

**CONSULTING SERVICES CONTRACT
AEA No. 25-05
Camarillo Airport – FINAL DESIGN SERVICES FOR
RUNWAY 8-26 RECONSTRUCTION**

This is a Contract, made and entered into this September 10, 2024, by and between the COUNTY OF VENTURA, (COUNTY), and WOOLPERT INC., 4454 Idea Center Blvd, Dayton, OH 45230 (CONSULTANT).

This Contract shall be administered for the COUNTY by the COUNTY's Department of Airports. Claims, disputes, or complaints to the COUNTY under this contract must be addressed to the Projects Coordinator located at 555 Airport Way, Suite B, Ventura, CA 93010 by certified mail return receipt requested. This Contract constitutes the entire agreement between the parties regarding its subject matter and supersedes all previous and contemporaneous agreements, understandings and negotiations regarding the subject matter of this Contract. No modification, waiver, amendment or discharge of this Contract is valid unless the same is in writing and signed by duly authorized representatives of both parties.

The parties hereto agree as follows:

1. COUNTY hereby retains CONSULTANT to perform services as provided in the "Scope of Work and Services", attached hereto as "Exhibit A", and the "County of Ventura, Public Works Agency, Consultant's Guide to Ventura County Procedures" as amended, which is on file with the County of Ventura, Public Works Agency, and which by reference is made a part hereof. This Contract shall take precedence over the Guide in case of conflicting provisions, otherwise they shall be interpreted together.
2. All work under this Contract, and any portion thereof separately identified, shall be completed within the time provided in the "Time Schedule", attached hereto as "Exhibit B". COUNTY shall issue a suspension of the contract time whenever CONSULTANT is delayed by action or inaction of COUNTY and CONSULTANT promptly notifies COUNTY of such delays.
3. Payment shall be made monthly, within 30 days from when the COUNTY receives an invoice along with a COUNTY claim form, or 10 business/working days from when the Auditor-Controller's office receives the invoice and COUNTY claim form, in accordance with the "Fees and Payment", attached hereto as "Exhibit C".
4. COUNTY, Federal Aviation Administration (FAA), Comptroller General of the United States or any duly authorized representative shall have the right to review the work being performed by CONSULTANT under this Contract at any time during COUNTY's usual working hours. A review of the work in progress shall not relieve the CONSULTANT of responsibility for the accuracy and completeness of the work performed under this Contract.

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5. COUNTY or any duly authorized representative shall have the right to review the work being performed by CONSULTANT under this Contract at any time during COUNTY's usual working hours. A review of the work in progress shall not relieve the CONSULTANT of responsibility for the accuracy and completeness of the work performed under this Contract.
6. This Contract is for the professional services of CONSULTANT and is non-assignable by CONSULTANT without prior consent by COUNTY in writing except that CONSULTANT may assign money due or which will accrue to CONSULTANT under this Contract. If given written notice, COUNTY will recognize such assignment to the extent permitted by law, but any assignment of money shall be subject to all proper setoffs and withholdings in favor of the COUNTY and to all deductions provided for in this Contract. All money withheld, whether assigned or not, shall be subject to being used by COUNTY for completion of the work, should the Contract be in default. Such professional services shall be actually performed by, or shall be immediately supervised by a Vice President of CONSULTANT.

In performing these professional services, CONSULTANT is an independent contractor and is not acting as an agent or employee of COUNTY.

7. COUNTY retains the right to terminate this Contract for any reason prior to completion by notifying CONSULTANT in writing, and by paying charges accumulated prior to such termination. Such charges shall be limited to the maximum fee specified in "Exhibit C" for completion of any separately identified phase of the work which, at the time of termination, has been started by request of COUNTY.
8. On completion or termination of Contract, COUNTY shall be entitled to immediate possession of, and CONSULTANT shall furnish on request, all computations, plans, correspondence and other pertinent data gathered or computed by CONSULTANT for this particular project prior to any termination. No documents prepared pursuant to this Contract or any modifications thereof shall be copyrighted by CONSULTANT or by COUNTY. CONSULTANT may retain copies of said original documents for CONSULTANT's files.
9. CONSULTANT is authorized to place the following statement on the drawings or specifications prepared pursuant to this Contract:

"This drawing (or These specifications), including the designs incorporated herein, is (are) an instrument of professional service prepared for use in connection with the project identified hereon under the conditions existing on date. Any use, in whole or in part, for any other project without written authorization of JVIATION, shall be at user's sole risk."
10. CONSULTANT owes COUNTY an undivided duty of loyalty in performing the services under this contract. During the term of this agreement CONSULTANT shall not employ or compensate personnel currently employed by COUNTY.

CONSULTANT shall promptly inform COUNTY of any contract, arrangement, or interest that CONSULTANT may enter into or have (other than this Contract) related to the COUNTY's subject project. This includes contracts and arrangements with manufacturers, suppliers,

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contractors or other third parties which possess or seek to obtain a financial interest related to the COUNTY's subject project. In performing services under this Contract, CONSULTANT acknowledges that it may be subject to laws addressing financial conflicts of interest such as the Political Reform Act ("Act"), Government Code section 81000 et seq.

CONSULTANT shall comply with financial disclosure requirements under the Act as directed by COUNTY, and shall not engage in activities that may constitute a conflict of interest under applicable law.

11. This Contract is funded in part by a Federal Aviation Administration (FAA), Airport Improvement Program (AIP) grant. Personnel performing services in the field during construction are required in accordance with Section 1770 et. seq. of the California Labor Code and the Code of Federal Regulations (Davis-Bacon Act) to be paid the higher of determinations of the general prevailing wages for various classes of workers in Ventura County as made by the California Director of Industrial Relations or the U.S. Secretary of Labor.

12. CONSULTANT shall defend, indemnify and hold harmless COUNTY, including the COUNTY's boards, agencies, departments, officers, employees and agents (collectively "Indemnatee"), against any and all claims, lawsuits, judgments, debts, demands or liabilities that arise out of, pertain to, or relate to the CONSULTANT's negligence, recklessness or willful misconduct in the performance of this Contract.

13. Insurance Requirements

a. Without limiting CONSULTANT's duty to indemnify and defend COUNTY as required herein, CONSULTANT shall, at CONSULTANT'S sole cost and expense and throughout the term of this Contract and any extensions thereof, carry one or more insurance policies that provide the following minimum coverage:

- 1) Commercial General Liability insurance shall provide a minimum of \$1,000,000 coverage for each occurrence and \$2,000,000 aggregate coverage.
- 2) Automobile Liability insurance shall provide a minimum of either a combined single limit of \$300,000 for each accident or all of the following: \$100,000 bodily injury per person, \$300,000 bodily injury per accident and \$50,000 property damage
- 3) Worker's Compensation insurance in full compliance with California law for all employees of CONSULTANT in the minimum amount of \$500,000.
- 4) Professional Liability (Errors and Omissions) insurance shall provide a minimum of \$1,000,000 coverage for each occurrence or \$2,000,000 in annual aggregate coverage.

b. CONSULTANT shall notify COUNTY immediately if the CONSULTANT'S general aggregate of insurance is exceeded by valid litigated claims and purchase additional levels of insurance to maintain the above stated requirements. Each type of insurance mentioned herein shall be written by a financially responsible company or companies authorized to do business in the State of California. CONSULTANT agrees to provide COUNTY with copies of certificates of all policies written and each shall contain an endorsement that they are not subject to cancellation without 30 days prior written notice being given to COUNTY by the insurance company or companies writing such insurance. CONSULTANT agrees to name County of

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Ventura and its officials employees and agents as additional insured ("Additional Insureds") on CONSULTANT'S general and automobile liability insurance policies.

