# SUPPLEMENTAL SERVICES AGREEMENT NO. 5

# ARMSTRONG CONSULTANTS, INC. (AIRPORT ENGINEERING CONSULTANT)

THIS SUPPLEMENTAL SERVICES AGREEMENT NO. 5, hereinafter referred to a
Supplemental Agreement, is made and entered into this day of, 2024, by an
between the COUNTY OF LAKE, hereinafter referred to as COUNTY, and ARMSTRONG
CONSULTANTS, INC, hereinafter referred to as ENGINEER:

#### <u>WITNESSETH</u>:

WHEREAS, the COUNTY has entered into a General Services Agreement dated July 26, 2022, with ENGINEER to perform engineering services, including planning studies, topographic surveys, soil tests and pavement evaluation studies, preparation of applications for State and Federal Aid, environmental studies, preliminary engineering studies, designs and cost estimates, engineering design including complete construction plans and specifications, and all engineering consultation required by COUNTY; and,

WHEREAS, the COUNTY AND ENGINEER now desire to also enter into this Supplemental Agreement with the scope of services described herein for project development for Lampson Field Airport,

NOW, THEREFORE, IN CONSIDERATION OF the covenants and agreements herein set forth, it is hereby agreed:

1. The General Services Agreement remains in full force and effect, and in the performance of this Supplemental Agreement ENGINEER is held to all provisions and the terms of the General Services Agreement.

#### 2. Projects

The project covered by this Supplemental Agreement shall include the following:

• Design engineering services related to the Lampson Field East Apron Pavement Rehabilitation Project.

### Scope of Work

The scope of work covered by this Agreement is described in the Task Order A prepared by ARMSTRONG CONSULTANTS, INC., which is dated June 30, 2023 and included as Attachment "A".

#### 4. Compensation

A. As full compensation for all work or services to be provided by ENGINEER hereunder, County shall make payments to ENGINEER based on monthly invoices for all services performed under this Agreement. Invoices shall reference the project title and include a detailed breakdown of work items completed to date and the cost of work remaining. Payment will be a lump sum based on the percentage of work complete per task. Invoices are due and payable upon receipt. The total fee for the project will not exceed \$158,947.00 without prior approval of the County.

Upon satisfactory completion of services summarized in Attachment "A", the final payment of any balance will be due upon receipt of the final invoice. The final invoice shall be submitted within 60-calendar days after completion of the ENGINEER'S work.

B. <u>Interest:</u> Interest at the rate of 1-1/2% per month, or that permitted by law if lesser, will be charged on all past-due amounts starting thirty (30) days after receipt of invoice and required documentation. Payments will first be credited to interest and then to principal.

In the event of a disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. COUNTY will exercise reasonableness in contesting any bill or portion thereof. No interest will accrue on any contested portion of the billing until mutually resolved.

If COUNTY fails to make payment in full to ENGINEER for services within sixty (60) days of

the date due for any uncontested billing, ENGINEER may, after giving seven (7) days written notice to COUNTY, suspend services under this Agreement until paid in full, including interest. In the event of suspension of services, ENGINEER will have no liability to COUNTY for delays or damages caused COUNTY because of such suspension of services.

#### 5. Duration of Contract

This Supplemental Services Agreement #5 shall have an effective date of June 30, 2023. ENGINEER shall continue work as assigned and this AGREEMENT shall remain in full force for a period of two (2) years from the effective date or until terminated by either party.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT the day and year first written above.

County of Lake, a political subdivision of the State of California	ARMSTRONG CONSULTANTS, INC.
ByChair, Board of Supervisors (COUNTY)	(ENGINEER)
ATTEST: SUSAN PARKER CLERK TO THE BOARD	APPROVED AS TO FORM: LLOYD GUINTIVANO COUNTY COUNSEL
By	

2	8	

# TASK ORDER A SUPPLEMENTAL SERVICES AGREEMENT TO PROFESSIONAL SERVICES AGREEMENT BETWEEN SPONSOR AND ENGINEER, DATED JUNE 30, 2023

## **FURTHER DESCRIPTION OF SERVICES OF ENGINEER**

- 1. This Attachment is made a part of and incorporated by reference into the Professional Services Agreement made on July 26, 2022, between COUNTY OF LAKE, CALIFORNIA (Sponsor) and ARMSTRONG CONSULTANTS, INC., (Engineer) providing for professional engineering services. The Services of Engineer as described in Section 1 of the Agreement are amended or supplemented as indicated below and the time periods for the performance of certain services are stipulated as indicated below.
- 2. LOCATION Lampson Field, Lakeport, California
- 3. WORK PROGRAM Attached

