### CITY OF SANTA ROSA TRANSPORTATION AND PUBLIC WORKS PROJECT WORK ORDER NO. A010136-2016-02A

PROJECT NAME: HEARN AVENUE AT HIGHWAY 101 INTERCHANGE ENGINEERING SERVICES

CITY PROJECT MANAGER: CHRIS CATBAGAN

CONSULTANT PROJECT MANAGER: HOWARD MICHAEL

SCOPE OF SERVICE: See Consultant's Scope of Services/Proposal for Services and Fee Schedule dated **July 12, 2022**, attached as Exhibit B-1.

START DATE: AUGUST 2022 COMPLETION DATE: DECEMBER 2025

CHARGE NUMBER FOR PAYMENT: 17075

Jessica Mullan (Jul 20, 2022 12:19 PDT)

Santa Rosa City Attorney's Office

NOT-TO-EXCEED AMOUNT FOR THIS WORK ORDER: \$1,079,548.00





TERMS AND CONDITIONS: This Project Work Order is issued and entered into as of the last date written below in accordance with the terms and conditions set forth in the "Master Professional Services Agreement with AECOM Technical Services, Inc., Agreement No. A010136," dated October 11, 2016, "Project Work Order No. A010136-2016-02, dated June 21, 2017, which is hereby incorporated and made part of this Project Work Order. In the event of a discrepancy or conflict between the terms and conditions of the Project Work Order and the Master Agreement, the Master Agreement shall govern.

<b>PROJI</b>	ECT WORK ORDER HISTORY		
Origin	al Project Work Order No. A010136-2016-02	Amount:	\$3,500,000.00
Amen	dment No. A010136-2016-02A	Amount:	\$1,079,548.00
		Total:	\$4,579,548.00
CITY (	OF SANTA ROSA,		
A Mun	icipal Corporation		
By:		Date:	
2).	CHRIS ROGERS		
	Mayor		
AECO	M Technical Services, Inc.,		
A Cali	fornia corporation		
	Howard Michael	07/	14/2022
By:	Howard Michael (Jul 14, 2022 08:38 PDT)	Date: O1/	14/2022
Name:	Howard Michael		
Title:	Associate Vice President		
By:	Armond Tatevossian Armond Tatevossian (Jul 14, 2022 08:53 PDT)	Date: <u>07/</u>	14/2022
Name:	Armond Tatevossian		
Title:	Secretary		
APPRO	OVED AS TO FORM: By:		
	1. A		

Attachments: Exhibit B-1 - Consultant's proposal and fee for services for this Project Work Order

#### **EXHIBIT B-1**



AECOM 2020 L Street, Suite 300 Sacramento, CA 95811 www.aecom.com 916 414 5800 tel

July 12, 2022

Chris Catbagan, PE Associate Engineer City of Santa Rosa 69 Stony Circle Santa Rosa, CA 95401

Re: US101/Hearn Avenue Interchange Improvement Project – Supplemental Budget Proposal

Dear Chris:

Based on coordination with the City, AECOM has prepared this proposal for an amendment to Purchase Work Order (PWO) No. A010136-2016-02 for time and fee. The project commenced in June of 2017 and was scheduled to be completed in December of 2019. During this period of time and beyond, the City directed AECOM to perform extra services beyond the original contract scope of work. Additionally, in recent months, other services were requested by the City and Caltrans, which were supported by the City, which add to this Supplemental Budget Proposal and need for an amendment to the PWO.

The following is a summary of the extra service activities for the PWO amendment as directed to by the City and as documented in our past Progress Reports and more recently in the Project Development Team (PDT) meeting notes.

#### SUMMARY OF EXTRA SERVICES DOCUMENTED IN PROGRESS REPORTS

#### Task 1 – Project Management / Project Coordination

This extra service is for the associated Project Management efforts in support of the extra services to date. The current accounting and estimated cost to complete this effort is \$105,551, which is approximately 12% of the total extra services costs and is below the industry standard for projects involving Caltrans oversight.

#### Task 2.1 - Support to SB-1 LLP

This extra service in the amount of \$29,987 was submitted to the City on 2/18/2020 (Concurred with by the City on 6/1/2020). This covers additional funding support planning for the City's SB-1 Local Partnership Program (LPP) grant application.

#### Task 2.2 - Support Build Grant

This extra service in the amount of \$31,243 was submitted to the City on 2/3/2021 (Concurred with by the City on 2/11/2021).