All required insurance shall be primary coverage as respects the Additional Insureds, and any insurance or self insurance maintained by the Additional Insureds shall be in excess of CONSULTANT's insurance coverage and shall not contribute to it. CONSULTANT agrees to waive all rights of subrogation against the Additional Insureds for losses arising directly or indirectly from the activities or work performed by CONSULTANT hereunder.

c. Notwithstanding subparagraph 13.a., if the Professional Liability coverage is "claims made", CONSULTANT must, for a period of five (5) years after the date when Contract is terminated, completed or non-renewed, maintain insurance with a retroactive date that is on or before the start date of contract services or purchase an extended reporting period endorsement (tail coverage). COUNTY may withhold final payments due until satisfactory evidence of the tail coverage is provided by CONSULTANT to COUNTY.

14. CONSULTANT shall sign and comply with the statement as set forth in "Exhibit D" hereto. Where the word Contractor is used in "Exhibit D" it shall mean "CONSULTANT".

15. Disputes arising under or related to the performance of the Contract shall be resolved by arbitration unless the COUNTY and the CONSULTANT agree in writing, after the dispute has arisen, to waive arbitration and to have the claim or dispute litigated in a court of competent jurisdiction. Arbitration shall be pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2 of the Public Contract Code and implementing regulations at Chapter 4 (commencing with Section 1300) of Division 2 of Title 1 of the California Code of Regulations.

The arbitration decision shall be decided under and in accordance with California law, supported by substantial evidence and, in writing, contain the basis for the decision, findings of fact, and conclusions of law.

Arbitration shall be initiated by a Complaint in Arbitration made in compliance with the requirements of section 1300 et seq. of Title 1 of the California Code of Regulations.

Where an election is made by either party to use the Simplified Claims Procedure provided under Sections 1340 – 1346 of Title 1 of the California Code of Regulations, the parties may mutually agree to waive representation by Counsel.

Prior to filing a Complaint in Arbitration, the CONSULTANT shall exhaust his administrative remedies by attempting to resolve his dispute with COUNTY's staff in the following sequence:

Project Coordinator
Director of Airports (Director)

CONSULTANT shall initiate the administrative review process no later than thirty (30) days after the dispute has arisen by submitting a written statement describing the dispute and request for relief, along with supporting argument and evidence, to the Project Coordinator. CONSULTANT may appeal the Project Coordinator's decision in writing to the Director not later than seven (7)

days after receipt of the Project Coordinator's decision. The Project Coordinator's and Director's decision shall be in writing. The Director's decision shall be the final decision.

CONSULTANT: WOOLPERT, INC.

Taxpayer No.:20-1391406

Dated: 9/10/2024

DocuSigned by:

88C60044F188434...

Jason Virzi Vice President
Print Name and Title

Dated:

Print Name and Title

COUNTY: County of Ventura

Dated: 9/10/2024


Keith Freitas, Director of Airports

EXHIBIT A**Scope of Services
Camarillo Airport – Design Services
Final Design of Runway 8-26 Reconstruction****I. PROJECT DESCRIPTION**

This project shall consist of preparing Construction Plans, Contract Documents, Technical Specifications, and Engineer's Design Report, along with Design Survey for the Final Design of the Runway 8-26 Reconstruction Project. This scope of work is for the consulting services provided by the Consultant for the County. See Exhibit No. 1 below for the project location.

**EXHIBIT NO. 1**

This project shall consist of the final design of the reconstruction of the 6,013-foot-long Runway 8-26 and approximately 200-foot-long transitional pavement along Taxiways A through E each. The 200-foot-long east and west blast pads will also be reconstructed and the additional paved Runway Safety Area (RSA) and abandoned pavement (2,500 feet in length on the east end and 800 feet in length on the west end) will be removed and graded. During design, the pavement removals required for safety or per FAA design standards will be determined and included in the base bid; additional pavement removals will be considered for a bid alternate. Based on initial investigations, this final design presumes a full-depth reconstruction is the recommended pavement rehabilitation, but this will be confirmed following additional geotechnical testing and pavement design analysis. The reconstruction will correct non-standard runway geometry and address failing pavement areas. The existing

pavement along the runway is showing signs of distress and failure and is creating foreign object debris (FOD) which is hazardous to aircraft and airport users. The improvements to the existing runway are necessary to improve the safety at the airport and increase the useful life of these pavements, as well as to support the current and future fleet mix of the airport.

Runway 8-26 was initially constructed between 1942 and 1958, with overlays in 1955 and 1998. In its existing condition, the runway has a cross-slope from the north edge of pavement to the south edge of pavement. The proposed project will determine if the cross-slope pavement will be maintained or if a crown along the runway centerline will be established. The existing runway is 150-feet wide; however, the runway width will be shortened to 100-feet wide with recommended 20-foot shoulders to meet the current geometry design standards per FAA Advisory Circular 150/5300-13B *Airport Design* given the existing fleet mix. The fleet mix will be analyzed during the final design to determine if any major changes have warranted an increase to the proposed runway width.

The proposed project will also consist of drainage improvements and underdrain infrastructure to meet regional, state, and federal water quality standards. If it is determined that a runway crown will need to be established in design, a drainage system will be implemented on the north side of the runway to convey runoff to the existing catch basin infrastructure on the south side of the runway. Infiltration chambers will then need to be incorporated in design on the south side of the runway to mitigate the stormwater quality to meet MS4 requirements. The establishment of a runway crown will also require the design for the relocation of the Runway End Identifier Lights (REILS) and Precision Approach Path Indicators (PAPIs). Any work on FAA owned equipment will be handled through a reimbursable agreement with the FAA.

A preliminary geotechnical investigation performed by Earth Systems Pacific in 2017 consisted of six (6) bores along Runway 8-26 and revealed that the runway consists of three different pavement sections; the eastern portion is comprised of 8-10-inches of asphalt concrete over 3.5-7-inches of base course, the central portion consists of 9.5-10-inches of asphalt concrete, and the western portion is composed of 2.75-inches of asphalt concrete over 11.25-inches of Portland cement concrete. The existing subgrade California Bearing Ratio (CBR) values along Runway 8-26 based on existing soil density and moisture content ranged from 1 to 22, with the values ranging from 1-3 estimated since the existing soil moisture content and/or density at subgrade was out of the data range. Based on the results of the limited bores, Earth Systems recommended a lime treatment of subgrade soils to reduce the design section and increase the subgrade CBR values. The preliminary geotechnical report also recommended mixing the milled existing asphalt and base course with the subgrade in addition to 4-6% lime treatment to increase the CBR of the subgrade soils to a value of 9. However, additional testing and an updated recommendation will be conducted during the final design to finalize the CBR values, pavement rehabilitation recommendation, and subgrade treatment recommendation with the additional bores. The proposed project will also standardize the pavement section along the runway and ensure FAA design standards are met for the existing and proposed fleet mix.

