

**SUPPLEMENTAL AGREEMENT FOR ASSIGNED PROJECT**

Consultant: MEAD & HUNT, INC., a Wisconsin corporation authorized to do business in California

Project Name: Airport Pavement Management System (APMS) Study

The Project Narrative for Airport Pavement Management System (“Project”), a copy of which is attached hereto as Exhibit “A” and incorporated herein by this reference, and Consultant’s proposal dated June 2025 , a copy of which is attached hereto as Exhibit “B” and incorporated herein by this reference, shall constitute a supplement to the Master for Professional Consultant Services Agreement for General Aviation Airport Design and Construction Management Consultant by and between City and Consultant dated January 11, 2022 (the “Agreement”). Consultant agrees to perform the services described in the Project Narrative within the time set forth in the Notice to Proceed for a not-to-exceed amount of Ninety-Nine Thousand Seven Hundred Eight Dollars (\$99,708.00) unless otherwise modified by Change Order. Performance of the services shall be subject to the terms and conditions contained in the Agreement.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_.

CITY OF RIVERSIDE, a California charter city and municipal corporation

MEAD & HUNT, INC., a Wisconsin corporation authorized to do business in California

By: \_\_\_\_\_  
City Manager

By: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Title: \_\_\_\_\_

ATTEST:

By: \_\_\_\_\_  
City Clerk

CERTIFIED AS TO AVAILABILITY OF FUNDS:

By: \_\_\_\_\_  
Chief Financial Officer

APPROVED AS TO FORM:

By \_\_\_\_\_  
Deputy City Attorney

CA #312638 SBM/jv 11/10/25

## EXHIBIT “A”

### PROJECT NARRATIVE

Prepare an Airport Management System (APMS) study (Project) for Riverside Municipal Airport (Airport or Sponsor). The term APMS can be used interchangeably with Pavement Management Program (PMP) and Pavement Maintenance-Management Program (PMMP). The methods and techniques used in preparation of the APMS shall be in conformance with Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5380-7B, Airport Pavement Management Program (PMP). The APMS is a set of defined procedures for collecting, analyzing, maintaining, and reporting pavement data. Federally obligated airports should perform a detailed inspection of airports every year, or every three (3) years if a Pavement Condition Index (PCI) survey is performed. The APMS study will cover all Sponsor-owned pavement at the Airport. FAA guidance requires the Sponsor to establish and perform a Pavement Reclassification Rating (PRC) analysis, which can be included as part of the APMS study. The PCR analysis will be conducted on all runway and taxiway pavements.

EXHIBIT "B"  
CONSULTANT'S PROPOSAL

**RIVERSIDE MUNICIPAL AIRPORT (RAL)**  
**Airport Pavement Management System (APMS) Study**  
**Engineering Design Scope of Services**

**June 2025**

**PROJECT OVERVIEW**

This Scope of Services details the engineering design services to be provided by Mead & Hunt, Inc. (Consultant) as described herein, to prepare an Airport Pavement Management System (APMS) study (Project) for Riverside Municipal Airport (Airport or Sponsor). The term APMS can be used interchangeably with Pavement Management Program (PMP) and Pavement Maintenance-Management Program (PMMP). The methods and techniques used in preparation of the APMS shall be in conformance with Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5380-7B, *Airport Pavement Management Program (PMP)*. The APMS is a set of defined procedures for collecting, analyzing, maintaining, and reporting pavement data. Federally obligated airports should perform a detailed inspection of airports every year, or every three (3) years if a Pavement Condition Index (PCI) survey is performed. The APMS study will cover all Sponsor-owned pavement at the Airport.

FAA guidance requires the Sponsor to establish and perform a Pavement Classification Rating (PCR) analysis, which can be included as part of the APMS study. The PCR analysis will be conducted on all runway and taxiway pavements. To derive PCR values, the Consultant will have to utilize available geotechnical reports and record information. To determine a PCR correctly, it is critical to have an accurate record of existing pavement sections and subsurface soil strength information. In areas for which record information is not available, or the pavement section information is limited or variable, the Consultant will decide the PCR value based on the "Using Aircraft Method." For this method, the Sponsor is responsible for providing information on the Aircraft Fleet Mix for the specific pavements. PCR calculations will be performed using the FAARFIELD program in accordance with FAA AC 150/5335-5D, *Standardized Method of Reporting Airport Pavement Strength - PCR*.