Element 1 – East Apron Pavement Rehabilitation (Design)

4. **FEES** - The fees will be as noted below. (All lump sums)

Element 1 – Project Development	\$3,910.00
Element 1 – Design Preliminary Design Final Design	\$52,580.00 \$42,760.00
Element 1 – Project Closeout	\$1,610.00
Element 1 – Special Services  Categorical Exclusion Form  DBE Program Assistance  Topographical Design Survey  Geotechnical Investigation	\$2,926.00 \$7,184.00 \$17,977.00 \$30,000.00
Engineering Total	\$158,947.00

5. ATTACHMENTS - Required Contract Provisions for A/E Contracts Under Airport Improvement Program

SPONSOR: COUNTY OF LAKE	ENGINEER: ARMSTRONG CONSULTANTS, INC.
Bruno Sabatier, Chair Board of Supervisors	Christopher S. Nocks, Western Division Lead

#### SCOPE OF WORK LAMPSON FIELD AIP NO. 3-06-0117-023-2023

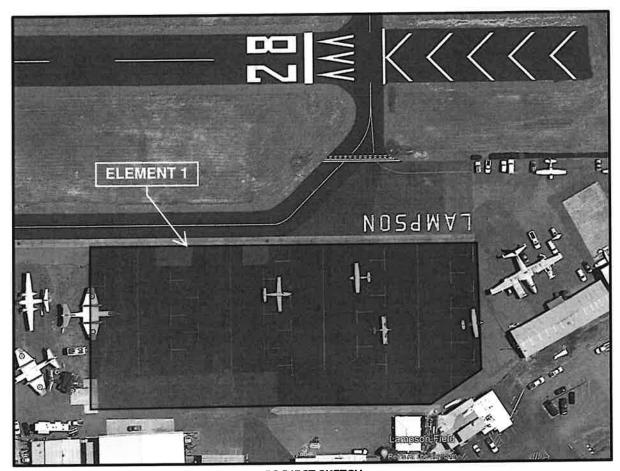
#### **ELEMENT #1 EAST APRON PAVEMENT REHABILITATION [DESIGN ONLY]**

- 1. This project involves the design of the rehabilitation of the east aircraft parking apron at Lampson Field (102). A PCI study conducted in 2018 found that this pavement area had a PCI rating of 57, indicating that the pavement is in need of major rehabilitation. The apron is currently exhibiting low severity raveling and weathering, and medium to high severity longitudinal and transverse cracking. The included project sketch depicts the general layout for the project.
  - 1.1. This apron is located towards the east end of the airport, generally south of Runway 28. The pavement area is approximately 10,200SY. Based on the approved Airport Layout Plan, the appropriate Runway Design Code (RDC) for this project is B-I(small). While the approved ALP does not list a Taxiway Design Group (TDG) for the airport, based on the design aircraft a TDG-1A is assumed.
  - 1.2. The pavement section will be designed to accommodate the anticipated aircraft fleet mix, which is assumed to include aircraft weighing up to 12,500 lbs SWG. FAA FAARFIELD software will be utilized during the design of the pavement section.
  - 1.3. New pavement markings will be designed to meet FAA AC 150/5340-1M. Type I Gradation A glass beads will be specified for the painted surfaces.
  - 1.4. It is assumed that the outcome of this project will not result in any substantive changes to the drainage patterns or structures at the airport, therefore this project will not involve a significant drainage design effort.
  - 1.5. No airfield lighting or signage is included in the scope of this project.

Estimated Construction Cost (Element 1) is:

\$1,125,000





**PROJECT SKETCH** 

#### I. PROJECT DEVELOPMENT

The project development phase is intended to complete the necessary preliminary actions required to initiate the project in accordance with established Federal, State and Local policies and procedures.