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The results of the PCN evaluation performed by Dynatest Consulting, Inc. in 2016 was utilized to evaluate the existing pavement conditions. The ACN/PCN ratio was calculated utilizing the COMFAA software and ranged from 1.3 through 0.9 for Runway 8-26, 4.9 for Taxiway A, 1.1 for Taxiway B, 0.1 to 33.0 for Taxiway C, 0.3 to 3.3 for Taxiway D, and 1.1 for Taxiway E. Generally, a ratio above 1.1 is considered problematic for the proposed aircraft mix. The results thus indicated that the existing pavement section is insufficient to support the proposed fleet mix and that a full-depth reconstruction is recommended. The PCN evaluation will be updated to an ACR-PCR value to comply with the newest version of AC 150/5335-5D *Standardized Method of Reporting Airport Pavement Strength – PCR* in the final design utilizing the new geotechnical data.

The full-depth pavement section will be removed and replaced with a traditional pavement section consisting of: P-209 Crushed Aggregate Base and P-401 Bituminous Surface Course. The runway will also be grooved due to the jet operation frequency to meet current FAA design standards, and temporary and permanent pavement markings will be applied.

Due to the decrease in pavement width from 150-feet to 100-feet, the existing runway edge and in-pavement lighting system and airfield guidance signs will need to be removed and replaced, as well as updated to current electrical systems. The electrical vault equipment, including the Constant Current Regulator (CCR), may also need to be updated following an inspection during the design phase.

A topographical and aeronautical survey will be completed for the project area consisting of approximately 195 acres to develop the base files for design, determine utility locations, and map elevations of existing infrastructure. This survey will be utilized to develop the project grading plan, plan set, and project quantities.

This project will be designed assuming it will be funded and constructed in one year; however, if it is determined that funding is not available for construction in one year, then the project will need to be further phased based on available funding and will be incorporated into an additional scope of work. If it is determined that a crowned centerline is required to be established along Runway 8-26, then approximately 1000-foot-long pavement sections along the runway would need to be temporarily constructed in order to tie the transverse grades to the new crowned pavement edges, as well as the new 100-foot-wide pavement to the existing 150-wide pavement, at the end of each construction phase. Temporary electrical infrastructure and stormwater infrastructure may also need to be established due to the decrease in width of the runway pavement section.

The engineering fees for this project will be categorized under **Basic Services**, which includes; 1) Preliminary Design Phase, 2) Design Phase, and Reimbursable Costs During Design, and **Special Services**, which includes; 3) Design Survey Phase and Reimbursable Costs During Survey. Additional services that will be completed by subconsultants to the Consultant, including the proposed geotechnical investigation and aerial imagery acquisition will also be included under **Special Services**. Parts A and B and the three phases are described in more detail below.

II. SCOPE OF SERVICES

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BASIC SERVICES consists of the Preliminary Design Phase and Design Phase (invoiced on a lump sum basis), and On-Site Construction Coordination Phase (invoiced on a cost plus fixed fee basis). Also included are direct subcontract costs for quality assurance testing during construction.

1.0 Preliminary Design Phase

1.01 Coordinate and Attend Meetings with the County and FAA. Meetings with the County and the FAA will take place to determine critical project dates, establish the proposed design schedule and AIP development schedule, review environmental component(s), determine the feasibility of the proposed project and to establish the need for topographical surveying, pavement investigation and/or geotechnical testing. Various meetings during the design phase will also be conducted to review the progress of the design, discuss construction details and proposed time frame of construction and identify any special requirements for the project. One of these meetings will also include meeting with tenants to obtain feedback on the proposed project phasing.

1.02 Prepare Project Scope of Work and Coordinate Contract. This task includes establishing the scope of work through meetings outlined above. Fees will be negotiated with the County and may be subject to an independent fee estimate conducted by a third party hired by the County. This task also includes coordinating with the County on the contract for this project.

1.03 Prepare Preliminary Cost Estimating. Not Applicable. The preliminary cost estimate from the conceptual design will be utilized and refined under Task 2.14.

1.04 Provide Project Management and Coordination. The Consultant shall provide project management and coordination services to ensure the completion of the design. These duties include:

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- Time the Consultant spends planning, organizing, securing and scheduling resources, and providing instruction to staff to meet project objectives as defined in the approved scope of work.
- The Consultant will analyze the budget semi-monthly to ensure budget and staffing needs are on track to meet design schedules within budget.
- Additional items to be accomplished include compiling and sending additional information requested from the office to related parties, maintaining project files as necessary and other items necessary in day-to-day project coordination.
- The Consultant will prepare and submit monthly invoicing.

The Consultant will complete the following tasks:

- Provide the County with a monthly Project Status Report (PSR), in writing, reporting on Consultant's progress and any problems that may arise while performing the work. The PSR must include an update of the project schedule, as described in this section, when schedule changes are expected.
- Submit for acceptance and maintain, a design schedule detailing the scheduled performance of the work.
- Create and maintain a Quality Control Checklist (QCC) for the project. The QCC shall include personnel, project milestone checking and peer review procedures at each phase of the project.

1.05 Review Existing Documents. Not Applicable. The existing documents that were reviewed during the conceptual design will be utilized during final design.

1.06 Coordinate Topographical and Aeronautical Survey. This task includes preparing the requirements, establishing the limits of the survey area, and scheduling time for the survey to be completed. Survey will be performed in-house under Tasks 3.01 and 3.02. The Deputy Project Manager is expected to visit the project site to coordinate the survey activities with the County and the survey team.

1.07 Coordinate Geotechnical Investigation. This task includes preparing the requirements for soils testing, establishing the limits of work, and scheduling a time for testing to be completed. The requirements of the geotechnical investigation shall be established in accordance with FAA AC 150/5320-

6 (current edition), *Airport Pavement Design and Evaluation*. Negotiating with the geotechnical engineering firm for a cost to perform the work is also included in this task. The Deputy Project Manager is expected to visit the project site to coordinate the geotechnical investigation activities with the County and the geotechnical team.

1.08 Coordinate Utility Locating and Potholing. This task includes coordinating with a utility locating/potholing company to locate utilities that might impact this project. Negotiating with the utility locating/potholing firm for a cost to perform the work and providing an on-site representative of the Consultant during the locates/potholing is also included in this task.

1.09 Prepare State Grant Application. This task consists of coordinating with the County on the state grant application, which includes the following:

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- Prepare Project Financial Information.
- Prepare Project Sketch (11" x 17").

The County will submit the grant application to the CALTRANS Aeronautics' Division.

1.10 Prepare Federal Grant Application. This task consists of preparing the federal grant application. The application will be submitted during the initial portion of the project. Preparation of the application includes the following:

- Prepare Federal 424 form.
- Prepare Federal Form 5100 – II thru IV.
- Prepare project funding summary.
- Prepare program narrative, discussing the purpose and need of the work and the method of accomplishment.
- Project sketch (11" x 17").
- Include preliminary cost estimate.
- Include the existing Exhibit "A" Property Map.
- Include the Sponsor's certifications.
- Attach the current grant assurances.
- Include DOT Title VI assurances.
- Include certification for contract, grants and cooperative agreements.
- Include Title VI pre-award checklist.
- Include current FAA advisory circulars required for use in AIP funded projects.