**Summary of Services**

TASK 1 – Project Management

TASK 2 – APMS Study

TASK 3 – Geotechnical Investigation

TASK 4 – PCR Calculations and Analysis

TASK 5 – Reporting

**Summary of Deliverables**

- 1) AutoCAD drawing graphically showing condition ratings of the pavement.
- 2) Draft APMS Report
- 3) Final APMS Report

## SCOPE OF SERVICES

The following details the Scope of Services to be provided by the Consultant upon receiving a Notice to Proceed (NTP) from the Sponsor.

### TASK 1: PROJECT MANAGEMENT

#### 1.1 PROJECT MANAGEMENT AND COORDINATION

Project management tasks will consist of the following:

##### 1.1.1 Project Setup

Consultant's Project Manager (PM), Administrative and Accounting staff will setup the internal Project database for finance tracking, and file management.

##### 1.1.2 Prepare Project Management Plan – NOT IN CONTRACT (NIC)

##### 1.1.3 Prepare Schedule

The PM and Project Team will prepare a schedule to complete the Project elements upon receiving the NTP from the Sponsor. This schedule will be updated throughout the Project, as necessary based on review times by the Sponsor and Airport Staff.

##### 1.1.4 Coordinate Internal Project Team

The PM will assign the Design Team to the Project. Once a Project team is established, the PM will implement a task coordination program to assign specific responsibilities to team members. Throughout the design, the PM will coordinate and monitor internal work progress.

##### 1.1.5 Quality Control (QC) Program

The PM will implement a Quality Control (QC) program. As part of this program, the PM will assign both QC and Quality Assurance (QA) Senior Project Engineering team members to the Project.

##### 1.1.6 Invoices

The PM will maintain a Project budget spreadsheet to track costs on a monthly basis. At the beginning of each month, the PM will review accrued costs from previous month and work with accounting staff to prepare invoices for the County. The invoices will be submitted in accordance with the Sponsor's standard invoice requirements. The invoices will include cost breakdowns referencing the items in this scope of work and indicate percent complete for each item. It is anticipated that five (5) invoices will be prepared during this Project.

#### 1.2 PROJECT MEETINGS AND COMMUNICATION

The Consultant Project Team will participate in meetings and phone calls during the Project. Meetings and communication items will be as follows:

##### 1.2.1 Internal Project Kickoff Meeting

The PM will prepare for and conduct a meeting with the internal design team to present the Project including but not limited to team member assignments, Project budget, design

schedule, major Project elements, and internal protocol. Up to four (4) members from the Consultant Team will attend.

#### 1.2.2 Project Kickoff Meeting with Sponsor Airport Staff

The Consultant Project Team will prepare for and conduct a meeting with the Sponsor Airport Staff to present the Project, including but not limited to, introductions of the Project Team, design schedule, and major Project elements. Up to two (2) members from the Consultant Team will attend (anticipated to consist of Senior Project Engineer and PM). The meeting is anticipated to be held Virtually. The Consultant will prepare an agenda to support the meeting, as well as exhibits, as necessary. The Consultant Project Team will collaborate to create meeting minutes and distribute via email to all that attended the meeting.

#### 1.2.3 Internal Progress Meetings

The PM will conduct meetings with the internal Project team to discuss the schedule and work progress. Up to four (4) members from the Consultant Team will attend each meeting. Up to two (2) meetings are anticipated during this Project.

#### 1.2.4 Progress Meetings with Sponsor Airport Staff

The PM will conduct meetings with the Sponsor Airport Staff to discuss the Project schedule, work progress, and coordination items. These meetings will be scheduled as needed during the Project. Up to two (2) members from the Consultant Project Team will attend each meeting (anticipated to consist of Senior Project Engineer and PM). Up to two (2) meetings are anticipated during this Project. The meetings are anticipated to be held virtually.

#### 1.2.5 General Communication with Sponsor Airport Staff

The Consultant Project Team will communicate with the Sponsor Airport Staff throughout the Project as needed via phone calls or email in addition to the meetings listed herein.