#### Activities include:

- 1. Conduct a pre-design meeting/scoping conference with the Sponsor and FAA to establish parameters for the project definition and work areas, budget, schedule, and needs for topographic survey and geotechnical investigations.
- 2. Develop preliminary cost estimates for the proposed work.
- 3. Develop a draft Scope of Work narrative for review and approval. The Sponsor may be required to have an independent fee estimate (IFE) performed to validate the proposed engineering fees. The Engineer will assist the Sponsor in getting reimbursed for the cost of this IFE as part of the grant by preparing a request for reimbursement. Upon receiving approval of the scope of work narrative, engineering fees will be calculated and provided with the final Scope of Work. The Engineer will assist the Sponsor with the submittal of a Record of Negotiations to document the fee negotiation performed for the project.
- 4. Prepare final Scope of Work and Contract.
- 5. Prepare Preliminary FAA Grant Application. Preparation of the application will include the following:
  - a. Prepare the following forms: SF424 and FAA Form 5100-100.
  - b. Prepare Project Narrative and Sketch.
  - c. Prepare Preliminary Estimate.
  - d. Prepare the Sponsor's Certifications.
  - e. Attach the current Grant Assurances.

The Engineer will submit the application to the Sponsor for approval and signatures.



#### II. PRELIMINARY DESIGN

The preliminary design phase is intended to identify and evaluate cost effective and practical solutions for the work items identified. The designer will complete its evaluation of alternatives through contacts with local authorities, field investigations, and a practical design approach. The design will take advantage of local knowledge and experience and utilize expertise from recent construction projects to design a cost-effective project. Cost efficiencies will be realized in a lower initial cost and in lower long-term maintenance costs.

#### Activities include:

- 1. Prepare requirements for the design topographical survey. Work includes establishing the limits of the work area and developing survey criteria in accordance with FAA design guidance. A surveyor subconsultant will be employed to conduct the topographical survey in accordance with the requirements developed. Coordinate the subconsultant's work schedule with County staff.
- 2. Prepare requirements for the design geotechnical investigation. Work includes developing a subsurface boring layout and soil testing regimen in accordance with FAA AC 150/5320-6G. A geotechnical engineering subconsultant will be employed to conduct the geotechnical investigation and provide a pavement section recommendation in accordance with the requirements developed. An Engineer's representative will be on-site with the subconsultant for one (1) day during the investigation. The Engineer will coordinate the subconsultant's work schedule with airport staff. Based on preliminary information available for this project, the following is an estimate of the effort required to complete the investigation and associated testing:
  - a. Subsurface Investigation: Obtain 5 subsurface borings, which will be drilled to a depth of 10 feet. Pavement cores will be used to establish existing structural information, photographed and preserved for reference during reconstruction.
  - b. Laboratory Soil Testing: Perform the following tests on the samples collected from the subsurface borings:

Test	Test Standard	No. of Tests
Soil Gradation (Dry)	ASTM C117/C136	15 each
Soil Gradation (Hydrometer)	ASTM D 422	3 each
Atterburg Limits	ASTM D 4318	3 each
Moisture-Density Relationship	ASTM D 698/D 1557	3 each
In-Place Density/Moisture	AASHTO T204/AASHTO T265	10 each
CBR Testing	ASTM D 1883	3 each
Consolidation Testing	ASTM D 2435	6 each
Soluble Sulfate Content	ASTM C 1580	3 each

3. Prepare an overall Construction Safety and Phasing Plan (CSPP) in order to maximize project constructability and operational safety. A draft CSPP will be submitted to the FAA for review and comment when the design is approximately 25-35% complete. This final CSPP will be submitted to the FAA when plans are 95% completed. The final CSPP will be coordinated, by the FAA Program Manager, with other FAA Lines of Business (LOBs). Comments received by the FAA LOBs will be incorporated into the CSPP prior to submitting the bid advertisement for the project.

- 4. Analyze and process topographical survey data. Input raw survey data into computer aided drafting program, develop TIN surface model of existing ground contours, pavement edges, electrical system components, utilities, and any other miscellaneous items. Generate 3D contour model and prepare and process data for spot elevations, grading, drainage and pavement cross sections.
- 5. Analyze and process geotechnical investigation data. Develop design conclusions based on the data presented and establish input values for pavement design software.
- 6. Prepare pavement section design.
- 7. Review and evaluate project layout.
  - Determine aircraft usage through coordination with Sponsor and FAA
  - b. Verify existing ALP dimensions and data.
- 8. Evaluate local conditions:
  - a. Inventory local material suppliers, sources and capabilities.
  - b. Evaluate drainage conditions/requirements.
  - c. Review existing Pavement Strength Survey data.
  - d. Review available record drawings of the project site.
  - e. Conduct one (1) design site visit by the Senior Project Manager and Project Engineer for familiarity with the site.
- 9. Prepare preliminary construction plans. Construction plans will be prepared depicting all of the work involved for Element 1. The following list of drawings will be used as a guideline.

