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

DEPT:	Public Works	BOARD AGENDA #: _*C-4
		AGENDA DATE: October 24, 2017
SUBJE	CT:	
Enginee		ent with Quincy Engineering, Inc. for Bridge the Cooperstown Road over Rydberg Creek
BOARD	ACTION AS FOLLOWS:	No. 2017-601
On motio	on of Supervisor Withrow	, Seconded by Supervisor Olsen
and appi	roved by the following vote,	
		and Chairman Chiesa
Excused	or Absent: Supervisors: None	
Abstaini	ng: Supervisor:None	
	_ Approved as recommended	
2)		
	_ Approved as amended	
4)		
MOTION	:	

ELIZABETH A. KING, Clerk of the Board of Supervisors

File No.

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS AGENDA ITEM

DEPT: Public Works BOARD AGENDA #: *C-4

Urgent ○ Routine ⊙ AGENDA DATE: October 24, 2017

CEO CONCURRENCE: 4/5 Vote Required: Yes ○ No ⊙

SUBJECT:

Approval of Amendment No. 3 to the Agreement with Quincy Engineering, Inc. for Bridge Engineering and Project Delivery Services for the Cooperstown Road over Rydberg Creek Bridge Replacement Project

STAFF RECOMMENDATIONS:

- Approve Amendment No. 3 to the Agreement with Quincy Engineering, Inc. for \$272,350 to provide additional and modified environmental studies for the Cooperstown Road over Rydberg Creek Bridge Replacement Project.
- 2. Authorize the Director of Public Works to execute the amendment with Quincy Engineering, Inc. in the amount of \$272,350 and to sign necessary documents.

DISCUSSION:

The Cooperstown Road over Rydberg Creek Bridge was constructed in 1922 and is approximately 60 feet in length and 22 feet wide. Caltrans has listed this bridge's status as Structurally Deficient and it has been programmed for replacement. The proposed bridge will provide adequate shoulder widths and include guardrails and approach roadway transitions.

On July 17, 2012, the Board awarded a Professional Design Services Agreement to Quincy Engineering, Inc. for \$362,233. This agreement was amended on May 20, 2015 to extend the agreement expiration date to September 19, 2017, and again on September 18, 2017 to extend the agreement expiration date to August 13, 2020.

As a result of input from the California Department of Transportation, and U.S. Fish and Wildlife Services, additional or modified environmental studies are needed to obtain regulatory approval based on cultural findings in the initial environmental study. The purpose of Amendment No. 3 is to provide additional and modified environmental studies that were not envisioned with the original scope of the Professional Design Services Agreement.

Construction of the project is expected to start in the fall of 2020.

POLICY ISSUE:

The Board of Supervisors must approve any amendments to existing professional services agreements that exceed \$100,000.

Approval of Amendment No. 3 to the Agreement with Quincy Engineering, Inc. for Bridge Engineering and Project Delivery Services for the Cooperstown Road over Rydberg Creek Bridge Replacement Project

FISCAL IMPACT:

The requested Amendment No. 3 for \$272,350 will bring the total contract amount to \$634,583. An Authorization to Proceed has been secured from Caltrans for the Preliminary Engineering phase of the project in the amount of \$450,000. These funds are from the Highway Bridge Program with Toll Credits and are not sufficient to fund the additional work needed to complete the project. Therefore, additional funds are currently being requested via the Local Assistance Program Guidelines Exhibit 6-D (Scope/Cost/Schedule Change Request) to fund the additional scope of work from Quincy Engineering and to cover additional County incurred expenses during the design phase of the project. In the event the additional funding is not realized, the remainder of the project will be funded with existing road funds. Funding for the project is available in Fiscal Year 2017-2018 Public Works Road Projects budget.

Cost of recommended action: \$ 272,350

Source(s) of Funding:

Highway Bridge Program w/ Toll Credits \$ 272,350

Funding Total: 272,350
Net Cost to County General Fund \$ -

Fiscal Year: 2017-2018

Budget Adjustment/Appropriations needed: No

BOARD OF SUPERVISORS' PRIORITY:

The recommended actions support the Board's priorities of providing A Safe Community, A Healthy Community and A Well-Planned Infrastructure System by ensuring efficient delivery of the project.

STAFFING IMPACT:

Existing Public Works staff is managing the services of the consulting firm.

CONTACT PERSON:

Matt Machado, Public Works Director Telephone: (209) 525-4153

ATTACHMENT(S):

1. Agreement Amendment No. 3 with Quincy Engineering, Inc.

ATTACHMENT 1

AGREEMENT AMENDMENT NO. 3 WITH QUINCY ENGINEERING, INC.

STANISLAUS COUNTY

Third Amendment to Professional Design Services Agreement between County of Stanislaus and Quincy Engineering, Inc.

Cooperstown Road over Rydberg Creek Bridge Replacement Project Contract No. 9608

This Amendment is made and entered into this 24th day of October, 2017, in the City of Modesto, State of California, by and between the County of Stanislaus ("County") and Quincy Engineering, Inc. ("Consultant"), for and in consideration of the promises, and the mutual promises, covenants, terms, and conditions, hereinafter contained.

WHEREAS, on July 17, 2012, the Stanislaus County Board of Supervisors approved a Professional Design Services Agreement ("Agreement") with Consultant for the Cooperstown Road over Rydberg Creek Bridge Replacement Project in the amount of \$362,233.05:

WHEREAS, on May 20, 2015, the Director of Public Works approved Amendment No. 1 to extend the expiration date of the Agreement to September 19, 2017;

WHEREAS, on September 18, 2017, the Director of Public Works approved Amendment No. 2 to extend the expiration date of the Agreement to August 13, 2020;

WHEREAS, there is a need for additional services in the amount of \$247,590.99, as shown in "Exhibit 1-A", attached hereto and made a part of this Amendment;

WHEREAS, the Director of Public Works has determined that the additional services are necessary for Consultant to complete the project;

WHEREAS, this amendment exceeds 10% of the contract and requires Board of Supervisor approval;

\$362,233.05	Original Agreement
+247,590.99	Third Amendment
\$609,824.04	Total

WHEREAS, the Consultant has continued to diligently perform the services requested to support this project in good faith; and,

NOW THEREFORE, the parties agree as follows:

1. Section 1.1 Scope of Services is amended to include additional services as shown in "Exhibit 1-A" attached hereto and made a part of this Amendment.

