of four months. The 2014 application included eight rounds of revision with Caltrans over a course of nine months. These additional rounds of revision were well beyond what was expected.

1.6 Additional Project Management and Administrative Services:

Due to the extended duration of the project from 8/2013 to the present (33 months), additional general project management and administrative services have been provided. These include coordination of the right-of-way acquisition process, answering County and other Agency questions, answering appraiser

questions, scheduling, and additional coordination meetings with the design team and the County.

Status: Completed all of the above tasks (1) but have not invoiced the County per County's request to wait until approval of funding.

- 2.0 Work to Be Performed: New tasks, 100% construction documents and bidding:
- 2.1 Additional Project Management and Administration:

Additional project management, administration and coordination services will be required to complete the final design process, to advertise and bid out the project, and to bring the project to construction. These services include contract management, scheduling, coordination of the design team and the County and other Agencies, monitoring of the design, meetings with the design team, and meetings with the County.

2.2 Additional Budget to Complete Construction Documents, and Provide Bidding Support:

Because the 95% design was submitted in August 2012, additional work will be required for the design team to re-familiarize themselves with the project, the remaining design and coordination issues, and to complete the design work needed to produce Final Construction Documents. Bidding support services will also be provided, including answering questions, providing consultation and interpretation of the construction documents, attendance at a pre-bi-1 meeting, assisting the County with preparation of addenda to the PS&R as needed during the advertisement period, and bid analysis if requested.

2.3 Design of Water Line Relocation at San Benito Street Retaining Wall:

During final design, it was determined that the existing 20-inch water line crossing Union Road at San Benito Street will need to be relocated during construction. A 95% level relocation plan will be provided to the Water District for review, and then Water District comments will be incorporated and a final relocation plan included in the final plan set.

2.4 Completion of the Incidental Take Permit for the California Tiger Salamander:

The incidental Take Permit is complete, but will not be issued until proof of mitigation can be provided by the County. Additional coordination and management is required to complete the proof of mitigation and obtain the permit. Currently there are no approved mitigation banks with ready-topurchase mitigation credits available to the project now, although we are aware of at least one mitigation bank working its way through the approval process now. The project must either purchase credits at an approved bank, or provide a letter of credit for the agreed-upon amount for this permit to be formally issued.

2.5 Bird Nest Deterrence Services:

2.51 Site Vegetation Removal

2.511 Brush clearing and tree removal services within the temporary and permanent impact areas designated in the attached map (Attachment B) are not included in this proposal. It is assumed that the County will be completing this work.

2.512 Services are included for outlining the brush and tree removal area on site, ESA fencing for river access points, as well as an onsite biologist to conduct pre-vegetation removal surveys of special status animals and provide worker training and monitoring of vegetation removal activities. Please see below for further details.

2.6 Approval of Biologists' Qualifications

Per the requirements of the Biological Opinion (BO) and Natural Environment Study (NES), a summary of the qualifications of each biologist who will be proposed to conduct activities required by the Project's BO will prepared. At least 30 days prior to the onset of any construction related activities at the site, such as the vegetation clearing, the names and credentials of biologists who would conduct activities pursuant to the USFWS BO will be submitted to the USFWS for approval.

2.7 Worker Environmental Awareness Program Training

2.71 Per the requirements of the BO and NBS a Worker Environmental Awareness Program (WRAP) will be prepared and presented to vegetation-clearing crews and contractors prior to the initiation of any Project activities at the site. The training will include a brief review of listed species and other sensitive species/resources that may exist in the Project area. It will include the life history of each species, field identification, habitat requirements, locations of sensitive biological

resources, and a description of the legal status and protection under the Federal Endangered Species Act and California Endangered Species Act for each species. The training will include materials concerning the following topics: sensitive resources, resource avoidance, permit conditions, and possible consequences for violations of State or Federal environmental laws. The training will cover the Project's conservation measures, environmental permits, and regulatory compliance requirements. It will include printed material and an oral training session by a qualified biologist.

- 2.72 Following the initial training session, additional training will be conducted as needed (e.g., as additional personnel begin to work on vegetation-clearing activities for the Project). The budget for this task includes the development of printed training materials and the initial presentation to Project personnel. All subsequent training will be given by the biological monitor already present on the site during vegetation-clearing activities and thus the cost of providing subsequent training is included in the costs associated with the monitoring of vegetation removal.
- 2.73 A record of all personnel trained during the Project will be maintained, and this record will be made available to the County and relevant agencies for compliance verification.