The Consultant shall submit the grant application to the County for approval and signatures. After obtaining the necessary signatures, the County or Consultant shall forward a copy of the signed application to the FAA for further processing.

1.11 Prepare Environmental Documentation. Not Applicable. The FAA has determined that a Categorical Exclusion (CATEX) applies to the project according to FAA orders 1050.1F and 5050.4B. A documented CATEX following current FAA guidance that addressed potential environmental effects resulting from the proposed project was submitted on September 28, 2022 by a different consultant to the County and is awaiting approval. The environmental conditions and scope of the project have not changed since original environmental determination. The environmental exhibit created as part of the previously approved CATEX will be reviewed for accuracy and referenced throughout this project.

1.12 Prepare Disadvantaged Business Enterprise (DBE) Program and Goal. Not applicable. The approved DBE program and goal is from 2021-2024 and the County will prepare the 2025-2028 DBE program and goal.

1.13 Coordinate County/FAA Reimbursable Agreement. A reimbursable agreement is a contractual agreement between the County and FAA for materials, supplies, equipment and services the FAA provides to the County. This task includes providing information to the County for the administration and completion of the reimbursable agreement between the County and FAA, including diagrams/sketches, ROM cost estimates, project schedules, etc.

The process to establish a reimbursable agreement can take on average up to 10-12 months. To avoid unnecessary delays, it is recommended the County initiate this process

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during the planning and project formulation phases of the project. The costs necessary to mitigate any impacts to FAA owned equipment caused by a County's AIP funded development project are eligible for reimbursement under the AIP.

1.14 Prepare Quarterly Performance Reports – Design. Federal Regulation 49 CFR Part 18 establishes uniform administrative requirements for grants to State and Local Governments. Subpart 18.40 addresses monitoring and reporting requirements for the County. The Consultant will assist the County in managing grant activities to ensure compliance with applicable Federal requirements. The Consultant will submit a quarterly performance report while the grant is active. It is estimated there will be four quarterly performance reports completed during the design phase of this project.

TASK 1 DELIVERABLES	TO FAA	TO COUNTY
1.01 Meeting Agendas, AIP Development Schedule and Meeting Minutes from Pre-Design Meeting	✓	✓
1.02 Scope of Work and Coordinate Contract with County	✓	✓
1.04 Design Schedule, PSR, and Monthly Invoicing		✓
1.09 State Grant Application		✓
1.10 Federal Grant Application		✓
1.14 Quarterly Performance Reports		✓

TASK 1 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
1.01 Meetings with County and FAA	<ul style="list-style-type: none"> Camarillo, CA One (1) Project Manager and (1) Deputy Project Manager Assume One (1) hour via teleconference (10 meetings)
1.02 Prepare Project Scope of Work and Coordinate Contract	<ul style="list-style-type: none"> Camarillo, CA One (1) Project Manager and (1) Deputy Project Manager Assume One (1) hour via teleconference (2 meetings)
1.06 Coordinate Topographical and Aeronautical Survey	<ul style="list-style-type: none"> Camarillo, CA One (1) Deputy Project Manager Assume half day site visit (1 site visit)
1.07 Coordinate Geotechnical Investigation	<ul style="list-style-type: none"> Camarillo, CA One (1) Deputy Project Manager Assume half day site visit (1 site visit)
1.08 Utility Coordination with Local Utility Companies	<ul style="list-style-type: none"> Camarillo, CA One (1) Project Manager and (1) Deputy Project Manager Assume One (1) hour via teleconference (2 meetings)

2.0 Design Phase

2.01 Weekly Design Team Meetings. This task includes a weekly meeting with the design team working on this project throughout the duration of the design, which is expected to take

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approximately eight (8) months. The weekly design team meeting will be attended by the Civil Project Manager, Deputy Project Manager, Electrical Project Manager, staff engineer(s), designer(s), drafter(s), and project coordinator. The weekly design team meeting will also be attended approximately once a month by the Practice Operations Leader, Quality Control Manager, and Construction Operations Manager.

2.02 Analyze Topographic Survey Data. This task includes analyzing the topographical survey data and preparing the data for use with computer modeling. This will include the following tasks:

- Generate three-dimensional contour model from TIN surface model.
- Prepare and process data for spot elevations, grading and/or paving cross sections.

This task includes analyzing the Runway 8-26 safety area topographical survey and object inventory data. Current editions of FAA runway safety area documents (i.e., FAA Office of Airports (ARP) Standard Operating Procedure (SOP) No. 8 Runway Safety Area Determination, FAA Order 5200.8 Runway Safety Area Program, FAA Order 5200.9 Financial Feasibility and Equivalency of Runway Safety Area Improvements and Engineered Material Arresting Systems, etc.) will be reviewed and applicable data provided to the County accordingly. This will include the following tasks:

- Conduct safety area topographical survey and object inventory.
- Prepare exhibit(s) (plan view of safety area with spot elevations/longitudinal and transverse gradients/dimensions, location/description of objects; etc.) and associated narrative with analysis (compliance with current standards vs. non-compliance with current standard(s)).
- If a non-standard determination is made by the FAA, assist County with alternative analysis preparation and presentation per the referenced FAA guidance above.

2.03 Analyze Geotechnical Investigation Data. This task includes analyzing the geotechnical investigation. This will include the following tasks:

- Review Geotechnical Consultant recommendations.
- Determine appropriate subgrade stabilization methods.
- Determine appropriate pavement rehabilitation, if appropriate.
- Determine on-site sources and quantities of suitable material for embankment.
- Determine appropriate data for the pavement design form(s).
- Prepare soil information for incorporation on the construction plans.

2.04 Prepare Pavement Design. After receiving the geotechnical investigation data, the Consultant will analyze the data and prepare a proposed pavement section using current FAA design software (FAARFIELD). In addition to determining the proposed pavement section for the

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current and anticipated traffic, a pavement classification rating (PCR) analysis will be performed in accordance with FAA Advisory Circular (AC) 150/5335-5 (Current Edition), *Standardized Method of Reporting Airport Pavement Strength – PCR*, to determine the runway PCR classification based on the expected fleet mix. The Consultant will submit the FAARFIELD computer printouts with a narrative to the FAA. The following tasks will be completed:

- Determine appropriate data for pavement design.
- Input data for computer modeling with topographical survey data.
- Prepare an exhibit showing the existing pavement and base course thickness.
- Determine areas of existing pavement to be removed and replaced.
- Prepare pavement and soils information for incorporation on the construction drawings.
- Verify elevation of water table.
- Compile the current airport fleet mix.
- Input data into FAARFIELD.
- Run pavement design scenarios.
- Analyze output from FAARFIELD.
- Select preferred pavement section.
- Compare pavement section to FAA Advisory Circular (AC) 150/5320-6 (Current Edition), *Airport Pavement Design and Evaluation*.
- Verify over excavation requirements (if needed).
- Verify optimum moisture content for subgrade preparation.
- Incorporate subgrade stabilization recommendations.