- 2. Section 2.1 Compensation is amended to include additional fees of Two Hundred Forty-Seven Thousand Five Hundred Ninety and 99/100 Dollars (\$247,590.99) as show in "Exhibit 1-A" attached hereto and made a part of this Amendment. Consultant's compensation shall in no case exceed Six Hundred Nine Thousand Eight Hundred Twenty-Four and 04/100 Dollars (\$609,824.04).
- 3. All other terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Second Amendment effective on the date written above.

COUNTY OF STANISLAUS

QUINCY ENGINEERING, INC.

By:____

Matt Machado, Director
Department of Public Works

Joran Quir President

APPROVED AS TO FORM John P. Doering, County Counsel

Amanda DeHart

Deputy County Counsel

EXHIBIT 1-A



Cooperstown Road Bridge over Rydberg Creek Bridge No. 38Co257

July 7, 2017
Nathaniel Tumminello
Stanislaus County Department of Public Works
1716 Morgan Road
Modesto, CA 95358

Re: Cooperstown Road Bridge over Rydberg Creek - Amendment 3 Request

The Quincy Engineering Inc. (Quincy) Team has completed cultural and biological resources technical studies for the aforementioned project. Due to findings from these studies as well as findings from previous studies at this location, Caltrans is requiring additional work be performed from what was originally scoped. This work includes the following:

- The Archaeological Survey Report and Historic Property Survey Report (HSR/HPSR)
 needs to be revised to reflect changes to the area of potential effect (APE) map and
 the additional cultural work needed.
- Preparing a Historical Resources Evaluation Report (HRER).
- Preparing an Archaeological Evaluation Report, which will include test plots at strategic locations within the APE.
- A Biological Assessment for California Tiger Salamander.
- Changing to a routine EA to comply with NEPA.
- Preforming an Extended Phase 2 Study

As you are aware, we were not able to prepare this amendment until we were able to determine the extent of the work that would be required to obtain environmental clearance. Because of which, we performed out of scope/extra work, which includes the following:

- Site visit during Caltrans performing of the Ground Penetrating Radar
- Site visit with Caltrans and the US Fish and Wildlife Services
- Site visit with Caltrans and local Indian Tribe
- Caltrans inefficiencies
 - Three different generalists have been assigned to this project
 - Two different Cultural Specialists have been assigned to this project
 - o Two different Biologists have been assigned to this project
 - O We were first directed to prepare an extended phase 2, then an extended phase 1 and now we are back to an extended phase 2
 - o It took Caltrans 9 months to respond to a request to modify the location of three of the test pits. Then they changed all of the locations.

• Preparation of this amendment

For our environmental subconsultant (North State Resources) to perform this work along with Quincy management, we are requesting \$178,852. This does not include an additional \$68,739 for four optional tasks. We have included as attachments a spreadsheet showing both our hourly breakdown as well as North State Resources scope and hourly breakdown.



Please contact me at (916) 368-9181 if you have questions or comments regarding this amendment request.

Sincerely,

Quincy Engineering, Inc.

Lance Schrey, P.E.

Project Manager

Attachments:

Quincy Fee Sheet and North State Resources Scope and Fee

Cost Proposal

Stanislaus County - Rydberg Cr. Br. Replacement on Cooperstown Rd. - Amnd. 3

				Date:	7/7/2017
	Quincy Engineering, Inc.				#0.400.00
	Direct Labor:				\$8,499.20
	Escalation for Multi-Year Project (3.5%): 1.664				\$297.47 \$14,637.66
Α.	Labor Subtotal			=	\$23,434.33
A.	Labor Subtotal				Φ23,434. 3 3
	Subconsultant Costs:				
	North State Resourses				\$151,999.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
В.	Subconsultant Subtotal			=	\$0.00 \$151,999.00
Б.	Subconsultant Subtotal				\$151,999.00
	Other Direct Costs:				
	Plotter/Computer		hours @	\$10.00	\$0.00
	Travel	840	miles @	\$0.575	\$483.00
	Pier Diem/ Hotel	0	days @	\$150.00	\$0.00
	Phone/Fax		_		\$0.00
	Delivery	4	@	\$25.00	\$100.00
	Survey Prevailing Wage Differential	0	-1	COE 00	\$0.00
	Vellum / Mylars Title Reports	0	sheets @	\$25.00 \$500.00	\$0.00 \$0.00
	11 X 17 Reproduction	40	@	\$500.00 \$0.10	\$0.00 \$4.00
	Coppies	400	@ @	\$0.10 \$0.05	\$20.00
	Newsletters (Translation and printing)	400	ω	Φ0.03	Ψ20.00
	Mailings (6x)				
C.	Other Direct Cost Subtotal:			=	\$607.00
	Labor Subtotal A. =				\$23,434.33
	Fee (12.0%);				\$2,812.12
	Subconsultant Subtotal B. =				\$151,999.00
	Fee (0.0%):				\$0.00
	Other Direct Cost Subtotal: C. =				\$607.00 \$0.00
	Fee (0.0%):			=	\$0.00
	TOTAL =				\$178,852.45
				_	

Note: Invoices will be **based upon actual Quincy hourly rates** plus overhead at 166.4% plus prorated portion of fixed fee. Subconsultant and Other Direct Costs will be billed at actual cost.