2.8 Pre-Activity Surveys

- 2.81 A qualified biologist will conduct pre-activity surveys for special-status animals in accordance with the requirements of the Natural Environment Study (NES), biological opinion (BO), and incidental take permit (ITP). Pre-activity/pre-construction surveys for the California red-legged frog (Rana draytonii), California tiger salamander (Ambystoma californiense), western pond turtle (Actinemys marmorata), homed lizard (Phrynosoma coronatum), and San Joaquin whipsnake (Coluber flagellum ruddocki) will be conducted by a qualified biologist within 48 hours of the scheduled start of vegetation-clearing activities.
- 2.82 In addition, a qualified biologist will conduct a pre-activity survey for San Joaquin kit fox (Vulpes macrotis mutica) dens no less than 14 days and no more than 30 days prior to the beginning of any vegetation-clearing activities that include ground disturbance, and will conduct a pre-construction survey for American badger (Taxidea taxus) dens within 2 weeks prior to the start of any such vegetation-clearing activities.

2.83 Further, a wildlife ecologist will conduct pre-activity clearance surveys for burrowing owls based on the California Department of Fish and Wildlife's (CDFW's) 2012 Staff Report on Burrowing Owl Mitigation. During the initial site visit, which shall be conducted no more than 30 days prior to any soil-altering activity or development within the Project site, a wildlife ecologist will survey the entire Project site and (to the extent that access allows) the area within 500 feet of the site for burrowing owl habitat (i.e., ground squirrel [Spermophilus beecheyi] burrows). If no burrows suitable for use by burrowing owls are present, no additional surveys will be required. However, if suitable burrows are determined to be present, a wildlife ecologist will visit the site an additional three times to investigate each burrow for signs of owl use and to determine whether owls are present in areas where they could be affected by the proposed activities. The final site visit shall take place no more than 24 hours prior to the start of construction. 2.84 Within one day following the completion of each pre-activity

survey, a letter report documenting the survey findings will be prepared.

2.9 Monitoring of Vegetation Clearing

A qualified biologist will be present during all vegetation-clearing activities. The biological monitor will ensure compliance with all biological resources-related conditions of the BO and ITP. The construction monitor will maintain a daily log describing construction activities, sensitive species observed, animal relocations, and any injury or mortality of animals that occurs during construction.

2.10 Bat Exclusion and Installation of Bird Exclusion Netting

2.101 Bats should be excluded after the maternity season (i.e., after 31 August) or after the winter season (i.e., after 15 February) and before the maternity season (i.e., before 15 March). Thus, bats will be evicted in early-mid February immediately prior to the installation of bird exclusion netting. An exit count will be made to determine the number of bats in the bridge before demolition occurs.

2.102 Bats using the existing bridge as a day roost will be evicted, and access to the crevices used will be blocked to prevent the establishment of a maternity roost. Bats will be evicted by installing one-way doors and/or filling the voids where bats roost. Bats will be evicted under the direction of a bat biologist.

2.103 Bird exclusion netting will be installed on the existing bridge to prevent active bird nests from becoming established. The underside of the bridge has "girder recesses" allowing for multiple locations throughout the underside of the bridge to be suitable for birds such as cliff swallows (Petrochelidon pyrrhonota) to build mud nests. Because of this, the bridge will require a perimeter cable and attachments to hold netting flush against the ceiling keeping bats and birds from entering the recesses for nesting or roosting. The netting's mesh will be ½ inch or smaller to prevent bats from accessing the bridge. The bridge also has pipelines on both sides that carry across the bridge and cause difficulty in keeping swallows from using the 90-degree angle at each side under the railing. This will require separate netting on the underside span ceilings and bridge overhangs. This will also require that the seven piers be addressed at the 90-degree angles that are created.

2.104 Single lane closure will be required during installation of the netting. The entire installation would never block both lanes, and work can be accomplished at night with one lane closed at a time over the course of two weeks. After the netting has been installed, weekly inspections will be conducted throughout the nesting bird season to check the integrity of the exclusion netting, and biologists conducting the nest deterrence and monitoring will check the netting whenever on-site.