## **TASK 2: APMS STUDY**

### 2.1 UPDATE EXISTING PAVEMENT INVENTORY

The Consultant will update the inventory of existing pavement and, if available, obtain pavement construction history from any previous APMS reports or available Sponsor records. The Sponsor shall make available all pertinent pavement record information to the Consultant. Prior to starting work, the Consultant will work with the Sponsor to confirm the naming convention of the various pavement areas. The following will be depicted:

- a) Identification of all Airside runways, taxiways, taxilanes, and aprons divided into sections having similar properties. Landside pavement and roads will not be included in the analysis.
- b) Dimensions and areas of pavements and pavements sections.
- c) Type of pavement surface.
- d) Year of construction and most recent rehabilitation (if known)

## 2.2 VISUAL CONDITION SURVEY

The Consultant will conduct a visual condition survey of all Sponsor-maintained pavement area (airfield and landside) to identify and quantify pavement distresses. The survey will consist of measuring length and area of various distresses as defined in the distress manuals provided with FAA AC 150/5380-7B. Measurements will be taken within sample units for each area of differing condition, which will be used to extrapolate the total quantity of the area. Up to three (3) members from the Consultant's Team are anticipated to perform the visual condition survey for up to four (4) days of site investigation (anticipated to be the Senior Engineer, Engineer II, and Engineer I).

## 2.3 GENERATE PAVEMENT CONDITION RATINGS

The Consultant will generate the current Pavement Condition Index (PCI) ratings for each paved area based upon the visual condition survey and the Consultant's judgement of the pavement condition. The Consultant will utilize the FAA PAVEAIR PMP software to perform PCI calculations. PAVEAIR is a free, web-based solution that meets the requirements of FAA AC 150/5380-7B.

The Consultant will prepare an AutoCAD drawing that graphically illustrates condition ratings of the pavement for electronic submittal.

## 2.4 MAINTENANCE, REHABILITATION, AND REPAIR RECOMMENDATIONS

Based upon the results of the pavement inspection and analysis, the Consultant will prepare pavement maintenance, rehabilitation, and repair recommendations for the next twenty (20) years.

# TASK 3: GEOTECHNICAL INVESTIGATION

## 3.1 COORDINATION FOR GEOTECHNICAL WORK

The Consultant will collect data, review as-built plans, and compile available existing geotechnical information in order to gather information on existing soil conditions and past geotechnical or pavement test results. Coordination will be done with the geotechnical subconsultant to schedule work and establish any work constraint parameters.

The Consultant will determine the type and frequency of geotechnical testing required for the Project. The Consultant will use this information to perform the following tasks:

- a) Determine soil boring locations and frequency of testing;
- b) Develop a project sketch showing location and coordinates of borings; and
- c) Determine soil sampling locations and types of soils testing required.

## 3.2 FIELD WORK AND LABORATORY TESTING (SUBCONSULTANT: TWINING)

The geotechnical field work and laboratory testing will be coordinated and performed by Twining, Inc. (Twining) as subconsultant to the Consultant. The geotechnical field work and laboratory testing shall include the following:

- a) Soil Investigation, including two (2) borings and twenty-three (23) pavement corings;
- b) Classification of pavements and soils encountered; and
- c) Two (2) California Bearing Ratio (CBR) tests at 95 percent and 100 percent compaction.

Refer to Twining's proposal in *Attachment 1*.

### 3.3 ANALYZE DATA

After receiving the testing report from the geotechnical firm, the Consultant will analyze the data and any existing previous geotechnical data. This effort will include the following:

- a) Review geotechnical findings;
- b) Verify the type and depths of pavement in each area; and
- c) Prepare pavement data and soil information for incorporation into the PCR analysis.

## TASK 4: PCR CALCULATIONS AND ANALYSIS

### 4.1 PCR CALCULATIONS

The Consultant will work with the Sponsor to prepare and develop PCR values utilizing both the "Technical Evaluation" methodology, based on pavement section information from as-builts and from the geotechnical investigation under this scope, and the "Using Aircraft Method," if information for the pavement area is unknown.

The Consultant will perform PCR calculations for all airfield pavements using the FAARFIELD program in accordance with FAA AC 150/5335-5D, *Standardized Method of Reporting Airport Pavement Strength - PCR*.