110	DESCRIPTION	ELEMENT 1
а	Cover Sheet	1 Sheet
b	General Notes, Legend and Survey Control	1 Sheet
С	Removals Plan	1 Sheet
d	Layout and Grading Plan	2 Sheets
е	Typical Sections and Details	2 Sheets
f	Marking Layout and Details	2 Sheets
g	Construction Safety and Phasing Plan	2 Sheets
	TOTAL SHEET COUNT	11 Sheets

Drawings may be added or deleted during the design phase if required.

- 10. Prepare preliminary contract documents. The Engineer will prepare the contract documents including invitation for bids, instructions to bidders, proposal, equal employment opportunity clauses and applicable wage rates, construction contract agreement, performance bond, payment bond, general and special provisions. Preparation will include establishing the location for the bid opening and description of the work schedule. Contract documents will be prepared early during the design phase and submitted to the FAA and Sponsor for review. Sponsor is ultimately responsible for reviewing and ensuring construction contract terms comply with local law and requirements.
- Prepare preliminary technical specifications. The Engineer will assemble the technical specifications necessary for the intended work. Standard FAA specifications will be utilized where possible.



Additional specifications will be prepared to address work items or material that is not covered by the FAA specifications.

The standard specifications to be utilized for Element 1 may include the following items:

Item C-100	Contractor Quality Control Program
Item C-105	Mobilization
Item C-110	PWL Calculation
Item P-101	Preparation/Removal of Existing Pavements
Item P-208	Crushed Aggregate Base Course
Item P-401	Plant Mix Bituminous Pavement
Item P-610	Structural Portland Cement Concrete for Miscellaneous Structures
Item P-620	Runway and Taxiway Marking

- 12. Prepare preliminary special provisions to address conditions that require additional clarification and/or definition beyond what is described in the standard general provisions or technical specifications. Items may include:
  - a. Project Location Information
  - b. Insurance Requirements
  - c. Contract Period and Work Schedule and Phasing
  - d. Pre-Construction Conference
  - e. Utilities
  - f. Permits, Taxes and Compliance with Laws
  - g. Field Office Requirements
  - h. Haul Road
  - i. Testing and Staking
  - j. Airport Security, Closure of Air Operations Areas
  - k. Accident Prevention
  - l. Warranty
  - m. Construction Management Plan
- 13. Prepare and submit FAA design Modifications to Standards, if necessary.
- 14. Conduct preliminary review of the construction plans, technical specifications, contract documents and special provisions by submitting copies of the preliminary documents to the FAA and Sponsor and solicit preliminary design review comments.

#### III. FINAL DESIGN

In the final design phase, the designer will provide well-defined construction requirements, with selected bid alternatives as appropriate to solicit competitive construction bids. Construction schedules will be coordinated around good weather conditions and as little as practical interference with airport operations.

#### Activities include:

#### Final Design

- 1. Incorporate preliminary design comments and respond as necessary to requests for additional information.
- 2. Calculate Estimated Quantities. The Engineer will calculate all necessary quantities for the various work items in each Element.
- 3. Prepare Estimate of Probable Construction Cost for each Element. Using the final quantities calculated following the completion of the plans and specifications, the Engineer will prepare the construction cost estimate. The estimate will be based on information obtained from previous projects, contractors, material suppliers and other databases available.
- 4. Prepare Engineer's Design Report. During the preparation of the construction plans and specifications, an engineer design report will be prepared. The report will include the summary of the project, pavement, drainage design, schedule and cost estimate for the completion of the project. The design report will follow the current FAA Airports guidance where applicable. The design report will be submitted for Sponsor and FAA review. Review comments will be incorporated in the final revised report.
- 5. Develop work schedules for construction. This task involves dividing the construction work into schedules to allow for maximum contract award flexibility in cases of limited available funds, and allow the project to be executed in a manner that minimizes the disruption of the airport aircraft operations.
- 6. Prepare final CSPP. CSPP will be uploaded to the OE/AAA website as part of the subsequent construction period services scope of work, closer to when physical construction is anticipated to take place.
- 7. Prepare 95% design construction plans, technical specifications, contract documents and special provisions.
- 8. Submit 95% design review package to the FAA and Sponsor and solicit design review comments.
- 9. Incorporate 95% design review comments and respond as necessary to requests for additional information.
- 10. Conduct final internal review of all design documents and incorporate any necessary changes. Final review will include one (1) site visit by the Senior Project Manager and Project Engineer to field verify project plans and specifications and to attend a user meeting to discuss the project.