2.11 Installation and Monitoring of Artificial Bat Roost

2.111 Per the requirements of the NES, a bat biologist will coordinate and complete the construction of a freestanding bat condominium (bat condo) adjacent to the existing bridge. The bat condo will be approximately 4 feet x 4 feet x 6 feet with at least 10 vertical feet between the ground surface and the bottom of the roost. In accordance with the Project's NES, the bat biologist will monitor the bat condo for up to three years following completion of the Project. Monitoring will cease prior to Year-3 if it is determined that the condo has been occupied by at least 50 percent of the number of bats observed during pre-demolition summer-time surveys.

2.112 The biologist will conduct temperature monitoring during the first year following installation of the bat condo, including up to three site visits (midsummer for the maternity season, fall, and winter) to download the temperature data. During the site visits, the bat biologist will visually assess bat occupancy of the condo. The biologist will analyze the temperature data and prepare a brief tech memo summarizing the results of the monitoring at the end of Year-1. The tech memo will compare the average measured temperatures in the condo (as a function of daytime,

nighttime, and season) to the suitable temperature range for bat use (85–105 degrees Fahrenheit). The tech memo will include recommendations to modify the condominium, if needed, to optimize the internal temperature of the condo for bat use. In Year-2 and Year-3, the bat biologist will conduct one site visit during the maternity season to visually assess bat occupancy at the bat condo.

2.12 Nesting Bird Surveys and Deterrence

2.121 To prevent Project impacts on nesting birds, and to prevent the presence of nesting birds from constraining the Project, an initial nesting bird survey will be conducted, followed by monitoring and deterrence from 1 February through 1 August, Site monitors (qualified biologists) will search all vegetation within the work area and a protective buffer zone (300 feet for raptors and 100 feet for other nesting birds, where access allows), including trees (both the foliage and cavities), shrubbery and hedges, and ground cover, for active nests. Monitors will also check the integrity of the exclusion netting on the bridge, visually scanning for gaps or holes that require repair to maintain its efficacy. The biologists will observe birds present in both the work areas and surrounding buffers to detect behavior indicative of nesting and follow birds to find nest starts. Monitors will use long poles with scrapers and hooks, ladders, and adaptive measures to find and remove nest starts and discourage nesting. Notably, a few of the tall trees within the survey area are more than 25 feet tall (i.e., beyond the reach of a ground-based monitor with a telescoping pole). Nest starts located high in trees cannot be reached with poles and ladders from the ground and would necessitate a hydraulic lift to manually remove nest starts. A 10 percent contingency has been included in the budget to allow for hiring a hydraulic lift and deterrence technician to account for the possibility that a nest is found in a tall tree that cannot be reached with a ladder and telescoping pole. Because active nests (i.e., a nest with at least one egg) cannot be disturbed per California Fish and Game Code regulations, if any active nests are observed, buffers zones (typically 300 feet for raptors and 100 feet for other species) or other measures to avoid impacts on the nest will be established via coordination with the County. However, the deterrence efforts are aimed at minimizing the potential for such nests to become established.

2.122 The level of effort needed to adequately survey the Project site is expected to vary throughout the nesting season in accordance with the level of nesting activity displayed by birds in the area. It is estimated that one site monitor will be required 3 days/week in February, 3.5 days/week in March, 4 days/week in April and May, 3.5 days/week in

June, and 3 days/week in July to adequately cover the work area and adjacent buffer areas, for a total of 91 eight-hour workdays. The frequency of monitoring is determined in part by the amount of time necessary for birds to construct a nest and lay an egg. Although for most birds, this process takes more than two days, it has been observed on other projects that birds have been able to build a nest and lay an egg in less than two days, thus necessitating the frequency of visits proposed. At a lower survey frequency, the risk of establishment of an active nest would increase. Nevertheless, the effort will be scaled to the nesting effort observed in the field, so that if it is determined that nesting effort is lower than anticipated (e.g., due to the combination of vegetation removal, netting, and deterrence efforts), the frequency of site visits or the time spent in the field by the biologists will be reduced.

2.123 If Project construction reaches its peak level of disturbance prior to 1 August, surveying and deterrence activities can be scaled back, as it is our opinion that no buffer should be required around new nests established at this point as long as the nest and its substrate are not physically disturbed and as long as construction activities do not increase in intensity (e.g., with a significant increase in noise or human/equipment activity) or occur closer to the nest after the nest has been established. By moving into areas with a certain level of existing activity and disturbance, the birds will have demonstrated their tolerance of such activities. Thus, continuing the same level (or a reduced level) of activity should not cause the abandonment of the nest. Concurrence has been obtained from CDFW on this approach for similar projects.