Total not to Exceed= \$178,852

Cost Proposal

OPTIONAL TASKS

OF I	TOWAL TASK	<u> </u>		
			Date:	7 <i>/7/</i> 2017
Quincy Engineering, Inc.				
Direct Labor:				\$2,479.20
Escalation for Multi-Year Project (3.5%):				\$86.77
1.664				\$4,269.78
Labor Subtotal				\$6,835.75
Subconsultant Costs:				
North State Resourses				\$60,923.00
				\$0.00
				\$0.00
				\$0.00
		•		\$0.00
			FIGURE	\$0.00
Subconsultant Subtotal				\$60,923.00
Other Direct Costs:				
Plotter/Computer		hours @	\$10.00	\$0.00
Travel	180	miles @	\$0.575	\$103.50
Pier Diem/ Hotel	0	days @	\$150.00	\$0.00
Phone/Fax	_	_		\$0.00
Delivery	2	@	\$25.00	\$50.00
Survey Prevailing Wage Differential			205.00	\$0.00
Vellum / Mylars	0	sheets @	\$25.00	\$0.00
Title Reports	0	@	\$500.00	\$0.00
11 X 17 Reproduction	10	@	\$0.10	\$1.00
Coppies Newsletters (Translation and printing)	100	@	\$0.05	\$5.00
Newsletters (Translation and printing) Mailings (6x)				
Other Direct Cost Subtotal:				\$159.50
Cure. Birect Cost Gustetai.				
Labor Subtotal =				\$6,835.75
Fee (12.0%):				\$820.29
Subconsultant Subtotal =				\$60,923.00
Fee (0.0%):		•		\$0.00
Other Direct Cost Subtotal: =				\$159.50
Fee (0.0%):			_	\$0.00
TOTAL =				\$68,738.54

Note: Invoices will be **based upon actual Quincy hourly rates** plus overhead at 166.4% plus prorated portion of fixed fee. Subconsultant and Other Direct Costs will be billed at actual cost.

Total not to Exceed= \$68,739

Total of Amendment Costs Including Optional Tasks = \$247,590.99

	Stanislaus County - Rydberg Cr. Br. Replacement on Cooperstown Rd Amnd. 3																	
	TASKS.	D Principal in Charge	ମ Project Manager - PM	지 Associate Engineer - DE	Senior Engineer - PE	곳 Associate Engineer - DE '	Z Environmental Manager	Senior Engineer - PE	Rasistant Engineer - DE	নু B Assistant Engineer - DE জ	Resident Engineer -	Principal Engineer	Staff	중 Senior Engineer - Spec.s	Quirty riotal Hours	Quincy Oost (w/oventeed and fee)	North State Resourses	Total Fee
No.	initial Hourly Rate	\$91.00	\$75.60	\$58.20	\$63,60	\$54.00	\$63,10	\$69.00	\$38.00	\$38.00	\$66.00	\$81.00	\$20.00	\$65.20				
	PHASE I - PROJECT KICK-OFF PRELIMINARY ENGINEERING	X 3 5 5 5 5 5			* **		110		943 57 (1973)			5 Salar 20 Aug						
	Project Management																	
	Topographic Survey										ļ						-	
3	Hydraulics									ļ	ļ			ļ				
4	Geotechnical									<u> </u>								
5	Stategy Report/Type Selection/30% Plans									ļ								
6	HBP Applications and Funding Assistance			33.80									SC LOS CONTRA		ļ			
	PHASE II - ENVIRONMENTAL CLEARANCE & FINAL DESIGN				f. 18\$24				6 7 6				- 4					
7	Environmental Document, Tech. Studies and Permits	4	58				40					4	8	12	126	\$26,246	\$151,999	\$178,245
8	Public Outreach																	
9	PS&E																	
10	Right of Way Services																	
11	Bidding and Post Award							ļ										
	TASK 10 TOTAL							ļ					<u> </u>					
	Subtotal-Hours Other Direct Costs	4	58				40					4	8	12	126	607		
	Total Cost	\$324	\$4,385				\$2,524	 	 	 		\$324	\$160	\$782	\$8,499	l	\$151,999	\$178,852
	OPTIONAL TASKS	Ф324	Φ4,380	40.4			ΦZ,324	and and				φ324	D100	Φ102	φυ,499		ΦΕΕ, Ι C F Φ	ψ170,032
7.1.B	Enhanced Program Management	e-min 1428/11/2/24	Ser America Configs.	augen in gen nedelle		AT THE PROPERTY OF THE	P.9. 2 . 2 . 3 . 3 . 4	- 60 S. M. V.	177947 044 3460	20 Bederin 19,525	10 10 10 10 10 10 10 10 10 10 10 10 10 1	O-24 do-2008/20			BOOMERT - CANOR SAME	- 10 miles (10 m	\$7,419	\$7,419
7.6.8	FOE/MOA ESA Action Plan		2				Δ			 	†		2	2	10	\$1,773	\$11,889	\$13,662
7.6.9	Section 4(f) Evaluation		2				8						2		14		\$18,743	\$21,295
7.7	Nepa EA Optional		2				12						2		18		\$22,872	\$26,203
<i>'''</i>	TASK 10 TOTAL		<u> </u>				14			 	<u> </u>	· -	 		1	Ψυ,υυ ι	ΨΖΖ,01Ζ	Ψ20,203
	Subtotal-Hours		6				24				ļ <u>.</u>		6	6	42			
	Other Direct Costs								 		 				 	160		
	Total Cost		\$454	<u> </u>	<u> </u>	L	\$1,514			<u> </u>		<u> </u>	\$120	\$391	\$2,479		\$60,923	\$68,739



Addendum 3 to Contract for Professional Services Dated August 20, 2012

Cooperstown Road over Rydberg Creek Bridge Replacement Project Stanislaus County Department of Public Works

[QEI Job #S30-300; NSR Project Number 51384]

April 2017 (Revised June 15, 2017

Preamble

North State Resources, Inc. (NSR) has prepared cultural and biological resources technical studies for the Cooperstown Road Bridge over Rydberg Creek Project in accordance with our contract with Quincy Engineering, Inc. (QEI), dated August 20, 2012, and on behalf of Stanislaus County Department of Public Works (County). As a result of additional input from the California Department of Transportation (Caltrans) and U.S. Fish and Wildlife Service (Service), additional or modified studies are needed to obtain regulatory approvals for the project. Due to cultural and biological concerns, a more robust environmental document is expected to be needed for the proposed bridge replacement to allow Caltrans to comply with the National Environmental Policy Act (NEPA). In addition, schedule delays have necessitated additional coordination with the project team, resulting in additional necessary project management effort and meetings to allow NSR to continue providing environmental services for the project. To date, the schedule has been delayed by about two years, and the remaining tasks are expected to require about two additional years to complete. Our scope of work and cost estimate for completing the additional work are provided herein. Depending on the results of the additional studies, other documentation or technical support may be needed to support the regulatory compliance process; such additional work will be described in a subsequent addendum to our contract.