### 4.2 AIRCRAFT FLEET MIX ANALYSIS

The Consultant will work with the Sponsor to prepare and confirm the Aircraft Fleet Mix. The fleet mix shall be used for the analysis on runways, and taxiways, and then modified / reduced as necessary for the ancillary pavement areas and based on actual use.

- a) If aircraft traffic data is not available on the FAA Traffic Flow Management System Counts website, the Consultant will rely on the Sponsor to provide the most dependable traffic information available. The information may be obtained from the Airport Traffic Control Tower (ATCT) counts, Fixed Based Operator (FBO) counts, and based aircraft information.
- b) The Consultant Project Team will compile the available information and develop a draft fleet mix for the County Airport Staff's review and approval.
- c) The fleet mix will be the basis for the final PCR calculation and determination.

### 4.3 PCR MODELS AND PCR CALCULATIONS

Up to twenty-five (25) PCR models will be determined for the following pavement areas at the Airport:

- a) Runway (5); and
- b) Taxiways (14).
- c) Apron (6).

#### 4.3.1 PCR Calculations

The Consultant Project Team will perform PCR calculations for all airfield pavements using the FAA FAARFIELD 2.0 Program in accordance with FAA AC 150/5335-5D, *Standardized Method of Reporting Airport Pavement Strength-PCR*.

## **TASK 5: REPORTING**

### **5.1 DRAFT APMS REPORT**

The Consultant shall prepare a draft report detailing analysis and recommendations and submit an electronic copy of the draft report to the Sponsor for review. The contents of the APMS report will be as follows:

- a) Pavement History
- b) Visual condition summary, including distress description and photos for each area.
- c) Pavement condition summary, including PCI ratings for each area.
- d) Pavement maintenance recommendations, including itemized cost estimates.

Exhibits will also be attached to the report, which will include the following:

- a) Pavement feature map
- b) Pavement section history table
- c) Pavement distress table
- d) Pavement condition map
- e) Maintenance history and programming table
- f) Recommended projects map
- g) PCR evaluation report

### **5.2 FINAL REPORT**

After the Sponsor's review, the Consultant shall incorporate the Sponsor's comments, finalize, and provide an electronic copy of the final report to the Sponsor. The Consultant shall also distribute electronic copies to the FAA and Caltrans Division of Aeronautics.

## **SERVICES PROVIDED BY THE SPONSOR AND EXCLUDED SERVICES**

The Sponsor and Consultant agree that the following items will be provided by the Sponsor and, if added to the Consultant's work, will be considered as extra services:

- 1) Any environmental analyses.
- 2) Any fees, easements, or permit fees from State, County, or utility companies, and others.
- 3) Provision of access and airside escorts for visual inspection team and Notices to Air Missions (NOTAMs) for pavement closures.
- 4) Furnishing of data including reports, "as-built" drawings, and other information related to the APMS study.
- 5) Review of draft documents from the Consultant within a reasonable amount of time, with review of comments in writing in a single package representing all comments.
- 6) Use of PAVER or MicroPAVER computer program(s) for the preparation of the analysis.
- 7) Geotechnical investigation.
- 8) Protection of Consultant-supplied digital information or data, if any, from contamination, misuse, or changes; and
- 9) Any services not covered under this Scope of Service.

- 10) Escort or localized taxiway / runway closure for completion of pavement inspections within the Tower-Controlled Movement Area

## **SCHEDULE**

The draft report submission will be completed within 90 calendar days of the NTP. The final report shall be submitted within 30 calendar days of receiving the Sponsor's written comments.

## **COMPENSATION FOR SERVICES**

Payment for all work outlined in this Scope of Services shall be a lump sum of **Ninety-Nine Thousand Seven Hundred Eight Dollars (\$99,708.00)**. This fee shall include labor, materials, expenses, and incidentals necessary to complete the work as described herein. The APMS Engineering Services Cost Estimate is included as *Attachment 2* to this Scope of Services. Payments will be made monthly based on the percentage of work completed.

Payments for any additional services requested by the Sponsor will be performed on a time-and-expense basis in conformance with the current *Mead & Hunt, Inc. California Standard Billing Rate Schedule 2025*, included as *Attachment 3* to this Scope of Services. The Consultant will establish the budget for additional services prior to the start of work and may not exceed the budget without written authorization from the Sponsor.