2.124 Monthly reports documenting all of the findings discussed in the initial survey report, as well as the monitoring efforts, will be provided. These reports will include the dates and locations of monitoring and deterrence efforts, as well as descriptions of any deterrence measures that were implemented for nesting birds. 2 hours have been budgeted for coordination with the CDFW regarding site-specific issues such as reduced buffers, should the need arise.

2.125 Close coordination with the design team, the County, the County's construction manager and the bridge replacement contractor will be provided as needed to ensure that the deterrence efforts are as efficient and cost-effective as possible, and that information regarding any netting repair work or active nests is conveyed to the appropriate parties in a timely manner.

2.13 Environmental Site Management and Coordination for Bird Nest Deterrence

Given the numerous biological resources permits, avoidance and minimization measures, and mitigation measures for the Project, it is anticipated that environmental site management and coordination for bird nest deterrence, and possibly meetings with the design team and others (possibly including the County and its construction manager and contractors) to discuss the Project, will be required. A limited amount of time for this coordination, and attendance at up to two meetings has been included in the budget. If more extensive coordination or attendance at additional meetings is required, these may be provided as additional services.

2.14 Bird Nest Deterrence Assumptions and Exclusions

2.141 It is assumed that once the County has hired a contractor for the bridge construction work, the responsibility for biological resources-related mitigation measures will become the responsibility of the contractor, and it is assumed that this will occur no later than 1 August. Therefore, pre-construction surveys and monitoring related to bridge demolition and construction activities are not included in this scope of work. A proposal for these services may be provided at the County's or the contractor's request.

- 2.142 Nesting bird surveys and deterrence services will be provided for the period of 1 February through 1 August.
- 2.143 Weekly inspections of the bird exclusion netting will be provided from the date of installation through 1 August. In addition, biologists will check the netting each day they are on the Project site to perform other tasks.
- 2.144 It is assumed that the biological monitor for the vegetation-clearing activities will be required for a maximum of 10 days.
- 2.145 It is assumed that the vegetation-clearing activities, and therefore the biological monitor, will take a maximum of 10 days. If the biological monitor is required for more than 10 days due to an extended period of vegetation-clearing activities, these services may be provided at additional cost.

2.146 It is assumed that the County will assist in expediting encroachment permits for the roadway use during installation of the netting on the bridge.

2.147 Costs for traffic control and roadway safety during lane closure are included.

END OF ATTACHMENT A.

ATTACHMENT B Payment Schedule

B-1. BILLING

[]	services rendered pursuant to the terms and conditions of this contract shall be the following basis: (check one) One month in arrears. Upon the complete performance of the services specified in Attachment A. The basis specified in paragraph B-4.
B-2. PAYM	1ENT
Payment sha of this contra	all be made by COUNTY to CONTRACTOR at the address specified in paragraph 8 act, net thirty (30) days from the invoice date.
B-3. COM	PENSATION
COUNTY sh	all pay to CONTRACTOR:
[X]	a total lump sum payment of \$ 322,450.50
[X]	an additional sum not to exceed \$ 679,000.00
for services respecial comp	endered pursuant to the terms and conditions of this contract and pursuant to any ensation terms specified in this attachment, Attachment B.
B-4. SPECI	AL COMPENSATION TERMS: (check one)
[] There are [X] The follo	e no additional terms of compensation. owing specific terms of compensation shall apply: (Specify)
CONTRAC	TOR will perform work identified in Attachment A, for an amount ed \$1,001,450.50.
The lump s	um payment of \$222 AEO EO -1 111 C

The lump sum payment of \$322,450.50 shall be for work performed during the period of 1/1/2013 to 5/1/2017.

The additional sum of \$679,000.00 shall be payable to CONTRACTOR who will

The additional sum of \$679,000.00 shall be payable to CONTRACTOR who will submit requests for progress payments on a monthly basis. COUNTY will review these requests and authorize payment consistent with the provisions of this Attachment. CONTRACTOR shall be paid by COUNTY for the works identified in Attachment A. CONTRACTOR shall provide invoices for said tasks along with documentation to justify the amount being invoiced and confirmation that each of the identified tasks has been completed.