- 11. Prepare and submit final plans and specifications. Copies will be submitted to the FAA, State, and Sponsor. A final set of plans, specifications and contract documents will be prepared which incorporates revisions, modifications and corrections determined during the FAA, State, and Sponsor's review. After final plan acceptance, plan sets will be provided to the FAA, State, and Sponsor.
- 12. Prepare and/or assist with necessary forms:
  - a. Sponsor Quarterly Report
  - b. Strategic Event Coordination Form
  - c. Standard Form 271
  - d. Standard Form 425

#### IV. PROJECT CLOSEOUT

During the project closeout phase of the project, the Engineer will assist the Sponsor with compiling all reports, documents, and other items necessary to successfully close out the associated grant and provide an accurate historical record for the project.

#### Activities include:

1. Assist the Sponsor with completing all necessary grant closeout certifications and forms, including final SF425, SF271, and draft grant closeout request letter.

#### V. SPECIAL SERVICES

Special Services are those services that aren't considered "basic" services such as those listed above. When a Special Service is needed that we do not provide in-house, we will contract with other firms that provide those services. The following are activities that are included in this project that fall under Special Service tasks.

#### Activities include:

- 1. Prepare and submit a Categorical Exclusion (CatEx) package.
- 2. Assist the Sponsor with the Disadvantage Business Enterprise (DBE) Program.
  - Coordinate with Sponsor to assign the DBE Liaison and Reconsideration officials.
  - b. Assist the Sponsor's DBE Liaison with FAA Connect website access.
  - c. Update the Sponsor's DBE Plan and posting requirements.
  - d. Create Sponsor's overall Goal Calculation for triennial DBE goals. This includes holding a public consultation meeting with stakeholders. Researching the applicable market area broken into zip codes. Researching the current State DOT market area certified DBE listings of potential contractors' availability compared to the availability of all market area Contractors using US Census Data. Use the preliminary cost estimate, developed during the Project Development phase, to determine potential DBE work items (breaking down % of work items into NAICS Codes). Determine whether the goal should be race/gender neutral (RN), race/gender conscious (RC) or what % of each by consideration of available disparity studies conducted in the State and past project history to determine if obtained goal calculations should be adjusted or if need to establish specific steps and milestones to correct any identified issues to keep the Airport in compliance.
  - e. Finalize the DBE plan and goals and assist the Sponsor in submitting these items to the FAA Civil Rights Office.
  - f. Assist the Sponsor with fiscal year DBE utilization reporting and in submitting these items to the FAA Civil Rights Website.
  - g. Assist Sponsor in ensuring record compliance found in USDOT 49 CFR Part 26 requirements are met.
- 3. Land surveys, design surveys, and topographic maps.
- 4. Geotechnical investigations, including core sampling, laboratory tests, related analyses, pavement design and reports.



	9	ю.	

# **Detailed Engineering Fee Breakout**

AIRPORT: Lampson Field
Location: Lakeport, California
AIP GRANT NO.: 3-06-0117-xxx-2023

ACI PROJECT NUMBER: 236989 DATE: 4/25/23

REV. NO:

PROJECT DESCRIPTION: East Apron Pavement Rehabilitation (Design)

Note: This spreadsheet is provided to show how the lump sum totals for each phase have been established. The monthly billing will be a simple percentage of each phases total lump sum amount.

	Proposed	Independent	Negotiated
	Fee	Fee Analysis	Fee
I PROJECT DEVELOPMENT	\$3,910.00		
II PRELIMINARY DESIGN	\$52,580.00		
III FINAL DESIGN	\$42,760.00		
VI PROJECT CLOSEOUT	\$1,610.00		
VII SPECIAL SERVICES			
Categorical Exclu	usion Form \$2,926.00		
DBE Program			
Topographical/La			
Geotechnical Inv			
TOTAL ENGINEERING SERVICES	\$158,947.00	\$0.00	\$0.00

ž.		