## **END OF SCOPE OF SERVICES**

### **ATTACHMENTS:**

*Attachment 1 – Twining Proposal*

*Attachment 2 – Engineering Design Cost Estimate*

*Attachment 3 – Mead & Hunt, Inc. California Standard Billing Rate Schedule 2025*



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April 12, 2024  
Proposal No. 24-0747

Mr. Rafael Gonzalez, PE  
Mead & Hunt  
3110 East Guasti Road, Suite 330  
Ontario, CA 91761

**Subject: Proposal to Perform Geotechnical Pavement Investigation**

**Project:** Riverside Municipal Airport - Airport Pavement Management System Study  
Riverside Municipal Airport  
6951 Flight Road  
Riverside, CA 92504

Dear Mr. Gonzalez:

Twining, Inc. (Twining) is pleased to submit this proposal to perform a **geotechnical pavement investigation** for the Airport Pavement Management System Study at the Riverside Municipal Airport in Riverside, California. We appreciate the opportunity to provide a proposal to be a part of your project.

### **DESCRIPTION OF PROPOSED PROJECT**

We understand that Mead & Hunt intends to perform investigations on the existing pavement and subgrade material of two borings and twenty three pavement corings. Plans and specifications were not available at the time of this proposal.

We understand that work will be performed during the daytime within an active Air Operations Area (AOA), and the closure of the runway may be required for the work to be performed.

### **SCOPE OF SERVICES**

Based on our understanding of the proposed project, the following scope of services will be performed:

- Task 1 – Project Startup, Marking the Locations & Utility Clearance
- Task 2 – Coordinate and Perform Field Exploration
- Task 3 – Perform Geotechnical Laboratory Testing
- Task 4 – Prepare Summary Report

The remainder of this section describes each of the above tasks and our approach to completing the tasks.

#### ***Task 1 – Project Startup, Marking the Locations & Utility Clearance***

No excavation permit or safety meeting is required from the Airport. Before starting our exploration program, we will conduct a field reconnaissance. We'll meet the client representative and mark the locations of proposed pavement cores/boreholes with the client's approval. We will coordinate with the Airport to obtain any necessary clearances to gain access and perform work at the site. As required by law, we will notify

Underground Service Alert (USA) regarding the proposed subsurface exploration locations at least 72 hours before drilling.

### ***Task 2 – Coordinate and Perform Field Exploration***

Two pavement borings at a depth of 10 feet will be drilled using an electric-powered core drill and a 4-inch diameter hand augering system. The pavement cores will be taken first and the two borings will then be advanced to 10 feet below the surface at these selected locations. A visual description of the subsurface material encountered will be logged for information only.

Twenty-three pavement cores will be performed using an electric-powered core drill equipped with a 4-inch diameter core bit. The pavement cores will be extracted and measured with a tape measure. The pavement cores shall be deep enough to identify the existing pavement section inclusive of bound and unbound layers as required by the RFP. Bulk samples of the excavated materials will be collected and transported to our laboratory for observation and testing.

Immediately upon completion of drilling and sampling, the boreholes and corings will be backfilled with excess soil cuttings or imported coarse-grained material then tamped down for compaction. The cores will be discarded once measured and photographed, and the core hole will be patched with rapid-setting concrete.

We will conduct the drilling and sampling in general accordance with applicable American Society of Testing and Materials (ASTM) standards. At the completion of the drilling, we will transport the recovered soil samples to our laboratory for testing and observation.

We understand that this is not a geotechnical investigation program, and no engineering analysis or recommendations are required. All the data and laboratory testing will be informational only for future purposes.

### ***Task 3 – Perform Geotechnical Laboratory Testing***

Samples obtained from the exploratory borings will be transported to Twining, Inc. for classification and testing. Laboratory tests will be performed on selected samples obtained from the borings to aid in the classification of the subgrade soils. The laboratory tests may include the following, dependent on the soils encountered at the project site:

- (2) Soil classification testing including sieve analyses;
- (2) Atterberg limits, for classification;
- (2) Maximum Density-Optimum Moisture Content;
- (2) California Bearing Ratio Test at 95 and 100 percent of Maximum Density.