2.05 Prepare Existing Utility Inventory. This task includes reviewing record drawings and consulting with the County and local utility companies to identify all utilities within the project site. The Construction Plans will include, to the maximum extent possible, the surveyed locations of observable utility features and the locations identified by utility locates.

2.06 Prepare Preliminary Contract Documents. This task includes preparing the Preliminary Contract Documents, including Contract Proposal, Bid Bond, Contractor Information Sheet, Subcontractor/Material Supplier List, Disadvantaged Business Utilization Commitment, DBE Participation Form, Equal Employment Opportunity Report Statement, Buy America Certification, Buy America Waiver Request, Buy America Conformance Listing, Non-Collusion Affidavit, Public Contract Code Sections 10285.1, 10162, and 10232, Drug-Free Workplace Certification, Certification of Offeror/Bidder Regarding Tax Delinquency and Felony Convictions, Bid Proposal, Contract, Payment Bond, Performance Bond, Notice of Award, Notice to Proceed, Notice of Contractor's Settlement, General Provisions, Wage Rates, and County of Ventura Standard Specifications. The wage rates will be updated at the time of advertisement to reflect the most current wage rates available. Preparation will include establishing the location for the bid opening, dates for advertisement and description of the work schedule. Also included in the Preliminary Contract Documents, and covered under separate tasks below, are the Construction Safety and Phasing Plan, Technical Specifications, and Special Provisions. Preliminary Contract Documents will be prepared as early as possible during the design phase and submitted to the County for review.

2.07 Prepare Construction Safety and Phasing Plan (CSPP). This task includes meeting with the County to discuss the current operations of the airport to assist in determining how the proposed construction phasing of the project will affect these operations. From these meetings, a complete Construction Safety and Phasing Plan (CSPP) will be developed to ensure safety compliance when coordinating construction activities and airport operations. The CSPP will be developed in accordance with the requirements of FAA AC 150/5370-2 (Current Edition),

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Operational Safety on Airports During Construction. A construction phasing plan that meets the requirements of the AC and operational needs of the airport will be developed and included in the Contract Documents. This plan will also identify any nighttime work, continuous working times, or other unusual conditions that could affect the Contractor's normal progress on the project. The draft CSPP will be submitted at 30% complete and at 90% complete to the County and ADO for review. Upon preliminary approval from the ADO, the CSPP will be submitted to FAA for OE/AAA coordination.

2.08 Prepare Preliminary Construction Plans. This task includes preparing the following list of construction plans for the project. Additional plans may be added during the design phase as needed:

Plan Name/Description	Number of Sheets
Cover Sheet	1
Index of Drawings, Summary of Approximate Quantities and General Notes	3
Survey Control Plan	1
Geotechnical Investigation Plan	8
Existing Condition Plan	8
Safety Plan	1
Construction Layout Plan	1
Construction Phasing Plan	8
Environmental Requirements and Details	2
Demolition Plan	12
Demolition Details	2
Geometric Layout Plan	8
Overall Grading Plan	1
Grading Plan	12
Pavement Plan and Profile	12
Typical Sections	4
Cross Sections	18
Spot Elevation Plan	8
Underdrain and Storm Sewer Layout Plan	8
Storm Sewer Plan and Profile	6
Underdrain and Storm Sewer Details	4
Pavement Grooving Plan	4
Pavement Grooving Details	1
Pavement Marking Plan	8
Pavement Marking Details	4
Seeding and Erosion Control Plan	4
Seeding and Erosion Control Details	1
Electrical Legend and General Notes	1
Electrical Demolition Plan	8
Electrical Layout Plan	8
Electrical Details	6
Total Sheet Count	173

2.09 Prepare Preliminary Technical Specifications. This task includes assembling the technical specifications necessary for the project. Standard FAA specifications will be utilized where possible, with the guidance from FAA AC 150/5370-10 (Current Edition), *Standard Specifications for Construction of Airports*. Additional specifications will be prepared to address work items for materials that are not covered by the standard FAA specifications. The standard specifications to be utilized shall include, but are not limited to, the following:

- ☐ Item C-100 Contractor Quality Control Program (CQCP)
- ☐ Item C-102 Temporary Air and Water Pollution, Soil Erosion and Siltation Control
- ☐ Item C-105 Mobilization
- ☐ Item C-110 Method of Estimating Percentage of Material Within Specification Limits (PWL)
- ☐ Item P-101 Preparation/Removal of Existing Pavements
- ☐ Item P-151 Clearing and Grubbing
- ☐ Item P-152 Excavation, Subgrade and Embankment
- ☐ Item P-153 Controlled Low-Strength Material (CLSM)
- ☐ Item P-154 Subbase Course
- ☐ Item P-155 Lime-Treated Subgrade
- ☐ Item P-156 Cement Treated Subgrade
- ☐ Item P-209 Crushed Aggregate Base Course
- ☐ Item P-306 Lean Concrete Base Course
- ☐ Item P-401 Asphalt Mix Pavement
- ☐ Item P-501 Cement Concrete Pavement
- ☐ Item P-603 Emulsified Asphalt Tack Coat
- ☐ Item P-604 Compression Joint Seals for Concrete Pavements
- ☐ Item P-605 Joint Sealants for Pavements
- ☐ Item P-608 Emulsified Asphalt Seal Coat
- ☐ Item P-610 Concrete for Miscellaneous Structures
- ☐ Item P-620 Runway and Taxiway Marking
- ☐ Item P-621 Saw-Cut Grooves
- ☐ Item D-701 Pipe for Storm Drains and Culverts
- ☐ Item D-705 Pipe Underdrains for Airports
- ☐ Item D-751 Manholes, Catch Basins, Inlets and Inspection Holes
- ☐ Item D-752 Concrete Culverts, Headwalls and Miscellaneous Drainage Structures
- ☐ Item T-901 Seeding
- ☐ Item T-905 Topsoil
- ☐ Item L-108 Underground Power Cable for Airports
- ☐ Item L-109 Airport Transformer Vault and Vault Equipment
- ☐ Item L-110 Airport Underground Electrical Duct Banks and Conduits
- ☐ Item L-115 Electrical Manholes and Junction Structures
- ☐ Item L-125 Installation of Airport Lighting Systems

2.10 Prepare Preliminary Special Provisions. This task includes preparing the preliminary Special Provisions to address, or expound on, site conditions that require additional clarification. These include, but are not limited to: Haul Roads, Airport Security, Radio Communications, Work Schedule, Contractor's Quality Control Program, Sequencing of the Work, Closure of Air Operations Areas, Accident Prevention, Underground Cables/Utilities, Insurance, Indemnification, Sales and Use Taxes, Permits and Compliance with Laws, Executed Contracts, Subletting or Assigning of Contracts, Qualification of Disadvantaged Business Enterprises, Liquidated Damages, Acceptance Testing, Grade Control and Surface Tolerance, Construction Management Plan, General Requirements for Airport Construction, Storm Water Pollution Prevention Plan, Key Personnel, Scheduling of Work, Partnering, and Removing of Miscellaneous Structures.