# **Detailed Engineering Fee Breakout**

AIRPORT: Lampson Field
LOCATION: Lakeport, California
AIP GRANT NO.: 3-06-0117-xxx-2023

ACI PROJECT NUMBER: 236989 DATE: 4/25/23

REV. NO:

Drin oin al	Sonier PM	Project	Designer	Project	Project	Total	Cost
necessary.			Control of the second second			Heurs	Summary
		\$147.00	\$121.00	\$143.00	\$99.00		\$870.00
2							\$729.00
	1	2	2				\$484.00
							\$484.00
2							\$1,343.00
1							\$1,343.00
7	5					23	CD 010 00
\$1,694.00	\$965.00	\$294.00	\$363.00	\$0.00	\$594.00		\$3,910.00
Mice Converse						450.00	\$0.00
							\$0.00
							\$0.00
							\$0.00
							\$0.00
							\$0.00
				Total Proje	ect Developme		\$3,910.00
						use	\$3,910.00
		Proiect	Project	Designer	Project	Total	Cost
Principal	Senior PM		Planner	(CAD)	Coordinator	iolai	C031
504000	\$103.00	1.00	\$143.00	\$121.00	\$99.00	Hours	Summary
\$242.00	\$175.00	φ147 λ00	\$115.00			5	\$677.0
		4					\$1,023.0
					2		\$2,872.0
					-	117.77	\$4,846.0
							\$1,804.0
							\$2,778.0
				3		12	\$1,873.0
						30	\$5,152.0
	12	10					الأفتوع
				2		3	\$389.0
						3	\$389.0
							\$1,262.0
							\$12,816.0
2	8						\$2,083.0
							\$2,230.0
							\$1,455.0
1							\$883.0
							\$2,750.0
							\$538.0
							\$1,604.0
2				2	2		\$2,328.0
4	4						\$2,326.0
16	47	108				348	040 750 0
\$3,872.00	\$9,071.00	\$15,876.00	\$0.00	\$18,755.00	\$2,178.00		\$49,752.0
	1	2			3 Days	\$59.00	\$177.0
	1	2			3 Days	\$98.00	\$294.0
					1 Days	\$110.00	\$110.0
					0 Miles	\$0.625	\$0.0
	1	2			3 Trips	\$750.00	\$2,250.0
						Actual Cost	\$0.0
	2 2 1 7 \$1,694.00 Principal \$242.00	\$242.00 \$193.00 2 2 1 2 1 2 2 1 2 7 5 \$1,694.00 \$985.00  Principal Senior PM \$242.00 \$193.00 1 1 4 1 2 1 2 1 4 1 2 1 1 2 12 1 4 1 2 1 1 2 12 1 4 1 2 1 1 2 12 1 4 1 2 1 1 2 12 1 4 1 5 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 12 1 1 2 1 2	Principal         Senior PM         Engineer           \$242.00         \$193.00         \$147.00           2         2           1         2           2         1         2           2         2           1         2         7           5         2         \$1,694.00         \$765.00         \$274.00           \$1,694.00         \$965.00         \$294.00         \$147.00           1         1         4         8         147.00           1         1         4         8         147.00         1	Principal         Senior PM         Engineer square         (CAD)           \$242.00         \$193.00         \$147.00         \$121.00           2         2         1         2         2           2         2         1         2         3           \$1,694.00         \$965.00         \$294.00         \$363.00           \$1,694.00         \$965.00         \$294.00         \$363.00           \$1         2         3         \$147.00         \$143.00           \$1         4         8         1         4         1           \$1         4         8         1         2         4         4         1         2         4         4         1         2         1         1         2         1         1         2         1         1         2         2         2         2         2         2         2         2         3 <t< td=""><td>Principal         Senior PM         Engineer Engineer         (CAD)         Planner \$143,00           2         2         2         2           1         2         2         2           2         2         1         2         2           1         2         1         1         1         2           7         5         2         3         0         \$0.00</td><td>  Principal   Senior PM   Engineer   (CAD)   Planner   Coordinator   \$99.00    </td><td>  Principal   Senior PM   Engineer   (CAD)   Planner   Coordinator   Hours    </td></t<>	Principal         Senior PM         Engineer Engineer         (CAD)         Planner \$143,00           2         2         2         2           1         2         2         2           2         2         1         2         2           1         2         1         1         1         2           7         5         2         3         0         \$0.00	Principal   Senior PM   Engineer   (CAD)   Planner   Coordinator   \$99.00	Principal   Senior PM   Engineer   (CAD)   Planner   Coordinator   Hours

# **Detailed Engineering Fee Breakout**

AIRPORT: Lampson Field
Location: Lakeport, California
AIP GRANT No.: 3-06-0117-xxx-2023