### ***Task 4 – Prepare Summary Data Report***

This is not a geotechnical investigation program, and no engineering analysis or recommendations are required. A letter report summarizing the findings, including the base thicknesses, the soil types encountered, and the laboratory testing results, will be prepared. A graphic log of soil borings conducted to a depth of 10 feet will be prepared. The log will include location, date performed, type of exploration, depth of materials,



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sample identification numbers, classification, and water table. A copy of the report signed and stamped by a California registered professional engineer will be provided.

### **SCHEDULE**

We can begin with Task 1 as soon as we receive the signed Task Order. We can start the coring and sampling within approximately one week upon receiving the appropriate clearances to perform work at the airport. We assume that our fieldwork will be completed in 4 business days. We have budgeted four 8-hour days of fieldwork. A draft letter report will be submitted within 10 to 14 days after fieldwork is completed. A final letter report will be issued within 2 weeks of receiving Airport comments.

### **ESTIMATED FEE**

We propose to provide Tasks 1 through 4 as described in this proposal for a lump-sum cost of **\$21,516.00**. Our fee is broken down as shown in Table 1.

Our estimated fees assume that the testing will be performed between 5 am to 5 pm on weekdays. If any standby time is incurred during our fieldwork as a result of airport operations, and we are not able to finish the work within the proposed amount of time, we propose to bill the extra fees on a time-and-materials basis. Should the fees be insufficient to cover the necessary effort due to significantly different conditions from those assumed during the preparation of this proposal, for example, the encountering of hazardous materials or buried structures, we will contact you prior to undertaking additional work. The additional scope, which would then be required, will be performed only after you have given your authorization for the additional scope and fees.

Our estimated fee for the proposed scope of services is based on the attached 2023-2024 fee schedule. Any authorized services beyond the proposed scope will also be based on this fee schedule.



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Proposed Scope of Services - Table 1				
Proposed Service	Assumed Quantity			
	Qty	Unit	Rate	Amount
<b>Task 1 - Project Startup, Marking the Locations and Utility Clearance</b>				
Project Manager - Site Reconnaissance / Boring Layout	4	hour	\$ 220.00	\$ 880.00
Project Engineer - Scheduling, Marking Boring/Coring Locations, Utility Clearance	10	hour	\$ 220.00	\$ 2,200.00
<b>Subtotal:</b>				<b>\$ 3,080.00</b>
<b>Task 2 - Coordinate and Perform Field Exploration</b>				
Coring Technician - Coring (2 Asphalt Core Technician x 4 days x 8 hours each day = 48 hours)	64	hour	\$ 134.00	\$ 8,576.00
Core Rig Equipment Fee	4	days	\$ 500.00	\$ 2,000.00
<b>Subtotal:</b>				<b>\$ 10,576.00</b>
<b>Task 3 - Perform Geotechnical Laboratory Testing</b>				
Sieve Analysis with #200 Wash (ASTM C136) - Subgrade Analysis	2	each	\$ 150.00	\$ 300.00
Atterberg Limits / Plasticity Index (ASTM D4318) - Subgrade Analysis	2	each	\$ 160.00	\$ 320.00
Maximum Density-Optimum Moisture Content (ASTM D1557)	2	each	\$ 190.00	\$ 380.00
California Bearing Ratio Test (ASTM D1883)	2	each	\$ 550.00	\$ 1,100.00
<b>Subtotal:</b>				<b>\$ 2,100.00</b>
<b>Task 4 - Prepare Summary Data Report Post-Report Consultation</b>				
Staff Engineer- Prepare Test Reports and Boring Logs	20	hour	\$ 195.00	\$ 3,900.00
Registered Engineer - Report Review	4	hour	\$ 245.00	\$ 980.00
Project Engineer - Post-Report Consultation	4	hour	\$ 220.00	\$ 880.00
<b>Subtotal:</b>				<b>\$ 5,760.00</b>
<b>LUMP SUM TOTAL</b>			<b>\$</b>	<b>21,516.00</b>



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### LIMITATIONS

Please notify us immediately if the proposed scope of services does not meet your current needs, or if any significant changes are made to the proposed development so that we can revise our scope of services. Revision of the scope of services may affect the estimated fee.