Changes to Scope of Work

This addendum modifies NSR's scope of work as follows and based on the assumptions noted below.

- No revisions to the water quality technical memo are needed.
- Revisions to the wetland/waters of the U.S. delineation report will be made given the lag time since the original delineation field work was completed and recent changes in the U.S. Army Corps of Engineers' minimum requirements for completing a jurisdictional delineation.
- Revisions to the Archaeological Survey Report (ASR) are needed, based on direction provided by Caltrans District 10 via e-mail on December 20, 2016.
- A new technical study for cultural resources is needed: a Historical Resources Evaluation Report (HRER).
- Due to the presence of cultural resources in the APE, an Archaeological Evaluation Proposal and subsequent Archaeological Evaluation Report (AER) will be completed, which includes test plots at strategic locations within the APE identified by the Caltrans District 10 archaeologist via e-mail on December 20, 2016.
- The Historic Property Survey Report (HPSR) will be revised to reference the HRER and AER, once they are complete. We assume this report will not be finalized until the HRER and AER are done.

- The Natural Environment Study (NES) will need to be updated to conform to the current Caltrans NES template, to discuss additional federally listed species, to provide more details on the impacts, and to respond to Caltrans comments provided in October 2016.
- A Biological Assessment (BA) is needed for California tiger salamander, San Joaquin kit fox, and California red-legged frog to support formal Section 7 consultation under the Endangered Species Act (ESA).
- Potential new technical studies to address impacts to a potentially-eligible archaeological resource include: a Finding of Effect report, Memorandum of Agreement, Environmentally Sensitive Area (ESA) Action Plan, and an Individual Section 4(f) evaluation report.
- Caltrans will complete the Categorical Exclusion process for the cultural testing, if required.
- NSR will not be responsible for obtaining any environmental permits for the cultural testing.
- Due to the presence of sensitive resources in the APE, Caltrans has determined that a routine EA is appropriate for the bridge replacement project to comply with NEPA. A joint EA/Initial Study (IS) to comply with both NEPA and the California Environmental Quality Act (CEQA) is assumed.

Changes to existing tasks and descriptions of new tasks are presented below.

Task 7.1 Program Management/Meetings

Modifications to Task 7.1 include additional management and accounting time over the four-year delay period and additional periodic conference calls and meetings during this period. Up to ten (10) additional conference calls and two (2) in person meetings at the County office are being added to this task.

Task 7.1.B Enhanced Program Management (OPTIONAL)

Should Caltrans District 10 undergo further staffing changes for the duration of project which results in changes in direction of work, NSR's Project Manager would be available to participate in up to two (2) additional conference calls to discuss project status with new Caltrans staff. This task also includes one additional technical report revision that is not otherwise indicated under Task 7.6, Technical Studies. Any further revisions that are the result of changes in Caltrans staff will be subject to a proposed contract amendment and subsequent authorization.

Task 7.6 Technical Studies

Subtask 7.6.1 Prepare NES Report

Task 7.6.1 is modified to include a revision to the existing draft NES report. The NES report will be revised to add an evaluation of potential project effects on San Joaquin kit fox and California red-legged frog, modify the discussion of potential effects on California tiger salamander, and further explain the botanical surveys that were conducted in 2013 and address additional comments provided by Caltrans on October 25, 2016. These additions will result in significant revisions to the previous draft NES. A field visit with Caltrans and the U.S. Fish and Wildlife Service (Service) revealed the presence of numerous small mammal burrows that could provide foraging habitat for the kit fox and aestivation habitat for the salamander. Ponds in the vicinity of the study area could support red-legged frog, and the frog could disperse through the study area. Because of this new information available on these species' potential to occur in the study area, the NES report will need to be revised to include and thoroughly discuss them. In addition, Caltrans has determined that they will need to conduct formal ESA Section 7 consultation with

the Service, and this process will need to be added to and discussed in the NES report. The NES report will be updated to conform to the new Caltrans format, which posted on October 13, 2014.

The botanical survey conducted on May 8, 2013 for the draft NES was negative for special-status plants. Environmental conditions and survey and plant identification techniques were adequate to substantiate the potential for occurrence and suitability of the BSA for special-status plants. The basis for this assertion is that, although rainfall was 72 percent of the historic average in 2013, which may be a limiting factor for wetland plants, the seasonal wetland and vernal pool adjacent to the BSA supported plants typically found in vernal pools, indicating that the hydrology was sufficient to support hydrophytic plants that year. Accordingly, additional rare plant surveys are not merited and additional description to clarify and enhance methods and results of the previous surveys will be included in the NES revisions.

NSR will augment analyses and update information to revise the NES report and submit it to QEI and the County for an initial review and for forwarding to Caltrans for final review. We assume up to two additional revisions in response to County, QEI, and Caltrans comments will be needed. A third revision would be conducted following authorization of Optional Task 7.1.B – Enhanced Project Management.

Subtask 7.6.2 Prepare Wetland Delineation

Based on comments provided by Caltrans on October 25, 2016, the lag time since the original wetland delineation field work was completed (May 8, 2013), and changes to the U.S. Army Corps of Engineers - Sacramento District minimum wetland delineation requirements, NSR will prepare a revised wetland delineation. This will include a site visit to re-delineate boundaries of potential jurisdictional waters, preparation of revised report that incorporates comments from Caltrans and new wetland delineation requirements. NSR will prepare a revised wetland delineation report and submit it to QEI and the County for an initial review and for forwarding to Caltrans for final review. We assume up to two additional revisions in response to County, QEI, and Caltrans comments will be needed. A third revision would be conducted following authorization of Optional Task 7.1.B – Enhanced Project Management.