ACI PROJECT NUMBER: 236989 DATE: 4/25/23

REV. NO:

	-		DEC	1401
III.	HIL	IAI	DES	IGN

III.	FINAL DESIGN					D. J	Project		
tem		Principal	Senior PM	Project Engineer	Project Planner	Designer (CAD)	Coordinator	Total	Cost
NO.		\$242.00	\$193.00	\$147.00	\$143.00	\$121.00	\$99.00	Hours	Summary
_	State of a contract of the service o	2	4	6		6	6	24	\$3,458.00
1	Incorporate prefim design comments			4		8		13	\$1,749.00
2	Calculate Estimated Quantities		2	4				6	\$974.00
3	Prepare Estimate of Probable Const Cost			12			2	19	\$2,976.00
4	Prepare Engineer's Design Report	1	- 4	4		4	2	11	\$1,463.00
5	Develop Bid Schedules	190		8		4	1	16	\$2,387.00
6	Prepare Final CSPP	!	2	24		60		94	\$12,816.00
7	Prepare 95% Plan Set	2	8			00	8	17	\$2,302.00
7	Prepare 95% Specifications	I.	2	6			1	4	\$586.00
8	Submit 95% Design/Bld Documents for Review		1	2		4	4	15	\$2,096.00
9	Incorporate 95% Design Review Comments	1	2	4		4		6	\$1,164.00
10	Conduct Final Internal Review of Design Documents	2	2	2			4	22	\$3,260.00
11	Prepare and Submit Final Design/Bid Documents	2	4	6		66	8	37	\$5,610.00
12	Prepare and/or Assist with necessary forms	1	10	18			36	284	40,01010
	Estimated Total Man-hours	13	43	100	0	92		204	\$40,841.00
	Summary Costs	\$3,146.00	\$8,299.00	\$14,700.00	\$0.00	\$11,132.00	\$3,564.00		\$40,041,00
	Reimbursables						2 Days	\$59.00	\$118.00
	Meals and Incidental Expenses Per Diem						2 Days	\$98.00	\$196.00
	Lodging Per Diem						1 Days	\$110,00	\$110.00
	Rental Car						0 Miles	\$0.625	\$0.00
	Mileage						2 Trips	\$750.00	\$1,500.00
	Airfare		(16)	A				Actual Cost	\$0.00
	Misc Expenses						Total Final De		\$42,765.00
							TOTAL TAIGE DE	use	\$42,760.00

VI. PROJECT CLOSEOUT

VI. PROJECT CLOSEOUT	Principal	Senior PM	Project	Field Eng	Designer	Project Coordinator	Total	Cost
No.	\$242.00	\$193.00	Engineer \$147.00	Supervisor \$147.00	(CAD) \$121.00	\$99.00	Hours	Summary
	\$242.00	3173.00	4	4		4	11	\$1,612.00
1 Assist Spansor with Grant Closeout		2	4	0	0	4	11	
Estimated Total Man-hours Summary Costs	\$242.00	\$386.00	\$588.00	\$0.00	\$0.00	\$396.00		\$1,612.00
Reimbursables						0 Days	\$59.00	\$0.00
Meals and Incidental Expenses Per Diem						0 Days	\$98.00	\$0.00
Lodging Per Diem						0 Days	\$110.00	\$0.00
Rental Car						0 Miles	\$0.625	\$0.00
Mileage						O Trips	\$750.00	\$0.00
Airfare							Actual Cost	\$0.00
Misc Expenses							ct Closeout:	\$1,612.00
							use	\$1,610.00

#### VII. SPECIAL SERVICES

		C	Project	Project	Designer	Project	Total	Cost
ltem	Principal	Senior PM	Engineer	Planner	(CAD)	Coordinator	99500000	VWHOLDODODECUS)
No.	\$242.00	\$193.00	\$147.00	\$143.00	\$121.00	\$99.00	Hours	Summary
	2			12	6		20	\$2,926.00
1 Prepare Categorical Exclusion Form	- 4/					48	62	\$7,184.00
2 Assist Sponsor with DBE Program	2	4	8					
Estimated Total Man-hours	4	4	8	12	6	48		*** *** ***
Summary Cos	ts \$968.00	\$772.00	\$1,176.00	\$1,716.00	\$726.00	\$4,752.00		\$10,110.00

SPECIAL SERVICES	\$17.97
Topographical/Land Survey	\$30,00
Geotechnical Investigation	Total Special Services: \$58,087