2.11 Review and Incorporate Airfield Drainage Study. This task includes verifying the existing storm drainage and/or subsurface drainage systems as well as reviewing and incorporating into design the Camarillo Airport Geometry Study and Airfield Drainage Study for Runway 8-26 and

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Taxiway Connectors by Encompass Consultant Group in June, 2022. Surface drainage will be evaluated and designed to ensure accordance with standard engineering practices, local requirements and FAA AC 150/5320-5 (Current Edition), *Airport Drainage Design*.

2.12 Compile/Submit Permits. This task includes identifying potential federal, state and local permits needed for the project. Permits are anticipated to be required for, but are not limited to, stormwater pollution prevention plans and associated permits (SWPPP). When applicable, the Consultant will assist the County to compile information and submit permits that are required to be obtained by the County.

2.13 Compile/Submit FAA Form 7460. This task includes preparing and submitting the required FAA Form 7460-1, "Notice of Proposed Construction or Alteration," via the FAA's online Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) system on the County's behalf. The Consultant will reference FAA Advisory Circular (AC) 150/5300-20 (Current Edition), *Submission of On-Airport Proposals for Aeronautical Study*, and coordinate with the FAA Project Manager and/or Airspace Specialist to determine the locations of required airspace case studies to be submitted. Generally, such cases are required for any restrictive/critical points where construction operations or proposed alterations may affect navigable airspace. Typically, these locations include (but are not limited to): limits of construction, construction phasing limits, haul routes for construction traffic, asphalt and/or concrete batch plants, and key points of any permanent, above-ground alterations. The Consultant will prepare an exhibit depicting the locations and other information pertinent to the cases' impact on the airspace to include with the submission. The Consultant will submit FAA Form 7460-1 and the associated documentation to the FAA via the OE/AAA system for approval a minimum of 45 days prior to the start of construction.

2.14 Calculate Estimated Quantities. This task includes calculating all necessary quantities for the various work items. Quantities must be consistent with the specifications and acceptable quantity calculation practices.

2.15 Prepare Estimate of Probable Construction Cost. Using the final quantities calculated following the completion of the construction plans and specifications, the Consultant will prepare the construction cost estimate. The estimate will be based on information obtained from previous projects, contractors, material suppliers and other available databases.

2.16 Prepare Engineer's Design Report and Modification of Standards. This task includes preparation of the Engineer's Design Report in accordance with current FAA Pacific Western Region Engineer's Design Report guidelines. The Engineer's Design Report will include a detailed summary of the project, photographs and descriptions of existing site conditions, pavement life cycle cost analysis, material availability analysis, estimate of project costs, and a schedule for the completion of the design, bidding, and construction. Modifications of the FAA standards, as necessary, for the project will be prepared for preliminary review. The approved Modifications of Standards (MOS) will be included in the Engineer's Design Report and submitted on the MOS website (See Task 2.16 below) to the FAA and County. The Engineer's Design Report will also contain any alternative design concepts that were investigated and evaluated.

2.17 Prepare and Submit Modification of Standards on MOS Website. This task includes Modifications of Standards (MOS) website access coordination with the County and FAA. Modifications of the FAA standards, as necessary, for the project must be compiled and submitted to the MOS website for approval. Revisions will be completed as needed.

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2.18 Review Plans at 30%, 60%, and 90% Complete. During various stages of completion of the design, the Consultant will submit a set of Construction Plans, Specifications, Engineer's Design Report, and Contract Documents to the County for their review. Meetings will be scheduled for periodic reviews, including a 90% plans-in-hand review. The project will be reviewed with the FAA to obtain their concurrence with the design.

2.19 Provide In-House Quality Control. The Consultant has an established quality control program that will provide both experienced and thorough reviews of all project submittals and will also provide engineering guidance to the design team throughout design development from an experienced, senior-level Professional Engineer.

Prior to each review set of Construction Plans, Specifications, Contract Documents, and Engineer's Design Report being submitted to the County and FAA, a thorough, in-house quality control review of the documents will be conducted. This process will include an independent review of the Construction Plans, Specifications, Contract Documents, and Engineer's Design Report being submitted by a licensed Professional Engineer other than the Engineer who performed the design of the project. Comments will be offered by the Engineer that performed the review, and revisions to the Construction Plans, Specifications, Contract Documents, and Engineer's Design Report will be made accordingly.

In addition to the 30%, 60%, and 90% reviews, the Consultant's in-house quality control program also provides engineering guidance to the design team throughout the project design in an attempt to steer the project in a manner that provides the best engineering judgment.

At the 90% design review, the independent review will re-evaluate the CATEX boundary.

2.20 Prepare and Submit Construction Plans, Specifications, Contract Documents, and Engineer's Design Report. A final set of Construction Plans (22" x 34"), Specifications, Contract Documents, and the Engineer's Design Report will be prepared and submitted to the County and the FAA. These documents will incorporate all revisions, modifications, and corrections identified during the final review. Electronic copies will be provided.

2.21 Prepare Airfield Signing and Marking Plan. This task includes preparing the overall airfield signing and marking plan.

2.22 Prepare Requests for Reimbursement. Not Applicable. The County completes the requests for reimbursement process.

2.23 Prepare and Submit Design Closeout Report. This task includes preparation of the design closeout report in accordance with current FAA Western Pacific Region Design Closeout Report guidelines. Electronic copies will be provided.

2.24 Prepare and Coordinate Grant Closeout Worksheet. This task includes preparation of the latest version of the FAA's Airport Sponsor Grant Closeout Worksheet and coordination with the County to submit the worksheet to the FAA ADO.

TASK 2 DELIVERABLES	TO FAA	TO COUNTY
2.04 Proposed Pavement Design	✓	✓
2.06 Preliminary Contract Documents for County's Review	✓	✓

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2.06 CSPP at 30% and 90% Complete	✓	✓
2.13 FAA Form 7460	✓	✓
2.18 30%, 60%, and 90 % Construction Plans, Specifications, Contract Documents, and Engineer's Design Report	✓	✓
2.20 Final Construction Plans, Specifications and Contract Documents, and Engineer's Design Report	✓	✓
2.21 Airfield Signing and Marking Plan		✓
2.23 Design Closeout Report	✓	✓
2.24 Grant Closeout Worksheet		✓

TASK 2 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
2.18 Plan Review at 30% Complete. Plan Review at 60% Complete.	<ul style="list-style-type: none"> • Camarillo, CA One (1) Project Manager and one (1) Deputy Project Manager Assume Two (2) hour via teleconference (2 meetings)
2.18 Plan Review at 90% Complete.	<ul style="list-style-type: none"> • Camarillo, CA One (1) Project Manager and one (1) Deputy Project Manager • Assume travel to/from Denver, CO to Camarillo, CA with two (overnight) stays for the Project Manager

EX Reimbursable Costs During Design. This section includes reimbursable items such as auto rental, lodging, per diem, and other miscellaneous expenses incurred in order to complete **Basic Services**.

PART B - SPECIAL SERVICES consists of Design Survey phase, invoiced on a Lump Sum basis, and direct subcontract costs for the proposed geotechnical investigation and aerial imagery acquisition.