Subtask 7.6.3 Prepare Archaeological Survey Report/Historic Property Survey Report

Based on guidance provided by Caltrans on December 22, 2016 the Archaeological Survey Report (ASR) and Historic Property Survey Report (HPSR) will need to be revised to incorporate the findings of the additional studies (e.g., archaeological evaluation report and historic resources evaluation report). In addition, Caltrans is presently reviewing the April 2016 version of the ASR/HPSR that NSR provided to QEI and will provide additional comments which will need to be addressed. NSR will prepare a revised ASR and HPSR and submit it to QEI and the County for an initial review and for forwarding to Caltrans for final review. We assume up to two additional revisions in response to County, QEI, and Caltrans comments will be needed.

Task 7.6.5 (NEW) Prepare Biological Assessment

Based on discussions with Caltrans and the Service, the project may affect the California tiger salamander (CTS), California red-legged frog (CRF), and San Joaquin kit fox (SJKF). Additionally, the proposed action could indirectly affect critical habitat for listed vernal pool plant and/or animal species; therefore, effects on critical habitat for these species will be addressed in the BA, too. Caltrans has requested that a BA be prepared to discuss impacts to the species and support formal ESA Section 7 consultation with the Service.

NSR proposes to coordinate and attend a technical assistance meeting/teleconference with the County, Caltrans, and Service staff during the early stage of preparation of the BA to discuss the most likely project effects determination(s) to be made in the BA, and accordingly, obtain agreement on an acceptable and sufficient analytical approach, methods, and level of detail to be used in the BA to support these determinations.

NSR will prepare a BA using Caltrans' latest template and relying on the information and analyses presented in the NES (Task 7.6.1, as modified above). The BA will include the following sections: introduction, study methods, environmental setting, discussion of impacts and mitigation, conclusion and determination, and references. Additional details on the project may need to be obtained to refine the project description (i.e., the proposed action) for purposes of meeting required levels of detail for analyses in the BA. We assume QEI will provide any requested additional project details, to the extent they are available; these details will be incorporated to the revised description. A follow-up field visit will be conducted to fully characterize current conditions in the study area, with respect to potential suitability of habitats for regionally occurring threatened and endangered species. Site suitability assessments for listed species with potential to occur in the project vicinity will conform to current Service guidelines for each species (i.e., CRF, CTS, and SJKF), and the methods and results will be clearly described in the BA. However, protocol-level field surveys for any of the listed species are excluded from this scope of work.

NSR will submit an internal draft BA to QEI and the County for an initial review and prepare a draft BA for Caltrans' review. Comments from Caltrans will be addressed to produce a final BA for Caltrans' submittal to the Service. NSR will also coordinate with the Service, as necessary and authorized from Caltrans and the County, to assist the County and Caltrans with the required ESA consultation process through completion. A third revision would be conducted following authorization of Optional Task 7.1.B – Enhanced Project Management.

Subtask 7.6.6 (NEW) Historical Resources Evaluation Report

A segment of a historical resource (CA-STA-390H, Cooperstown Road) and rock wall was documented within the area of direct impacts (ADI) during previous fieldwork in support of the ASR. This Gold Rush-era roadway would be affected by ground-disturbing activities, including grading, the demolition of the existing bridge, and the construction of a new span. Although documented in the ASR, Caltrans has determined that both the road and rock wall features will need to be documented in a Historic Resources Evaluation Report (HRER). The HRER is used to document and evaluate for National Register of Historical Resources (NRHP) listing eligibility historic-era archaeological resources including built environment features and sites such as buildings, structures, objects, districts, and linear features (e.g. Cooperstown Road).

Staff will provide a cultural resources specialist meeting the Secretary of the Interior's Standards and Caltrans standards for historical archaeology to prepare a draft HRER. Due to the existing information on Cooperstown Road already provided by previous investigations and the ASR for the project, it is assumed that additional field documentation will not be necessary and that existing field data on the road and rock wall location, configuration, and integrity will be sufficient for inclusion in the HRER. Supplemental archival research will be conducted, as necessary, to assist with the evaluation process.

NSR will submit an internal draft HRER to QEI and the County for an initial review and prepare a draft HRER for Caltrans' review. Comments from Caltrans will be addressed to produce a final HRER.

Subtask 7.6.7 (NEW) Phase II Investigation/Archaeological Evaluation Report

Staff will conduct a Phase II Archaeological Evaluation for the project. This will include the development of a Phase II Archaeological Study Proposal (AEP), archaeological excavations, and the preparation of an Archaeological Evaluation Report (AER) per Caltrans' Standard Environmental Reference (Volume 2) format. All phases of the investigation will be conducted in accordance with Section 106 of the National Historic Preservation Act (Section 106) standards and guidance.

A previously documented prehistoric archaeological site (CA-STA-389/H), a bedrock mortar complex, was identified within the APE during previous fieldwork in support of the ASR. Portions of this site lie directly within the ADI and cannot be avoided by the proposed project. The original investigation of the site in 1997 documented 146 mortar cups on three bedrock outcrops although the vast majority of the cups are situated along the south bank of Rydberg Creek including directly underneath the existing bridge span. It is not currently known if a prehistoric occupation component of the site exists or if the site consists solely of the bedrock mortar features. In order to determine if project-related ground disturbing activities within the ADI could affect the integrity of known prehistoric deposits or uncover previously unrecorded components of CA-STA-389/H, and to comply with the Section 106 process under the Programmatic Agreement, this Phase II Archaeological Evaluation is needed for the following specific reasons:

- to identify the presence of archaeological materials in the APE;
- to determine the horizontal and vertical extent of the CA-STA-389/H deposit, and
- to determine if any CA-STA-389/H deposits in the APE and ADI are eligible for listing on the National Register of Historic Places (NRHP).