There are inherent risks related to subsurface explorations. The estimated fee in this proposal is not sufficient to cover costs associated with the repair of damaged underground utilities. Twining, Inc. will not be responsible for the repair or the cost of repairs on any damaged underground utilities unless it is due to the sole negligence of Twining.

Our field explorations will not include sampling, testing, or assessment of toxic or hazardous substances if such are encountered, or evaluation of other environmental issues. If foreign or odorous materials are encountered during the subsurface exploration program, the field operation will be terminated, and the client will be advised of the condition.

Please note that our scope of services does not include geotechnical recommendations or review of grading or construction plans. However, if requested, these services can be provided under a separate proposal.

The proposed scope of services is consistent with the level of care and skill ordinarily exercised by engineering professionals with experience in this area. No other warranty, either expressed or implied, is made.

### CLOSURE

If our proposed scope of services and the attached terms and conditions are acceptable, please sign and return a copy of this proposal to us. Should you have any questions or comments, please contact the undersigned at your convenience. We can be reached at (909) 383-6660.

Respectfully submitted,  
**TWINING, INC.**

Lee Bainer  
Project Manager

Sammy Daghighi, PE  
Vice President

Attachments: Proposal Acceptance Block/ Terms and Conditions

**Riverside Municipal Airport  
 Airport Pavement Management System (APMS) Study  
 Engineering Design Services Cost Estimate**

Date: 6/26/2025

PHASES and TASKS	Mead & Hunt (labor hours and rates)								Subconsultant fee + 15% markup	Expenses			Total Cost	
	Senior Associate	Sr Proj Engineer	Project Engineer	Senior Engineer	Engineer III	Engineer II	Engineer I	Administrative Assistant	Twining	Mileage (Per Mile)	Meals	Resproduction and Shipping		
	Mead & Hunt California Standard Billing Rate Schedule 2025	\$362	\$298	\$260	\$240	\$184	\$172	\$154	\$132	1	\$0.700	\$25.00		1
<b>TASK 1 - PROJECT MANAGEMENT</b>														
1.1	Project Management and Coordination													
1.1.1	Project Setup	1	1					1						\$ 670.00
1.1.2	Prepare Project Management Plan (PMP) - NIC													\$ -
1.1.3	Prepare Schedule			1	2									\$ 608.00
1.1.4	Coordinate Internal Project Team			2	2									\$ 848.00
1.1.5	Quality Control (QC) Program	1		2	2									\$ 1,146.00
1.1.6	Prepare Invoices - up to five (5) Anticipated	2		5				2						\$ 2,060.00
1.2	Project Meetings and Communication													
1.2.1	Internal Project Kickoff Meeting	1		1	1			1						\$ 876.00
1.2.2	Project Kickoff Meeting with Sponsor Airport Staff	1		2				2						\$ 1,042.00
1.2.3	Internal Progress Meetings - up to two (2) anticipated	2		3	1			1						\$ 1,654.00
1.2.4	Progress Meetings with Sponsor Airport Staff - up to two (2) anticipated	2		3				1						\$ 1,448.00
1.2.5	General Communication with Sponsor Airport Staff	4		8										\$ 3,112.00
<b>Subtotal Task 1 - Project Management</b>		<b>0</b>	<b>14</b>	<b>0</b>	<b>28</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$ -</b>	<b>\$ 13,464.00</b>
<b>TASK 2 - APMS STUDY</b>														
2.1	Update Existing Pavement Inventory		1		2	4	12	16						\$ 6,042.00
2.2	Visual Condition Survey				32		32	32			140	12		\$ 18,510.00
2.3	Generate Pavement Condition Ratings		1		2	8		16						\$ 4,714.00
2.4	Maintenance, Rehabilitation, and Repair Recommendations		2	2	4	8	12	16					\$ 50.60	\$ 8,126.60
<b>Subtotal Task 2 - APMS Study</b>		<b>0</b>	<b>4</b>	<b>2</b>	<b>40</b>	<b>20</b>	<b>56</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>140</b>	<b>12</b>	<b>\$ 50.60</b>	<b>\$ 37,392.60</b>
<b>TASK 3 - GEOTECHNICAL INVESTIGATION</b>														
3.1	Coordination for Geotechnical Work				1			2						\$ 548.00
3.2	Field Work and Laboratory Testing (Subconsultant: Twining)									\$ 24,743.40				\$ 24,743.40
3.3	Analyze Data		1		2	2								\$ 1,146.00
<b>Subtotal Task 3 - Geotechnical Investigation</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>\$ 24,743.40</b>	<b>0</b>	<b>0</b>	<b>\$ -</b>	<b>\$ 26,437.40</b>
<b>TASK 4 - PCR CALCULATIONS AND ANALYSIS</b>														
4.1	PCR Calculations		1		2	4	8							\$ 2,890.00
4.2	Aircraft Fleet Mix Analysis	1			2	4								\$ 1,578.00
4.3	PCR Models and PCR Calculations		1	2	4	6	4							\$ 3,570.00
<b>Subtotal Task 4 - PCR Calculations and Analysis</b>		<b>1</b>	<b>2</b>	<b>2</b>	<b>8</b>	<b>14</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$ -</b>	<b>\$ 8,038.00</b>
<b>TASK 5 - REPORTING</b>														
5.1	Draft APMS Report		1	2	4	8	6	16	8				\$ 100.00	\$ 7,902.00
5.2	Final Report		1	1	4	6	8	12	4				\$ 100.00	\$ 6,474.00
<b>Subtotal Task 5 - Reporting</b>		<b>0</b>	<b>2</b>	<b>3</b>	<b>8</b>	<b>14</b>	<b>14</b>	<b>28</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$ 200.00</b>	<b>\$ 14,376.00</b>
<b>TOTAL PROJECT BUDGET</b>													<b>\$ 99,708.00</b>	