3.0 Design Survey Phase

3.01 Perform Topographical Survey. This task includes providing design survey services within the topographic survey limits shown in Exhibit No. 1 to support the design team for this project. Work items associated with this task include the following:

- Topographical survey of approximately 195 acres.
- Preparation of a survey plan that will determine the appropriate survey methods and equipment to be utilized.
- Collect aerial LiDAR, classify and process and utilized to provide planimetric feature compilation and 0.5 foot contour DEM surface data of the topographic survey limits.
- It is assumed that the Primary Airport Control Station (PACS) and Secondary Airport Control Stations (SACS) located on the airport are in good condition and can be verified; however, if it is found that the PACS and SACS are compromised, establishment of temporary airport control must be completed and tied to the national spatial reference system via static GPS observations. Following airport control verification/establishment, temporary project control, based upon the airport control PACS and SACS or temporary airport control, will be placed near the project area at intervals not to exceed 500 feet to control the project.
- A limited ground survey of non-pavement areas will be performed to supplement the imagery with high accuracy tie-in positions to existing grades and will include shots as necessary to accurately depict breaklines. These ground topography areas will be surveyed with vertical accuracies not to exceed +/- 0.10 feet.
- Hard surface pavement positions, for the transitions to existing pavement, will be surveyed at 25-foot stations as well as all vertical and horizontal points of tangent/curve with associated cross sections having no greater than 25-foot spacing. All hard surface pavement will be surveyed with vertical accuracies not to exceed +/- 0.02 feet.
- Location of structures, paving, and above ground improvements including building footprint, finished floor elevations at the openings plus five feet interior of the opening and concrete aprons associated with door openings will be surveyed at intervals of no greater than 25 feet.
- Additional airfield elements that will be mapped from the collected imagery include guidance signs, airfield runway, taxiway, and/or apron lighting and paint markings, NAVAIDS within the project area (if any), fences, gates and other airport features within the project area.
- Coordinate location and field marking of all existing utilities in the project limits with one-call services, airport operations staff, and/or private utility locators as necessary. Review of existing as-built and other construction records as necessary. All utility locates will be surveyed as marked by utility locators in the field. Points of utilities to be surveyed include, but are not limited to, all paint marks, hydrants, valves, hand holes, manholes, inlets, cleanouts, culverts, pipes, pedestals, meters, transformers, utility poles and other reasonably visible existing utility infrastructure components.
- During design, there may be the need to verify existing survey information or extend the limits of the existing survey.
- Reduce all field notes and pictures into a topographic survey report to be used by the Consultant.
- Prepare triangulated irregular network (TIN surface model) of existing ground contours, pavement edges, roadways, electrical equipment, drainage features, buildings, fences, and other miscellaneous entities.
- Generate three-dimensional contour model from TIN surface model.

The Topographical Survey shall be completed by, or under the direct supervision of, a state-licensed Professional Land Surveyor.

3.02 Design/As-Built Airport Data Project and Airspace Analysis. An aeronautical survey with Design Data will be performed to the standards mandated by the FAA Airports GIS (AGIS) initiative, following the specifications outlined in the following guidance:

- FAA Advisory Circular 150/5300-16 (Current Edition), *General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey.*
- FAA Advisory Circular 150/5300-17 (Current Edition), *Standards for Using Remote Sensing Technologies in Airport Surveys.*
- FAA Advisory Circular 150/5300-18 (Current Edition), *General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards.*
- Runway End, Stopway End, And Displaced Threshold Identification for Surveyors, NGS First Edition.

The Consultant will work with the National Geodetic Survey (NGS) and the FAA airports program to acquire and submit the necessary data for an airspace analysis based upon design elements for the reconstructed Runway 08/26. All necessary existing and future design data will be submitted through the Airports Data and Information Portal (ADIP) as required by the aforementioned Advisory Circulars (AC). The following items will be performed following the required criteria set forth in Table 2-1 of AC 150/5300-18 (Current Edition) under the Instrument Procedure Development column:

- Initiate and complete the AGIS Project process on the AGIS web portal. A Safety-Critical Data Collection, including Design Data project will be created.
- Develop SOW and plans as required
- Establish or validate airport Geodetic Control
- Provide and submit an imagery plan for Design data submittal
- Establish photogrammetric control and collect stereo imagery covering the surface area defined by the **-18B Vertically guided (VG)** surfaces, **FAR Part 77** approach and departure surfaces, **-13B Approach and Departure** surfaces, and the PAPI **OCS/LSCS** surfaces, extended out to 4 miles for Runway 08 and 8 miles for Runway 26.

- Perform or validate and document an airport airspace analysis based upon design data
- Perform, document, and report the tie to National Spatial Reference System (NSRS)
- Identify and survey displaced thresholds – if any
- Monument displaced thresholds – if any
- Document control features requiring digital photographs
- Document control features requiring sketches
- Prepare Airport Manager/Operator interviews
- Survey and document runway ends/thresholds, existing and future elements
- Monument runway ends/thresholds
- Determine runway length and width, existing and future elements
- Determine runway profile using 50-foot stations, existing and future elements (10-foot stations and 10-foot offset left and right for all Part 139 airports)
- Determine the touchdown zone elevation, existing and future elements
- Determine the runway true azimuth, existing and future elements
- Determine or validate and document the position of navigational aids including design navigational aids
- Determine or validate and document the position of runway abeam points of navigational aids including design navigational aids
- Field verify existing obstacle data currently in the FAA obstacle Database
- Prepare an orth-rectified aerial photo from collected imagery covering the extents of the airport property.
- Provide a final project report

Extensive and constant coordination with the FAA instrument procedures development team will be required to facilitate the development and publication of instrument approach procedures to the future Runway End configurations. This coordination effort must begin several years in advance of the runway construction project being completed and the runway commissioned as active. The airspace analysis survey and airport survey data submittals to the ADIP will be used by the FAA to generate new procedures to the future Runway ends. An as-built survey and imagery collection project will be required once the Runway is fully constructed. The as-built survey, imagery, and final report documentation required to finish the project in ADIP is NOT included with this SOW; however, the Design/As-built data project with obstacles in the ADIP system will be created during the design process.

TASK 3 DELIVERABLES	TO FAA	TO COUNTY
3.01 Topographical Survey		✓
3.02 Design/As-built Aeronautical Survey and Airspace Analysis	✓	✓

TASK 3 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
3.01 Coordinate and Perform Topographical Survey	<ul style="list-style-type: none"> Camarillo, CA One (1) Surveyor Assume one (1) site visit, consisting of eight days of total field work including seven (7) overnight stays Assume travel to/from Denver, CO to Camarillo, CA
3.02 Design/As-built Aeronautical Survey and Airspace Analysis	<ul style="list-style-type: none"> Camarillo, CA One (1) Surveyor Assume one (1) site visit, consisting of eight days of total field work including seven (7) overnight stays Assume travel to/from Denver, CO to Camarillo, CA

EX Reimbursable Costs During Design Survey. This section includes reimbursable items such as auto rental, lodging, per diem, and other miscellaneous expenses incurred in order to complete **Special Services**.

Special Considerations

The following special considerations are required for this project, but will be completed by subconsultants to the Consultant. The cost for this work will be included in the engineering contract agreement with the County and the costs are in addition to the engineering fees outlined above.