Prepare Phase II Archaeological Evaluation Proposal – Staff will prepare a Phase II AEP to be submitted to Caltrans District 10. The purpose of the proposal is to ensure the investigation meets the requirements of 36 CFR 800.4(b) and similar requirements under the California Environmental Quality Act. The Phase II AEP explains the reason for the investigation, the methods of excavation, and provides a guide for when the study's goals have been met. A draft of the Phase II AEP will be submitted to QEI and the County for review and comment. Any comments received will be incorporated into a revised draft Phase II AEP for submittal to Caltrans District 10. The AEP will be revised per Caltrans comments and a final version submitted for Caltrans approval. Staff will be available to discuss the proposal with Caltrans staff and will provide a final version of the proposal based on Caltrans' comments.

Implement Phase II Archaeological Evaluation - Following approval of the final Phase II AEP by Caltrans, the Phase II excavations within the APE and ADI will be conducted to complete the required discovery process. Based on initial guidance provided by Caltrans on January 11, 2017, the Phase II Archeological Evaluation will consist of the following elements:

Shovel Test Units and Excavation Units: A total of fourteen (14) shovel test units (STUs), two (2) 1-meter by 1-meter control units, and two (2) shovel scrapes (1 meter by 1 meter units within the ADI, east of the bridge) will be excavated.

The STUs will not exceed 50 by 50 centimeters in size. Up to 12 STUs will be placed on the south side of Rydberg Creek; two on each side of Cooperstown Road, in the proposed staging areas, and 8 within the temporary detour alignment. An additional two STUs will be excavated on the north side of the creek and

west side of Cooperstown Road to determine if any archaeological materials are located in this area. These units will be dug in 10 centimeter levels within natural stratigraphy. One wall of each STU will be drawn and each STU will be mapped using sub-meter Global Positional System (GPS) equipment. All excavated material will be passed through ¼-inch screen and any recovered artifacts will be bagged and marked according to 10 centimeter level, and transported to a secure laboratory facility for analysis.

In addition, two shovel scrapes, 1-meter by 1-meter, will be dug on the south side of the creek adjacent to the eastern edge of the ADI/APE outside of the Cooperstown Road prism in an effort to identify surface and near-surface indications of prehistoric materials. Two control units, also 1-meter by 1-meter, will be dug south of the creek, and within the proposed temporary detour.

Column or soil samples will be recovered from each control unit. The samples will measure 10 centimeters square. The samples will be taken following the arbitrary 10 centimeter level system of the units. The soil samples will be processed through 1/16-inch screen to recover small faunal materials.

The units will be considered complete when "sterile" soil is reached (the point where artifact return per 10 centimeter level is below 3 pieces of debitage measuring less than 1 centimeter in maximum dimension or when a subsurface restrictive feature such as bedrock is reached).

Native American Monitoring: All field excavation tasks may need to be conducted with a Native American monitor present, and our cost estimate includes costs for one monitor for five 10-hour days. NSR assumes that any Native American community outreach along with any consultation or coordination with the State Historic Preservation Officer or other relevant agencies will be managed by Caltrans.

Artifact Analysis: The range of analyses that might be utilized in interpreting finds recovered from subsurface contexts at the site could range from radiocarbon dating and obsidian hydration to trace element analysis and material sourcing. While a diverse array of techniques could be applied to materials recovered from CA-STA-389/H, the following are the most likely to occur and prove applicable to the types of artifacts/features found at comparable prehistoric archaeological sites from the general region:

- Obsidian hydration;
- Lithic material sourcing (XRF);
- Radiocarbon dating;
- Lithic debitage analysis;
- Soil Ph testing;
- Faunal remains analysis; and
- Flotation and floral remains analysis (feature soils).

The analysis of flaked stone artifacts would be based on experimentally-derived variables. The variables utilized in the lithic assemblage analysis would be those developed through knapping experiments and that have been applied to numerous lithic artifact assemblages. By employing variables based on principals of fracture mechanics and material variability, a more accurate technological assessment of lithic material acquisition, and implement manufacture, curation, and discard can be obtained; a goal not attainable from a typological foundation.

Soil Ph testing will take place in the field to provide data on the possible effects soil condition might have on organic materials, human remains in particular, should further testing or data recovery occur on the site. Soil Ph readings will be recorded with a hand-held Ph meter. Column or soil samples will be processed by staff either in the field or in the office. Other analyses including obsidian hydration, radiocarbon dating and the examination of faunal remains would be conducted by outside subcontractors such as Nancy Valente (faunal), Northwest Obsidian Research Lab (Corvallis, Oregon) and Beta Analytic (radiocarbon dating) in Miami, Florida.

Site Documentation: The existing record for site CA-STA-389/H will be updated and completed. The updated site record will be attached to the Phase II AER. A detailed site map will be created and a comprehensive photographic record will be included. The site record will be submitted with the Final Phase II AER to the Central California Information Center. In addition to the updated site record, the artifact catalog and all data acquired in the field will be attached.

Prepare Archaeological Evaluation Report - Results of the discovery process will be presented in the AER which will be appended to the HPSR. The AER will include the following elements:

- Overview of the Phase II AER project purpose and goals
- Summary of regional cultural setting including a detailed review of area prehistory/ethnography
- Research Design
- Field and lab methodology
- Detailed documentation and analysis of findings
- NRHP listing eligibility discussion
- Appended independent study reports for specialized artifact analyses

Staff will prepare and submit an administrative draft of the AER report to QEI and the County for initial review and comment and prepare a revised draft AER for submittal to Caltrans District 10. Following review of the draft AER report by Caltrans, staff will revise and prepare a final AER report. Once the HRER (Subtask 7.6.6) and AER are complete, staff will also revise the HPSR to reference the documents and update the findings, as appropriate. The revised HPSR will be submitted with the final HRER and AER for Caltrans approval.

Subtask 7.6.8 (NEW) Prepare Finding of Effect, Memorandum of Agreement, and Environmentally Sensitive Area Action Plan (OPTIONAL)

If required by Caltrans based on the results of Subtask 7.6.7, we will prepare a Finding of Effect (FOE) to assess the project effects on archaeological site CA-STA-389/H. The FOE will analyze and address the preferred project and alternatives, including some that may have been considered, but rejected.