#### Task 2.3 – RAISE Grant Application + Handout

This extra service was estimated at \$27,307 for updating previous grant application material to align with the current 2022 RAISE Grant criteria. The USDOT debrief provided to the City and AECOM regarding the last RAISE Grant Application results occurred on March 7, 2022, and resulted in a change in scope of work as described below. Due to the extreme pace of needing to develop and submit the 2022 Application on April 14, there was no time to pause and renegotiate the application scope and fee, thus AECOM proceeded in good faith to complete our analyses and obtain a greater value BCA, which did occur. The BCA increased from the 2021 value of 1.5 to the current value of 2.1, which is a very measurable increase in project value. The actual accounting for this effort is \$61,863 and is based on the following factors associated with the evolving nature of the RAISE 2022 analysis:

 Bicycle and Pedestrian Use (New): Quantification and benefit estimation of travel time savings, facility, health, and reduced automobile use for both future bicycle and pedestrian use of the Hearn Overcrossing. Each were analyzed individually. This task included: review of background studies, several conference calls with city staff to develop/review data availability,



development of current and future use projections, alternate route assumptions and analysis approach. *Prior RAISE 2021 did not quantify or estimate these benefits*.

- Transit use (New): Quantification and benefit estimation of transit rider travel time savings.
   This task included: review of background studies/data, several conference calls with CityBus staff to develop/review data availability, development of current and future use projections, alternate route assumptions and analysis approach. Prior RAISE 2021 did not quantify or estimate these benefits.
- Emergency Response (New): Quantification and benefit estimation of transit rider travel time savings. This task included: review of background studies/data, conference calls with City's Fire Marshall staff to discuss data availability, development current and future use projections, determine reduced response time assumptions and analysis approach. *Prior RAISE 2021* did not quantify or estimate these benefits. This involved the following:
  - Calculated the difference between free flow speed and congested speed for each direction of Hearn Avenue using both the SCTA model and the TOAR results for the no build and build conditions for each analysis year,
  - Estimated the time savings that an emergency vehicle might be able to have assuming the Hearn Avenue is widened, and
  - Documented the results of this travel time analysis.
- Safety (New): A detailed review of the 2021 Grant Application was performed in response to USDOT comments regarding crash analysis that involved:
  - Added crash data from 2021 to the analysis of the Hearn Avenue and US 101 corridors.
  - Added ped-bike specific crash data from 2012 2021 to the analysis of Hearn Avenue.
  - Coordinated with the City of Santa Rosa to get property damage only crash data for the study area,
  - Developed and provided map to City of Santa Rosa where crash data for analysis was needed,
  - Reviewed data from the City and compared against the TIMS data set,
  - o Reviewed 2010 and 2018 Update to the Ped-Bike Master Plan for Santa Rosa.
  - Reviewed crash analysis, high injury network, and developed write-up for Tech Memo/Grant Application,
  - Deep dive in 2015 fatal crash on US 101 southbound off-ramp to Hearn Avenue and developed justification write-up why this crash was eliminated from our analysis,
  - Updated Safety Tech Memo from 2021 RAISE Grant Application,
  - Updated predictive safety analysis to include the years 2041 2046 for Hearn Avenue,
  - Developed safety analysis for ped-bikes treatments on Hearn Avenue,
  - Updated safety discussion in Grant Application to reflecting additional crash data used in this update cycle,
  - Coordination with other team members to discuss safety analysis, analysis gaps, and to modify safety memo based on review and feedback,



- Participated in bi-weekly check-in calls and other regular project coordination calls regarding safety and the BC analysis, and
- Providing scope of work and hours review of out-of-scope efforts.
- Handout (Leave behind)
  - Prepared a leave behind for the City to have their political advocate distribute to the Federal Secretary of Transportation and his staff. This leave behind will help elevate the project in the minds of the decision maker and allows them to see this project's benefits at glance and to easily be reminded of the value the project provides for funding that the Federal Government has to provide.

This added effort and strategic/systematic analyses performed by the AECOM economists and application authors increased the past BCA ratio from 1.5 to 2.1 which clearly increases this project's candidacy for funding.

#### Task 2.4 - New General Funding Support

This extra service in the amount of \$49,967.13 was requested by the City to be included for supporting the City in upcoming funding grant application writing.

#### Task 8.1 - Pothole City Water

This extra service in the amount of \$10,612 was submitted to the City on 2/4/2019 (Concurred with by the City on 2/13/2019). This covers additional utility positive locating work (potholing) for the existing City waterline that crosses under Route 101.

#### Task 8.2 - Additional Traffic Data

This extra service in the amount of \$2,000 was submitted to the City on 1/24/2019 (Concurred with by the City on 1/30/2019). This covers additional traffic count data that needs to be collected to support the temporary weekend closure of Hearn Avenue between Corby Avenue and Santa Rosa Avenue.

#### Task 8.3 - Added Irrigation System

This extra service in the amount of \$52,800 was submitted to the City on 6/26/2018 (Concurred with by the City on 7/24/2018). This covers additional design work associated with adding an irrigation system to the interchange area as requested by Caltrans following their review of the 35% submittal.