END OF ATTACHMENT B

Revised 1/96

ATTACHMENT C General Terms and Conditions

C-1. INDEMNIFICATION.

CONTRACTOR and COUNTY each agree to indemnify, defend and save harmless the other party and the other party's officers and employees, from and against any and all claims and losses whatsoever arising out of, or in any way related to, the indemnifying party's performance under this contract, including, but not limited to, claims for property damage, personal injury, death, and any legal expenses (such as attorneys' fees, court costs, investigation costs, and experts' fees) incurred by the indemnitee in connection with such claims or losses. A party's "performance" includes the party's action or inaction and the action or inaction of that party's officers and employees.

C-2. GENERAL INSURANCE REQUIREMENTS.

Without limiting CONTRACTOR's duty to indemnify COUNTY, CONTRACTOR shall comply with the insurance coverage requirements set forth in the contract and in this attachment. Those insurance policies mandated by Paragraph C-3 shall satisfy the following requirements:

- (a) Each policy shall be issued by a company authorized by law to transact business in the State of California.
- (b) Each policy shall provide that COUNTY shall be given notice in writing at least thirty (30) days in advance of any change, cancellation, or nonrenewal thereof.
- (c) The comprehensive motor vehicle and comprehensive general liability policies shall each provide an endorsement naming the County of San Benito and its officers, agents and employees as additional insureds.
- (d) The required coverage shall be maintained in effect throughout the term of this contract.

CONTRACTOR shall require all subcontractors performing work under this contract to obtain substantially the identical insurance coverage required of CONTRACTOR pursuant to this agreement.

C-3. INSURANCE COVERAGE REQUIREMENTS.

If required by paragraph 5 of the contract, CONTRACTOR shall maintain the following insurance policies in full force and effect during the term of this contract:

- (a) Comprehensive general liability insurance. CONTRACTOR shall maintain comprehensive general liability insurance, covering all of CONTRACTOR's operations with a combined single limit of not less than the amount set out in paragraph 5 of this contract.
- (b) Professional liability insurance. CONTRACTOR shall maintain professional liability insurance with liability limits of not less than the amount set out in paragraph 5 of this contract.

- (c) Comprehensive motor vehicle liability insurance. CONTRACTOR shall maintain comprehensive motor vehicle insurance covering all motor vehicles (including owned, non-owned and hired) used in providing services under this contract, with a combined single limit of not less than the amount set out in Paragraph 5 of this contract.
- (d) Workers' compensation insurance. CONTRACTOR shall maintain a workers' compensation plan covering all of its employees as required by California Labor Code Section 3700, either through workers' compensation insurance issued by an insurance company or through a plan of self-insurance certified by the State Director of Industrial Relations. If CONTRACTOR elects to be self-insured, the certificate of insurance otherwise required by this contract shall be replaced with a consent to self-insure issued by the State Director of Industrial Relations.

C-4. CERTIFICATE OF INSURANCE.

Prior to the commencement of performance of services by CONTRACTOR and prior to any obligations of COUNTY, CONTRACTOR shall file certificates of insurance with COUNTY, showing that CONTRACTOR has in effect the insurance required by this contract. CONTRACTOR shall file a new or amended certificate promptly after any change is made in any insurance policy which would alter the information on the certificate then on file. In lieu of providing proof of insurance, CONTRACTOR may provide proof of self-insurance meeting requirements equivalent to those imposed herein. CONTRACTOR warrants that CONTRACTOR's self-insurance provides substantially the same protection to COUNTY as the insurance required herein. CONTRACTOR further agrees to notify COUNTY in the event any change in self-insurance occurs that would alter the obligations undertaken in this contract within thirty (30) days of such change.

C-5. RECORDS TO BE MAINTAINED.

CONTRACTOR shall keep and maintain accurate records of all costs incurred and all time expended for work under this contract. CONTRACTOR shall contractually require that all of CONTRACTOR's subcontractors performing work called for under this contract also keep and maintain such records. All such records, whether kept by CONTRACTOR or any subcontractor, shall be made available to COUNTY or its authorized representative, or officials of the State of California for review or audit during normal business hours, upon reasonable advance notice given by COUNTY, its authorized representative, or officials of the State of California.

C-6. RETENTION OF RECORDS.