Depending upon the results of the Phase II investigation and follow up coordination with Caltrans, preparation of an Environmentally Sensitive Area (ESA) Action Plan may be required. NSR will prepare an ESA Action Plan that fully describes the avoidance measures that will be needed to protect the resource. The Action Plan will include the following: summary of the project/proposed undertaking;

description of the avoided site; description of the avoidance measures that will be implemented, and summary of key parties' responsibilities. A draft ESA Action Plan will be prepared and submitted for review and approval by QEI and the County. NSR will then incorporate the QEI and County's revisions, and provide a draft Action Plan for submittal to Caltrans for review and approval. NSR will review and respond to Caltrans comments and prepare a final ESA Action Plan.

Replacement of the bridge could be an adverse effect if the site is recommended eligible for NRHP listing a Memorandum of Agreement (MOA) could be necessary to identify mitigation measures to reduce that effect and to complete the Section 106 process. This scope does not include preparation of a MOA because it may not be necessary and we assume Caltrans will take a leading role in preparing the MOA, as is its current practice. If a MOA is necessary, we will provide assistance to the County in considering various mitigation measures to help avoid or reduce the adverse effects the project will have on historic properties. Staff will, if requested, also assist with preparation of a MOA, if necessary, to address measures to mitigate adverse effects to historic properties.

Staff will also contribute to client coordination and participate in the QEI team effort for public outreach regarding this project. For this process, we will provide its expertise about the site, as well as for Section 106 / CEQA compliance processes as they relate to the prehistoric deposits. We will attend up to two meetings, as needed, and one public workshop. Staff will also attend and participate in up to four hours of teleconferences.

We will prepare documents for this project following Caltrans' guidelines set forth in the *Standard Environmental Reference* (SER), *Volume 2*, Cultural Resources Procedures. Staff will also follow the procedures set forth in the "Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of the Federal-Aid Highway Program in California."

Subtask 7.6.9 (NEW) Individual Section 4(f) Evaluation (OPTIONAL)

A U.S. Department of Transportation Act Section 4(f) evaluation may be required if it is determined that the project may affect a cultural site eligible for listing in the National Register of Historic Places (pending results of Subtask 7.6.7). It is anticipated based on initial guidance from Caltrans District 10 that the Section 4(f) document that will be required will be an Individual Section 4(f). This means that the draft Section 4(f) document will need to be circulated to the Department of the Interior. The Section 4(f) process would be closely coordinated and integrated with preparation of the Draft and Final CEQA/NEPA documents (Task 7.7), as well as the Section 106 process (HPSR, Finding of Effect, Memorandum of Agreement, as applicable). Section 4(f) evaluations cannot start until the Section 106 process is through the "finding of effect" stage. NSR assumes the County or QEI would provide sufficient engineering and economic data to support the required discussion about the feasibility (or infeasibility) of project alternatives. The Section 4(f) evaluation will include the following elements to ensure compliance with FHWA Technical Advisory T6640.8A:

- Discussion on the purpose of the Section 4(f) evaluation and the purpose and need for the project.
- Document the preliminary coordination with the public officials having jurisdiction over the Section 4(f) properties (e.g. SHPO).
- Description of the Section 4(f) properties that could be affected by the proposed project.

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- Description of the impacts that would occur to the Section 4(f) property as a result of project implementation.
- Develop feasible and prudent alternatives to avoid or minimize potential effects.
- If no feasible and prudent avoidance alternatives are identified that completely avoid impacts, recommend mitigation measures that would minimize impacts on the Section 4(f) properties or provide adequate documentation to support the proposed bridge replacement project based on engineering constraints data provided by QEI.
- Pending review of the draft Section 4(f) evaluation, a decision as to whether the alternatives affecting the Section 4(f) land are feasible and prudent will be documented in the final Section 4(f) evaluation. The results of this final Section 4(f) evaluation, including response to comments on the draft Section 4(f) evaluation, will be included in the Final IS and NEPA EA documentation.

NSR will submit an internal draft Section 4(f) report to QEI and the County for an initial review and prepare a draft Section 4(f) report for Caltrans' review. Comments from Caltrans will be addressed to produce a revised draft Section 4(f) report for Caltrans' submittal to the Department of the Interior. Any comments received from the Department of Interior will be discussed with Caltrans, the County, and QEI, and NSR will prepare a final Section 4(f) for signature by the agencies.

Task 7.7 CEQA/NEPA Environmental Document (NEPA EA OPTIONAL)

Task 7.7 is modified to include the preparation of a joint EA/IS to meet County and Caltrans requirements. A NEPA EA will only be required if, based on the results of Subtask 7.6.7, it is determined that the project may affect a cultural site eligible for listing in the National Register of Historic Places. With this modification, a joint CEQA/NEPA document will be prepared, and the environmental review processes will be completed at the same time, with each agency responsible for its respective approvals. Most of the scope contained in the original Task 7.7 description will still apply. The key differences associated with preparation of a joint CEQA/NEPA document are discussed below.

Purpose and Need Statement: NSR, with input from the County and QEI, will prepare a written description of the purpose and need for incorporation into the EA/IS. The draft purpose and need will be submitted to the County and Caltrans for review and comment. After resolution of the comments, and incorporation of changes as appropriate, NSR will prepare the final purpose and need for inclusion into the EA/IS.

Compliance with Federal Executive Orders: Per Caltrans' direction, the EA will be a routine EA, not a complex EA. The main difference between preparing an IS and an EA is the inclusion of additional federal regulatory compliance requirements, such as Federal Executive Orders for floodplains and noxious weeds. To address these requirements, the EA/IS will summarize relevant information from the technical reports that have been prepared to meet Caltrans requirements. Some supplemental research or additional input from the engineers may be necessary to prepare the EA/IS.