#### Task 8.4 – Added Multipurpose Path (Plans, Specs & Estimate)

This extra service was initially estimated at \$145,000 for incorporating the multi-purpose trail along Hearn Ave. on the roadway and the bridge overcrossing, and through the intersections of Corby Ave. and Santa Rosa Ave. The work involved revising the design and plans to incorporate this trail and this includes:

- Redesign and 3D modeling of 8 curb ramps,
- Added two new typical sections,
- Revised drainage inlet locations which effected most drainage systems reflected on the drainage plans and profiles, including drainage details,
- Revised temporary drainage systems and the temporary drainage plans, profiles, and details,
- Revised striping plans,
- Revised grading plans,
- Revised loop detector and signal pole's locations,
- Revised stage construction layouts and sections,



- Revised base geometry file and updated on most plan sheets,
- Revised most construction details,
- Redeveloped 3D model and surface,
- Requantifying and estimating.

This extra services work was further influenced from changes made to the multi-purpose path cross section as the City and Caltrans further considered the implementation of the originally agreed to plan. The progression of changes made to the trail are as follows:

- June 2021 Began incorporating the approved plan,
- March 15, 2022 Met with Caltrans and the City to discuss City's desire for revising the cross section to make greater use of the cross-section space,
  - Obtained concurrence at this meeting,
  - Began updating design and plans,
- April 6,2022 Presented updated trail plan at PDT meeting,
  - Changes suggested by various parties prompting another meeting to be scheduled to discuss changes,
- April 11, 2022 Met with Caltrans and the City to discuss possible changes,
  - New conclusion drawn,
  - Proceeded again with changes to the design and plans,
- April 20, 2022, Solomon Tesfe of Caltrans asked for updated the updated section,
  - o Provided updated section on April 20,
  - Comments provided on April 21,
  - o Further changes made to the section, and
- May 20, 2022 Met with Solomon to confirm comments addressed,
  - o Concurrence obtained.

The initial estimate of \$145,000 for incorporating the multi-purpose trail along Hearn Ave. has increased as efforts since have been accounted for at \$299,775. This total effort for incorporating the trail and the associated changes include the following:

- Redesign and remodeling of 5 ramps,
- Revised drainage inlet locations again which effected most drainage systems reflected on the drainage plans and profiles, including drainage details,
- Revised striping again,
- Revised grading and surface again, and
- Added typical sections.

In total, 155 plan sheets were revised.



#### Task 8.5 - RV2 Ramp Redesign (Plans, Specs & Estimate)

This extra service was documented in the PDT meeting notes as a request by Caltrans to redesign the RV2 off-ramp in an attempt to eliminate the drainage basin flat drainage System No. 15 and eliminate the associated berm that isolated the ramp from the basin stormwater. The current accounting and estimated cost to complete this effort is \$115,722. The new design of a raised RV2 Off-ramp involved the following:

- Establishing a raised profile along a confined length of ramp between and mainline exit gore
  and intersection gore. This involved an iterative process with WRECO to minimize the
  impacts in the gores, avoid impacting the mainline of US-101 and the Corby Ave. intersection,
  while creating enough volume in the basin to store the peak stormwater volume. The effort
  include:
  - Redesign of one layout sheet,
  - Creation of a new profile sheet,
  - Creation of a new superelevation diagram,
  - Creation of new typical sections,
  - Redesign of a Construction Detail sheet for the RV2 Ramp,
  - Redesign of a Construction Detail sheet for the basin,
  - Coordination with Caltrans and WRECO
  - Updating the H/H analysis and Drainage Report
  - Design of new gores layouts
  - Adding replacement signing to the Sign Plans,

This resulted in 7 new sheets being added due to the RV2 redesign. The new sheets include:

- 1 Typical Section sheet,
- 1 Profile and Superelevation sheet,
- 2 Stage Construction sheets,
- 1 Motorist Information sheet, and
- 2 Temporary Signal and Lighting sheets

#### Task 8.6 - Update Design to 2018 Caltrans Standard Plans & Specs

This extra service in the estimated amount of \$30,000 is for updating the plans and specifications to 2018 standards. This included incorporating a new standard for the placement of temporary barriers to provide greater offset from temporary bridge deck edges associated with stage construction, which effected the bridge plans and roadway traffic handling plans. The actual accounting for this effort is \$45,773. AECOM's anticipated scope and fee was provided on to the City on February 25, 2022.

#### Task 8.7 - Supplemental DSDD

This extra service was documented in the PDT meeting notes as a result of a request by Caltrans to redesign the RV2 off-ramp. The redesign of the RV2 ramp resulted in a change in design standard decisions resulting in a need for a supplemental Design Standard Decision Document (DSDD). The accounting for this effort is \$22,297 that included a new report with new exhibits.



#### Task 8.8 - Three Successive Final Submittals

This extra service in the estimated amount of \$37,000 was noted to address two additional Final Submittals. But in fact, a third additional Final Submittal will be made as we are nearing the completion of the 4th Final Submittal which will be submitted in the upcoming weeks. These additional submittals were due to modifications made to the project design to enhance the project in an attempt to attract construction funding and to address subsequent comments on the contract documents by Caltrans. Specifically, this involved creating pdf documents of the PS&E and supporting reports, quality review of the submittal package, printing many hard copies and delivering the submittals to Caltrans in Oakland, meeting with Caltrans in Oakland to present the submittal, and providing copies to the City. The value of these successive three services from our accounting is \$55,598.