**MEAD & HUNT, Inc.**  
**Standard Billing Rate Schedule**  
**Effective January 1, 2025**

**Standard Billing Rates**

• Clerical .....	\$104.00 / hour
• Technical Editor .....	\$138.00 / hour
• Accounting, Administrative Assistant .....	\$132.00 / hour
• Technician I, Technical Writer .....	\$122.00 / hour
• Technician II, Surveyor - Instrument Person .....	\$140.00 / hour
• Technician III .....	\$164.00 / hour
• Technician IV .....	\$174.00 / hour
• Senior Technician .....	\$216.00 / hour
• Engineer I, Scientist I, Architect I, Interior Designer I, Planner I .....	\$154.00 / hour
• Engineer II, Scientist II, Architect II, Interior Designer II, Planner II .....	\$172.00 / hour
• Engineer III, Scientist III, Architect III, Interior Designer III, Planner III .....	\$184.00 / hour
• Construction Resident Project Representative (RPR) .....	\$194.00 / hour
• Senior Engineer, Senior Scientist, Senior Architect, Senior Interior Designer, Senior Planner, Construction Manager .....	\$240.00 / hour
• Project Engineer, Project Scientist, Project Architect, Project Interior Designer, Project Planner ....	\$260.00 / hour
• Senior Project Engineer, Senior Project Scientist, Senior Project Architect, Senior Project Interior Designer Senior Project Planner .....	\$298.00 / hour
• Senior Associate, Principal, Senior Client / Project Manager .....	\$362.00 / hour

**Expenses**

- Geographic Information or GPS Systems ..... \$100.00 / day
- Out-Of-Pocket Direct Job Expenses ..... cost plus 15%  
Such as reproductions, sub-consultants / contractors, etc.

**Travel Expense**

- Company or Personal Car Mileage..... \$ IRS rate / mile\*  
*\* Rates will be charged at Current IRS rate*
- Air and Surface Transportation..... cost plus 15%
- Lodging and Sustenance .....

**Billing and Payment**

- Travel time is charged for work required to be performed out-of-office. A minimum of two hours will be billed for any work out-of-office.
- Invoicing is on a monthly basis for work performed. Payment for services is due within 30 days from the date of the invoice. An interest charge of 1.5% per month is made on the unpaid balance starting 30 days after the date of invoice.

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This schedule of billing rates is effective January 1, 2025, and will remain in effect until December 31, 2025, unless unforeseen increases in operational costs are encountered. We reserve the right to change rates to reflect such increases.