CONTRACTOR shall maintain and preserve all records related to this contract for a period of three years from the close of the fiscal year in which final payment under this contract is made. CONTRACTOR shall also contractually require the maintenance of such records in the possession of any third party performing work related to this contract for the same period of time. Such records shall be retained beyond the three-year period, if any audit involving such records is then pending, until the audit findings are resolved. The obligation to insure the maintenance of the records beyond the initial three year period shall arise only if the COUNTY notifies CONTRACTOR of the commencement of an audit prior to the expiration of the three year period.

C-7. TITLE TO DOCUMENTS; COPYRIGHT.

All reports and other materials collected or produced by the CONTRACTOR or any subcontractor of CONTRACTOR shall, after completion and acceptance of the contract, become the property of COUNTY, and shall not be subject to any copyright claimed by the CONTRACTOR, subcontractor, or their agents or employees. CONTRACTOR may retain copies of all such materials exclusively for administrative purposes. Any use of completed or uncompleted documents for other projects by CONTRACTOR, any subcontractor, or any of their agents or employees, without the prior written consent of COUNTY is prohibited.

C-8. INDEPENDENT CONTRACTOR.

CONTRACTOR and its officers and employees, in the performance of this contract, are independent contractors in relation to COUNTY and not officers or employees of COUNTY. Nothing in this contract shall create any of the rights, powers, privileges or immunities of any officer or employee of COUNTY. CONTRACTOR shall be solely liable for all applicable taxes or benefits, including, but not limited to, federal and state income taxes, Social Security taxes, or ERISA retirement benefits, which taxes or benefits arise out of the performance of this contract. CONTRACTOR further represents to COUNTY that CONTRACTOR has no expectation of receiving any benefits incidental to employment.

C-9. CONFLICT OF INTEREST.

CONTRACTOR covenants that it presently has no interest and shall not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the services hereunder. CONTRACTOR further covenants that, in the performance of this contract, no subcontractor or person having such an interest shall be used or employed.

C-10. COMPLIANCE WITH APPLICABLE LAWS.

CONTRACTOR shall comply with all applicable federal, state and local laws now, or hereafter, in force, and with any applicable regulations, in performing the work and providing the services specified in this contract. This obligation includes, without limitation, the acquisition, and maintenance of any permits, licenses, or other entitlements necessary to perform the duties imposed expressly or impliedly under this contract.

C-11. NONDISCRIMINATION.

CONTRACTOR shall not discriminate in the employment of persons necessary to perform this contract on any legally impermissible basis, including on the basis of the race, color, national origin, ancestry, religion, age, sex, or disability of such person.

C-12. BANKRUPTCY.

CONTRACTOR shall immediately notify COUNTY in the event that CONTRACTOR ceases conducting business in the normal manner, becomes insolvent, makes a general assignment for the benefit of creditors, suffers or permits the appointment of a receiver for its business or assets, or avails itself of, or becomes subject to, any proceeding under the Federal Bankruptcy Act or any other statute of any state relating to insolvency or protection of the rights of creditors.

C-13. PROHIBITION AGAINST ASSIGNMENT AND DELEGATION OF DUTIES.

Except as specifically authorized herein, no rights under this contract may be assigned and no duties under this contract may be delegated by CONTRACTOR without the prior written consent of COUNTY, and any attempted assignment or delegation without such consent shall be void.

C-14. NEGOTIATED CONTRACT.

This contract has been arrived at through negotiation between the parties. Neither party is to be deemed the party which prepared this contract within the meaning of California Civil Code Section 1654.

C-15. SEVERABILITY.

Should any provision herein be found or deemed to be invalid, this contract shall be construed as not containing such provision, and all other provisions which are otherwise lawful shall remain in full force and effect. To this end, the provisions of this contract are declared to be severable.

C-16. ENTIRE CONTRACT.

This contract is the entire agreement of the parties. There are no understandings or agreements pertaining to this contract except as are expressly stated in writing in this contract or in any document attached hereto or incorporated herein by reference.

C-17. TIME IS OF THE ESSENCE.

Time is of the essence in the performance of this contract.

C-18. TERMINATION.

Either party may terminate this contract, with or without cause, at any time. In order to terminate this contract, the terminating party shall give advance written notice to the other party. The termination shall be effective no earlier than the expiration of the number of days specified in paragraph 6 of this contract. The termination notice shall be made as specified in paragraph C-19, below. In the event of termination, COUNTY shall pay CONTRACTOR for all work satisfactorily performed prior to the effective date of the termination.