#### Task NA – Escalation for Extra Services Through Construction

This extra service is for escalation for services moving forward to the mid-point of construction. The escalation rate used is that noted in the PWO of 3.043% and amounts to \$7,701.

#### Task NA – Escalation for Original Scope Work Performed Beyond the Original Contract Period

This extra service is for escalation for work beyond the original POW term of July 2019 to July 2022. The escalation rate used is that noted in the PWO of 3.043% and amounts to \$47,777.

#### TOTAL AECOM SUPPLEMENTAL BUDGET CONCLUSION

A summary of these extra services values is provided in the following table. The costs include anticipated costs to complete these extra service items following Caltrans review and comments. While this is not expected, it is important to note that should comments be returned from Caltrans that involve effort beyond normal efforts to finalize such services at this Final Submittal stage, additional compensation may be necessary.

Task 1	Project Management / Project Coordination	\$105,563
Task 2.1	Support to SB-1 LLP	\$29,987
Task 2.2	Support Build Grant	\$31,243
Task 2.3	RAISE Grant Application + Handout	\$61,863
Task 2.4	New General Funding Support	\$49,967
Task 8.1	Pothole City Water	\$10,612
Task 8.2	Additional Traffic Data	\$2,000
Task 8.3	Added irrigation system	\$52,800
Task 8.4	Added Multipurpose Path (Plans, Specs & Estimate)	\$299,809
Task 8.5	RV2 Ramp Redesign (Plans, Specs & Estimate)	\$115,735
Task 8.6	Update Design to 2018 Caltrans Standard Plans & Specs	\$45,778
Task 8.7	Updated DSDD	\$22,300
Task 8.8	Three Successive Final Submittals	\$55,598
Task NA	Escalation for Extra Services Through Construction	\$7,704
Task NA	Escalation for Original Scope Work Beyond the Original Contract Period	\$47,777
	Total Out of Scope Services Fee	\$938,737



#### SUPPLEMENTAL BUDGET

The following summarizes our amendment proposal to PWO No. A010136-2016-02.

Original Fee	\$3,500,000
Total Out of Scope Services Fee	\$938,737
Contingency (15% of Total Out of Scope Services Fee)	\$140,811
Total Amended Fee	\$4,579,548
2022 Engineer's Construction Cost Estimate	\$27,870,000
Fee as a Percent of Estimated Construction Cost	16.43%
Amendment Request	\$1,079,548

Also, a time extension to December 31, 2025, is requested to account for services through anticipated construction support services.



#### **ORIGINAL DESIGN FEE CONSIDERATIONS**

From a high-level overview, relating this amendment request to the same items of the original contract amount results in the following perspective:

Total Original Fee (w/ Construction Support & Contingency)	\$3,500,000
2022 Engineer's Construction Cost Estimate	\$21,500,000
Fee as a Percent of Original Estimated Construction Cost	16.28%

As illustrated, the project changes have been incorporated to add value at essentially the same efficiency as originally planned.

#### CONCLUSION

The estimate to complete these extra design services include anticipated costs to complete following Caltrans review and comments. While this is not expected, it is important to note that should comments be returned from Caltrans that involve effort beyond those reasonably expected to finalize such services at this Final Submittal stage, additional compensation may be necessary.

This Supplemental Budget Proposal includes 15% contingency and results in an amendment request of \$1,079,548 for a total contract amount not to exceed \$4,579,548.

We appreciate the collaborative nature of working with the City and look forward to supporting the City through the construction of this project and with the delivery of other projects to come. Thank you for letting us serve you on this project and we appreciate your processing of this Supplemental Budget Proposal.

If you have any questions, please contact me at 916.769.6334 or at <a href="mailto:howard.michael@aecom.com">howard.michael@aecom.com</a>.

Sincerely,

**AECOM** 

Howard Michael, PE

Associate Vice President / Northern California Highway Group Leader

#### City of Santa Rosa: Hearn Avenue at Highway 101 - Phase 3 Rebuild Interchange Project (PSE Phase) SUPPLEMENTAL BUDGET REQUEST COST PROPOSAL SUMMARY