Alternatives Analysis: It is anticipated that the environmental document will analyze at a minimum the following alternatives: preferred alternative; another build alternative; and No Project/No Action alternative. Alternatives carried forward for evaluation in the administrative draft EA/IS will be presented with detail sufficient to support meaningful analysis. The narrative description for the

alternatives will be prepared by NSR, in coordination with County and Caltrans District 10 staff. The administrative draft EA/IS will describe any alternatives that were considered by the County, but rejected as infeasible during the initial alternative development process. The evaluation will be conducted at a level of detail sufficient to allow meaningful comparisons with the proposed action.

Additional Agency Review Requirements: The EA/IS will be structured to integrate the results of the Section 106 process, Section 7 ESA consultation, and Section 4(f) process (draft Section 4[f] evaluation). Upon completion of the administrative draft EA/IS, we will circulate the document for review and comment by QEI and the County. NSR will incorporate County and QEI comments, complete the required Caltrans Quality Review Checklist and submit to Caltrans District 10 for review and comment. NSR will revise the administrative draft EA/IS to address Caltrans District 10 comments, complete required Caltrans Quality Assurance forms and submit to Caltrans District 10. Caltrans District 10 will then submit the revised administrative draft, pending approval, to Caltrans Headquarters for separate review.

Following review of final County and Caltrans Headquarters' comments on the administrative draft EA/IS, NSR will discuss the revisions of the administrative draft EA/IS with County, QEI, and Caltrans District 10 staff, incorporate any changes as needed to prepare the Draft EA/IS, and assist with completion of the Quality Review Certification Sheet. A screen-check of the Draft EA/IS will be provided to the County, QEI, and Caltrans District 10 for final review and approval. Caltrans District 10 will coordinate with Caltrans Headquarters to get a recommendations to release the public draft EA/IS for public review before the document is reproduced and distributed.

After the close of the public comment period, NSR will review the public and agency comments and provide written responses for each comment provided. The draft EA/IS will become the final EA/IS and the written responses to comments will be included as a separate, bound document. Upon completion of the final EA/IS, we will circulate the document for review and comment by QEI and the County. NSR will incorporate QEI and County comments, complete the required Caltrans Quality Review Checklist and submit to Caltrans District 10 for review and comment. NSR will revise the final EA/IS to address Caltrans District 10 comments, complete required Caltrans Quality Assurance forms and submit to Caltrans District 10. Caltrans District 10 will then submit the revised final EA/IS, pending approval, to Caltrans Headquarters for separate review. Following review of final Caltrans Headquarters' comments on the final EA/IS, NSR will discuss the revisions of the with County, QEI, and Caltrans District 10 staff, incorporate any changes as needed to prepare the final EA/IS, and assist with completion of the Quality Review Certification Sheet. A screen-check of the final EA/IS will be provided to the County, QEI, and Caltrans District 10 for final review and approval. Caltrans District 10 will coordinate with Caltrans Headquarters to get a recommendations to release the EA/IS for public review before the document is reproduced and distributed.

NSR will deliver the Notice of Determination (NOD) form and Proposed Finding of No Significant Impact (including the final EA/IS) to the County, QEI, and to Caltrans. The Final EA/IS will integrate the findings and mitigation measures associated with both the Section 106 process (final MOA), Section 7 ESA consultation (BO); and Section 4(f) process (final Section 4[f] evaluation).

NSR will coordinate the final stages of the CEQA process with the County. CEQA approval, via certification of final IS/MND, would be obtained at a regularly scheduled meeting of the Board of Supervisors. CEQA *Guidelines* (Section 15075) requires that the lead agency file a NOD with the County clerk and with the state Office of Planning and Research after deciding to approve a project for which an IS/MND has been adopted. Per standard procedures, Caltrans will review and approve the document and adopt the FONSI. Before Caltrans can adopt the FONSI, the Section 7, Section 106 and Section 4(f)

consultations and reviews will have to be completed. The NEPA process is complete with Caltrans adoption of the FONSI.

NSR assumes that the County and Caltrans will perform any required public outreach, agency consultations (e.g., State Historic Preservation Officer, Native American tribes), or other NEPA-related processing. If requested by the County and/or Caltrans, NSR can provide technical input for public outreach or agency consultations, such as by drafting letters describing the project and study results or preparing handouts or information sheets. NSR's participation at public or agency meetings is not assumed to be needed and is not included.

Revised Cost Estimate

NSR proposes to complete the tasks described above on a time and materials basis for a total of \$212,922. The budget includes labor, management, administration, and expenses. The new not-to-exceed amount for the contract will be \$283,197.19 (current, approved amount is \$70,275.19). The following table summarizes costs by task; a detailed cost spreadsheet is attached.

TASK	ESTIMATED COST			
Task 7.1 Program Management/Meetings	\$9,321			
Task 7.1.B Enhanced Program Management (OPTIONAL)	\$7,419			
Subtask 7.6.1 (Modified) Prepare NES Report	\$9,292			
Subtask 7.6.2 (Modified) Prepare Wetland Delineation Report	\$3,895			
Subtask 7.6.3 (Modified) Prepare ASR/HPSR	\$5,636			
Subtask 7.6.5 (New) Biological Assessment	\$11,482			
Subtask 7.6.6 (New) Historical Resources Evaluation Report	\$7,165			
Subtask 7.6.7 (New) Phase II/Archaeological Evaluation Report	\$75,279			
Subtask 7.6.8 (New) Finding of Effect/Memorandum of Agreement/ESA Action Plan (<i>OPTIONAL</i>)	\$11,889			
Subtask 7.6.9 (New) Section 4(f) Evaluation (OPTIONAL)	\$18,743			
Task 7.7 CEQA/NEPA Environmental Document (NEPA EA OPTIONAL) ^{/a/}	\$40,372			
Task 8 Environmental Permits /b/	\$12,429			
Total Addendum Cost	\$212,922			

Notes:

/a/: If a NEPA is not required, this task would be reduced to \$17,500.

/b/: Prior approved budget for Task 8 was used to complete out-of-scope items such as the Extended Phase I and subsequent Phase II/AER study proposals.