C-19. NOTICES.

Notices to the parties in connection with the administration of this contract shall be given to the parties' contract administrator personally, by regular mail, or by facsimile transmission as more particularly specified in this paragraph. Notices will be deemed given on:

- (a) The day the notice is personally delivered to the contract administrator or the office of the party's contract administrator; or
- (b) Five days after the date the notice is deposited in the United States mail, addressed to a party's contract administrator as indicated in this contract, with first-class postage fully prepaid; or

(c) On the day that the notice is transmitted by facsimile to a party's facsimile number specified in paragraph 8 of this contract, provided that an original of such notice is deposited in the United States mail, addressed to a party's contract administrator as indicated in this contact, on the same day as the facsimile transmission is made.

C-20. RESPONSIBILITY OF CONTRACT ADMINISTRATORS.

All matters concerning this contract which are within the responsibility of the parties shall be under the direction of, or shall be submitted to, the respective contract administrators or to the party's employee specified, in writing, by the contract administrator. A party may, in its sole discretion, change its designation of its contract administrator and shall promptly give written notice to the other party of any such change.

C-21. MATERIALITY.

The parties consider each and every term, covenant, and provision of this contract to be material and reasonable.

C-22. WAIVER.

Waiver by either party of a breach of any covenant of this contract will not be construed to be a continuing waiver of any subsequent breach. COUNTY's receipt of consideration with knowledge of CONTRACTOR's violation of a covenant does not waive its right to enforce any covenant of this contract. The parties shall not waive any provisions of this contract unless the waiver is in writing and signed by all parties.

C-23. AUTHORITY AND CAPACITY.

CONTRACTOR and CONTRACTOR's signatory each warrant and represent that each has full authority and capacity to enter into this contract.

C-24. BINDING ON SUCCESSORS.

All of the conditions, covenants and terms herein contained shall apply to, and bind, the heirs, successors, executors, administrators and assigns of CONTRACTOR. CONTRACTOR and all of CONTRACTOR's heirs, successors, executors, administrators, and assigns shall be jointly and severally liable under this contract.

C-25. CUMULATION OF REMEDIES.

All of the various rights, options, elections, powers and remedies of the parties shall be construed as cumulative, and no one of them exclusive of any other or of any other legal or equitable remedy which a party might otherwise have in the event of a breach or default of any condition, covenant or term by the other party. The exercise of any single right, option, election, power or remedy shall not, in any way, impair any other right, option, election, power or remedy until all duties and obligations imposed shall have been fully performed.

C-26. INDEPENDENT ADVICE.

Each party hereby represents and warrants that in executing this contract it does so with full knowledge of the rights and duties it may have with respect to the other. Each party also

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represents and warrants that it has received independent legal advice from its attorney with respect to the matters set forth in this contract and the rights and duties arising out of this contract, or that such party willingly foregoes any such consultation.

C-27. NO RELIANCE ON REPRESENTATIONS.

Each party hereby represents and warrants that it is not relying, and has not relied, upon any representation or statement made by the other party with respect to the facts involved or its rights or duties. Each party understands and agrees that the facts relevant, or believed to be relevant to this contract may hereunder turn out to be other than, or different from the facts now known to such party as true, or believed by such party to be true. The parties expressly assume the risk of the facts turning out to be different and agree that this contract shall be effective in all respects and shall not be subject to rescission by reason of any such difference in facts.

C-28. REDUCTION OF CONSIDERATION.

CONTRACTOR agrees that COUNTY shall have the right to deduct from any payments specified in Attachment B any amount owed to COUNTY by CONTRACTOR as a result of any obligation arising prior to, or after, the execution of this contract. For purposes of this paragraph, obligations arising prior to, or after, the execution of this contract may include, without limitation, any property tax, secured or unsecured, which tax is in arrears. If COUNTY exercises the right to reduce the consideration specified in Attachment B, COUNTY, at the time of making a reduced payment, shall give CONTRACTOR notice of the amount of any off-set and the reason for the reduction.

C-29. COUNTERPARTS.

This contract may be executed in any number of counterparts, each of which so executed shall be deemed to be an original. The counterparts shall together constitute one contract.

END OF ATTACHMENT C.