	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	<u>Task 10</u>	<u>Task 11</u>	<b>TOTAL</b>
	Project Management / Project Coordination	Project Funding Planning	Preliminary Engineering and Technical Reports	35% PS&E (Base Maps and Plan Sheets)	65% PS&E (Unchecked Design)	95% PS&E (Checked Design)	100% PS&E (Pre-Final Bid Documents)	Final PS&E (Final Bid Documents)	R/W Engineering	Obtain Permits and Agreements	Design Support Services During Construction	
LABOR												
AECOM (Civil)	\$105,772	\$155,162	\$0	\$0	\$0	\$0	\$0	\$572,761	\$0	\$0	\$0	\$833,695
AECOM (Environmental)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AECOM (Geotech)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AECOM (Structures)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AECOM (Traffic)	\$0	\$18,060	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,060
Labor Escalation												\$55,482
SUBCONSULTANTS												
H&A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WRECO	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$30,000
Best Testlab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub Markup	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$0	\$0	\$1,500
OTHER DIRECT COST												
Environmental Drilling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Environmental Testing / Brid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geotech Drilling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geotech Testing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Utility Locating	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Printing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Postage, Travel, Misc.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Permit Fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Traffic Control	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Corrosion Study	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0
TOTAL	\$105,772	\$173,222	\$0	\$0	\$0	\$0	\$0	\$604,261	\$0	\$0	\$0	
												\$938,737

Contingency 15.00% \$140,811 TOTAL ESTIMATED OUT OF SCOPE SERVICES FEE

DBE 0.0% 0.0% 5.0% 3.4% 12.0% 19.6% 0.0% 0.0% 0.0% 0.0% 0.0% 68.4% 0.0% 0.0% 0.0% 100.0% % budget

For purposes of the estimate, rates are estimated average for each position Billing rates are determined by actual salary at time of service times audited multiplier Annual escalation occurs each January 1, but individual merit or promotional increases may occur at any time Billing rate increases do not increase contract limit

\$1,079,548



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ID CODE	DELIVERABLE	Project Manager	, pod 1, 2000 pod 0	Rodaway Lead / St. Project Engineer / QC	Project Engineer	Engineer	Staff Engineer	CAD	Admin / Project Controls	Traffic Engineer	AECOM LABOR HOUR TOTAL	H&A	WRECO	Printing	Postage, Travel, Misc.	Permit Fees	Traffic Control	Corrosion Study
		CV	_ (	CVL	CVL	CVL	CVL	CVL	CVL	TRF		SUE	SUB	ODC	ODC	ODC	ODC	ODC
	Labor rate==	> 22	2	217	157	129	90	109	102	108		1	1	1	1	1	1	1
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Project Managem	nent / Project Coordination																	
1.1 Pro	ject Administration	160	)								160							
1.1.1 Sch	neduling	24									24							
	oices/Progress Reports:	32							80		112							
<b>1.2</b> Age	ency/Subconsultant Coordination	16	)								160							
1.3 PD	T Meetings (up to 16)	64									64							
l																		
Task 1	Subtot	al 44	)	0	0	0	0	0	80	0	520	0	0	0	0	0	0	0
2.3 RAIS	ort Build Grant E Grant Application + Handout General Funding Support	10 15 12		48 116 88	16 24 16	52 81 68	73 60	24 42 36	24 16 16	24 59 55	218 426 351							
Task 2	Subtot	al 45		304	68	241	189	122	68	168	1,205	0	0	0	0	0	0	0
Preliminary Engli	neering and Technical Reports Subtot																	
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. 201. 0	Subtot	al 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Maps and Plan Sheets)	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0
35% PS&E (Base	Maps and Plan Sheets)																	
				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35% PS&E (Base	Maps and Plan Sheets) Subtot																	
7 PS&E (Base Task 4	Maps and Plan Sheets) Subtotecked Design)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35% PS&E (Base	Maps and Plan Sheets) Subtot																	
7 PS&E (Base Task 4	Maps and Plan Sheets)  Subtote ecked Design)  Subtote			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 PS&E (Base   Task 4   S5% PS&E (Unch   Task 5   Task 5	Maps and Plan Sheets)  Subtote ecked Design)  Subtote			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### City of Santa Rosa: Hearn Avenue at Highway 101 - Phase 3 Rebuild Interchange Project (PSE Phase) SUPPLEMENTAL BUDGET REQUEST COST PROPOSAL SUMMARY



					A	ECOM LA	BOR				SUBCO	ISULTANTS					
ID CODE	DELIVERABLE	Project Manager	Roadway Lead / Sr. Project Engineer / QC	Project Engineer	Engineer	Staff Engineer	CAD	Admin / Project Controls	Traffic Engineer	AECOM LABOR HOUR TOTAL	Н&А	WRECO	Printing	Postage, Travel, Misc.	Permit Fees	Traffic Control	Corrosion Study
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100% PS&E	(Pre-Final Bid Documents)											+					
Task 7	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I WOR 7	Gustotal																<u> </u>
Final PS&E (	(Final Bid Documents)																
	Pothole City Water	16	8	20		24				68							
	Additional Traffic Data	6		6						12							
	Added Irrigation System	56	78	66	68	48				316							
	Added Multipurpose Path (Plans, Specs & Estimate)	144	312	348	454	935				2,193							
	RV2 Ramp Redesign (Plans, Specs & Estimate)	60	74	132	145	188				599		30,000					
	Update Design to 2018 Caltrans Sandard Plans & Specs Supplemental DSDD	30	36 16	64 40	86	112				328 140		_					
	Three Successive Final Submittals	60	84	60	72	46 60				336		_					
0.0	Three Successive Final Submittals	- 00	04	00	12	00				336		+					
Task 8	Subtotal	410	608	736	825	1,413	0	0	0	3,992	0	30,000	0	0	0	0	0
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R/W Engine	ering																
Task 9	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Obtain Barra	Manual Assessments		1	<u> </u>	<u> </u>		1	1	<u> </u>		_			1	ı		
Obtain Perin	its and Agreements											+					
Task 10	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 10	Gubiotai																<u> </u>
Design Supp	port Services During Construction																
Task 11	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Project Hours	895	912	804	1,066	1,602	122	148	168	5,717	0	30,000	0	0	0	0	0
	TOTAL HOURS BY PERCENT	15.7%	16.0%	14.1%	18.6%	28.0%	2.1%	2.6%	2.9%	100.0%	0.0%	86.4%	0.0%	0.0%	0.0%	0.0%	0.0%

For purposes of the estimate, rates are estimated average for each position Billing rates are determined by actual salary at time of service X audited multiplier Annual escalation occurs each January 1, but individual merit or promotional increases may occur at any time Billing rate increases do not increase contract limit

## City of Santa Rosa: Hearn Avenue at Highway 101 Phase 3 Rebuild Interchange Project (PSE Phase) SUPPLEMENTAL BUDGET REQUEST COST PROPOSAL SUMMARY



CT LABOR	Hours	Rate	Tota
Project Manager	895	221.76	\$198,474
Roadway Lead / Sr. Project Engineer / QC	912	217.36	\$198,23
Project Engineer	804	156.99	\$126,21
Engineer	1066	129.23	\$137,75
Staff Engineer	1602	90.28	\$144,59
CAD	122	108.66	\$13,25
Admin / Project Controls	148	102.48	\$15,16
Traffic Engineer	168	107.50	\$18,06
Total Direct Labor	5,717		\$851,75
Labor Escalation (Calcled in sep. workbook)	3.043%	\$55,482	
Total Labor			\$907,23
CONSULTANTS			
H&A			\$
WRECO			\$30,00
Best Testlab			\$
Subtotal Subconsultants			\$30,00
Subconsultant Markup		5%	\$1,50
Total Subconsultants			\$31,50
ER DIRECT COST (ODC)			
Environmental Drilling			\$(
Environmental Testing / Bridge Sampling			\$(
Geotech Drilling			\$
Geotech Testing			\$(
Utility Locating			\$
Printing			\$
Postage, Travel, Misc.			\$
Permit Fees			\$
Traffic Control			\$
Corrosion Study			\$(
			\$

#### TOTAL ESTIMATED OUT OF SCOPE SERVICES FEE WITH CONTINGENCY

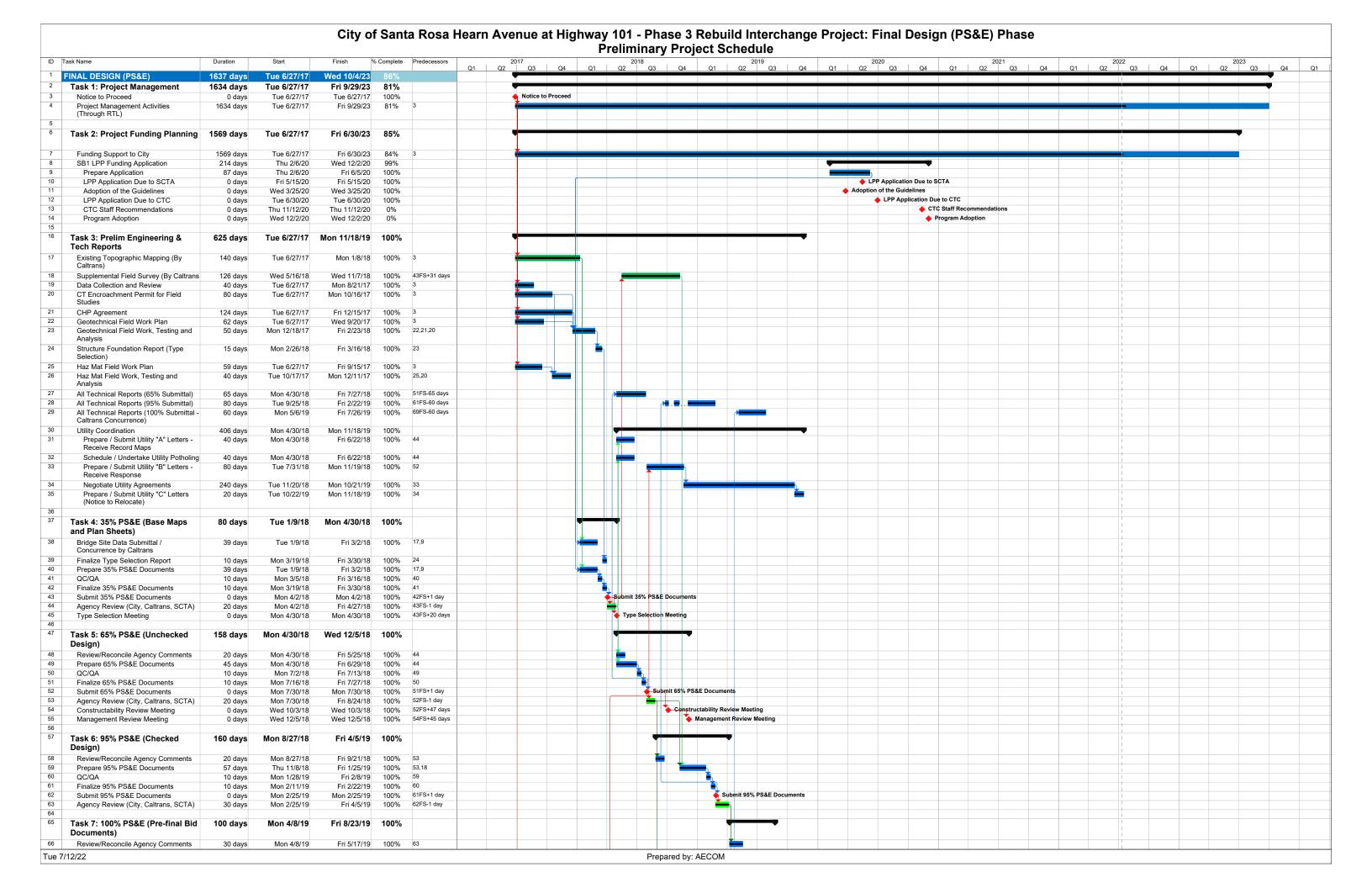
Contingency

\$1,079,548

\$140,811

15.00%

For purposes of the estimate, rates are estimated average for each position Billing rates are determined by actual salary at time of service X audited multiplier Individual merit or promotional increases may occur at any time Billing rate increases do not increase contract limit



#### City of Santa Rosa Hearn Avenue at Highway 101 - Phase 3 Rebuild Interchange Project: Final Design (PS&E) Phase **Preliminary Project Schedule** ID Task Name Start 67 Fri 6/28/19 100% Prepare 100% PS&E Documents 60 days Mon 4/8/19 Mon 7/1/19 Fri 7/12/19 100% QC/QA 10 days 69 Finalize 100% PS&E Documents 68 Mon 7/15/19 Fri 7/26/19 100% 10 davs 70 Submit 100% PS&E Documents 69FS+1 day Submit 100% PS&E Documents 0 days Mon 7/29/19 Mon 7/29/19 100% 71 70FS-1 day Agency Review (City, Caltrans, SCTA) 20 days Mon 7/29/19 Fri 8/23/19 100% 72 73 Task 8: 3rd PS&E (Final Bid 171.6 days Mon 8/26/19 Tue 4/21/20 100% Documents) 74 Review/Reconcile Agency Comments 10 days Mon 8/26/19 Fri 9/6/19 Prepare Final Bid Package 20 days Mon 8/26/19 Fri 9/20/19 QC/QA Mon 9/23/19 Fri 10/4/19 100% 10 days Finalize Final Bid Package Mon 10/7/19 Fri 10/18/19 100% 10 days 77FS+1 day 78 Submit Final PS&E Documents Mon 11/4/19 mit Final PS&E Document 0 days Mon 11/4/19 100% 79 Caltrans DOE 1st Review / NSSP 78FS-1 day 64 days Tue 11/5/19 Fri 1/31/20 100% Submit Final 2nd PS&E Documents 55 days Mon 1/20/20 Tue 4/21/20 100% 82 Mon 1/16/23 Task 9: R/W Engineering 1450 days Tue 6/27/17 83 124 days Fri 12/15/17 Existing R/W Mapping (By Caltrans) Tue 6/27/17 100% 53 Finalize R/W Requirements - Submit to 100% 20 days Mon 8/27/18 Fri 9/21/18 Mon 9/24/18 Fri 3/22/19 100% Hard Copy Maps Appraisal Maps, Plats 130 days & Legals (By Caltrans) Appraisals and Acquisitions (By 325 days Mon 1/14/19 Fri 4/10/20 100% Caltrans) Record Transfer of Jurisdiction (TOJ) Record Transfer of Jurisdiction (TOJ) 0 days Wed 11/3/21 Wed 11/3/21 Nesting Season (Caltrans Env. Wed 8/31/22 Nesting Season (Caltrans Env. Monitoring for tree removal/ trimm 152 days Tue 2/1/22 Monitoring for tree removal/ trimming) Notify Maintenance of Staking/Tree Remova Notify Maintenance of Staking/Tree 0 days Wed 5/25/22 Wed 5/25/22 Survey Stake ROW/remove tree & fence Wed 6/8/22 Tue 7/12/22 103 5 wks 90 Utility Relocation 3 wks Wed 7/13/22 Tue 8/2/22 0% Caltrans Approve R/W Certification 0% 121FS-60 days, Tue 1/10/23 Mon 1/16/23 5 days Task 10: Obtaining Permits and 1149 days Tue 4/24/18 Fri 9/16/22 88% Prepare and Submit Draft Application 80 days Tue 4/24/18 Mon 8/13/18 100% 52FS-70 days Packages to Caltrans Caltrans Review 40 days Tue 8/14/18 Mon 10/8/18 100% Revise, Finalize Application Packages 79 days Tue 10/9/18 Fri 1/25/19 100% and Submit to Caltrans Caltrans Submit to Regulatory Agencies Wed 2/27/19 Tue 3/12/19 100% 10 days (ACOF / RWOCB) Regulatory Agency Initial Review Wed 3/13/19 Tue 3/26/19 10 days (ACOE / RWOCB) ACOE Issue 404 Permit 0 days Thu 4/25/19 Thu 4/25/19 ACOE Issue 404 Permit Respond to RWQCB Comments Wed 3/27/19 Tue 5/28/19 100% 45 days Purchase Mitigation Bank Credits for 401 Permi Purchase Mitigation Bank Credits for 0 days Tue 12/3/19 Tue 12/3/19 100% RWQCB Issue 401 Permit Wed 12/11/19 Wed 12/11/19 RWQCB Issue 401 Permit 0 days 100% 110SS-20 days Fri 8/19/22 Environmental Revalidation 87 davs Thu 4/21/22 70% 105 104 Caltrans Reviews Environmental 20 days Mon 8/22/22 Fri 9/16/22 0% Revalidation 106 ental Revalidation Approval and Certification Environmental Revalidation Approval 0 days Fri 9/16/22 Fri 9/16/22 0% 105 and Certification 107 108 Task 11: 4th PS&E (Final Bid 255 days Mon 11/15/21 Fri 11/4/22 73% Documents) 109 Prepare 4th PS&E Plan Set Mon 11/15/21 Fri 7/15/22 Incorporating Multi-Use Path and Modifications to SB US-101 Off Ramp Submit 4th PS&E Plan Set to Caltrans 0 days Mon 8/8/22 Mon 8/8/22 109FS+1 da Submit 4th PS&E Plan Set to Caltran 111 110 Caltrans Review of 4th PS&E Plan Set Mon 8/8/22 Fri 9/16/22 0% 6 wks 112 Review/Reconcile Agency Comments Mon 9/19/22 Fri 10/7/22 0% 3 wks 113 112 Prepare Final Bid Package Mon 10/10/22 Fri 10/21/22 0% 2 wks 114 113 OC/OA 1 wk Mon 10/24/22 Fri 10/28/22 0% 115 114 Update Final Bid Package 1 wk Mon 10/31/22 Fri 11/4/22 0% 116 Submit Final Bid Package Submit Final Bid Package 0 days Fri 11/4/22 Fri 11/4/22 0% 115 117 RAISE Grant Results 0 days Fri 8/12/22 Fri 8/12/22 0% RAISE Grant Results 118 119 Task 12: Design Support 137 days Tue 3/28/23 Wed 10/4/23 **Services During Construction** 120 Funding Obligated 0 days Tue 3/28/23 Tue 3/28/23 121 RTL Mon 4/3/23 Mon 4/3/23 0% 120FS+5 days **▼** RTL 0 davs 122 Agenda for CTC Meeting Agenda for CTC Meeting 0 davs Tue 4/4/23 Tue 4/4/23 123 122FS+20 days CTC Funding Vote CTC Funding Vote Mon 5/1/23 Mon 5/1/23 0% 0 davs 124 123 Prepare Bid Package 12 days Tue 5/2/23 Wed 5/17/23 0% 125 124 Advertise Project 40 days Thu 5/18/23 Wed 7/12/23 0% 126 Contract Award 20 days Thu 7/13/23 Wed 8/9/23 0% 125 Contract Approval 10 days Thu 8/10/23 Wed 8/23/23 126 Begin Construction 128 127FS+30 days Begin Construction 0 days

# A010136-2016-02A Hearn Avenue at Highway 101 Interchange Engineering Services

Final Audit Report 2022-07-13

Created: 2022-07-13

By: Sarah Molinari (smolinari@srcity.org)

Status: Approved

Transaction ID: CBJCHBCAABAAfi8qVKqRNIQdB2x8aGemyw-5MoCvUCT\_

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# A010136-2016-02A Hearn Avenue at Highway 101 Interchange Engineering Services

Final Audit Report 2022-07-14

Created: 2022-07-14

By: Sarah Molinari (smolinari@srcity.org)

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# A010136-2016-02A Hearn Avenue at Highway 101 Interchange Engineering Services

Final Audit Report 2022-07-20

Created: 2022-07-14

By: Sarah Molinari (smolinari@srcity.org)

Status: Signed

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- Agreement completed.
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