Geotechnical Investigation. Soil samples for analysis must be taken for both the project site and all potential on-site borrow sources. Investigation and testing is anticipate to be completed at nighttime during a runway closure to facilitate the pavement design per FAA Advisory Circular (AC) 150/5320-6 (Current Edition), *Airport Pavement Design and Evaluation*. As mentioned under the project description, the geotechnical investigation will include the following:

- ➔ Perform a geologic reconnaissance of the project site
- ➔ Soil boring and laboratory testing at approximately 34 project locations
- ➔ Visual inspection and documentation of each soil boring
- ➔ Soil Classification/Atterberg Limits, Liquid Limit (LL), Plastic Limit (PL), Plasticity Index (PI)
- ➔ Hydrometer and Water-Soluble Sulfates/Corrosivity
- ➔ Moisture/Density Relations
- ➔ Swell/Consolidation Potential
- ➔ Soaked California Bearing Ratio
- ➔ Moisture content, density of undisturbed fine-grained samples
- ➔ Sulfate Testing
- ➔ Recommendation and testing on subgrade stabilization methods

- Utility Locates
- Dynamic Cone Penetrometer (DCP) Testing per ASTM D6951 and FAA AC 150/5320-6G at approximately 19 project locations

Aerial Imagery Acquisition. A subconsultant will be retained to collect the necessary imagery to support this project.

Assumptions

The scope of services described previously, and the associated fees, are based on the following rates and assumed responsibilities of the Consultant and County.

1. For the purposes of estimating the amount of reimbursable expenses which will be incurred by the Consultant, per diem and lodging are calculated in accordance with applicable, current GSA rates. The actual amounts to be invoiced for per diem will be in accordance with the applicable, published GSA rates at the time of service and may vary from the rates used in the fee estimate. Lodging will be invoiced as an actual expense incurred.
2. It is anticipated there will be a minimum number of trips and site visits to the airport to facilitate the completion of the various phases listed in this scope. The number of trips, as well as the anticipated lengths and details of the trips, are included at the end of each phase above.
3. The County will provide existing mapping data including as-builts available for the project areas, aerial orthoimagery, subsurface conditions information such as prior geotechnical investigations in the project area and other available information in the possession of the County.
4. The County will provide an electronic copy of the current ALP to allow for updating of the plan upon completion of the project.
5. The County will furnish escorts as needed for the Consultant to conduct field work.
6. The County will coordinate with tenants as required to facilitate field evaluations and construction.
7. All engineering work will be performed using accepted engineering principles and practices and provide quality products that meet or exceed industry standards. Dimensional criteria will be in accordance with FAA AC 150/5300-13 (Current Edition), *Airport Design*, and related circulars. Construction specifications will be in accordance with FAA AC 150/5370-10 (Current Edition), *Standard Specifications for Construction of Airports*, and the Western Pacific Regional Updates for Specifying Construction of Airports and related circulars. Project planning, design, and construction will further conform to all applicable standards, including all applicable current FAA Advisory Circulars and Orders required for use in AIP-funded projects and other national, state, or local regulations and standards, as identified and relevant to an airfield design and construction project.
8. The Consultant will utilize the following plan standards for the project:
 - Plans will be prepared using the Consultant's standards, unless the County provides its own standards upon Notice to Proceed.
 - Plan elevations will be vertical datum NAVD 88 derived from the existing control network.

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- Plan coordinates will be based on horizontal datum NAD 83/2011 State Plane Coordinates derived from the existing control network.
 - All plans will be stamped and signed by a state-licensed Professional Engineer, or Professional Land Surveyor, as required.
 - Plans prepared by subconsultants will be prepared using the same base maps, the same coordinate systems and the same plan layout and format as plans prepared by the Consultant.
 - The guidance included in FAA Memorandum, *FAA Review of Construction Plans and Specifications for AIP Funded Projects*, will be reviewed, incorporated and will supplement the Consultant's standards.
9. The Consultant will utilize the following assumptions when preparing the project manual for bidding and construction of the project:
- The project manual Contract Documents will be developed jointly by the County and the Consultant.
 - The Consultant is responsible for developing the contents of the document and including the Front-End documents which will be supplied by the County.
 - FAA General Provisions and required contract language will be used.
10. The Consultant must maintain records of design analyses and calculations consistent with typical industry standards, as required by the FAA, for a period of three years after the project is closed by the FAA.
11. Because the Consultant has no control over the cost of construction-related labor, materials, or equipment, the Consultant's opinions of probable construction costs will be made on the basis of experience and qualifications as a practitioner of his/her profession. The Consultant does not guarantee that proposals for construction, construction bids, or actual project construction costs will not vary from the Consultant's estimates of construction cost.

Extra Services

The following items are not included under this agreement but will be considered as extra work:

- Redesign for the County's convenience or due to changed conditions after previous alternate direction and/or approval.

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- Submittals or deliverables in addition to those listed herein.
- If a project audit occurs, the Consultant is prepared to assist the County in gathering and preparing the required materials for the audit.
- Serving as an expert witness for the Owner in any litigation, surety claim, contractor bond activation, or other proceeding involving the project.
- Additional or extended services during construction made necessary by extension of contract time, non-concurrent work, or changes in the work.
- Legal, surety, or insurance support, coordination, and representation.

Extra Work will be as directed by the County in writing for an additional fee as agreed upon by the County and the Consultant

END OF EXHIBIT A

EXHIBIT B

TIME SCHEDULE

1. Schedule

The CONSULTANT will complete all work by September 10, 2028.

2. Delays

Time during which the CONSULTANT is delayed by any public agency reviewing the Contract Documents, or by the COUNTY for any reason, and not occasioned by acts or omissions of the CONSULTANT, shall not be included in the above time limitations if the CONSULTANT gives prompt notice of delays when they occur. The estimated review time between submittal phases is estimated to be a maximum of ten (10) working days.

END OF EXHIBIT B

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EXHIBIT C
FEES and PAYMENT

1. FEES

- A. County shall Compensate Consultant as specified in Exhibit A, Basic Services on a not to exceed maximum fee amount of One-Million Nine-Hundred Twenty-Eight Thousand Five-Hundred Ten Dollars (\$1,928,510) for all work specified in Exhibit A, Tasks 1, 2 and 3 using the fee schedule herein. This amount shall not be exceeded without written authorization from the COUNTY.
- B. County shall Compensate Consultant for all services specified in Exhibit A, Special Services on a not to exceed maximum fee amount of One-Million Nine-Hundred Twenty-Eight Thousand Five-Hundred Ten Dollars (\$1,928,510) for all work specified in Exhibit A, Task 3 and direct subcontract costs. Payment shall be made based upon percentage of completion for lump sum tasks and actual time and expenses as approved by the COUNTY based upon the rates in the Construction Administration Services Cost Breakdown included as Exhibit C-1 for other tasks.

2. PAYMENT

Payment will be made monthly on presentation of an invoice and supporting documentation (i.e. time sheets, reimbursables, etc.) to the Department of Airports for services actually performed against the Scope of Work and Services detailed in EXHIBIT "A" and as outlined under Fees above. Separate invoices are to be submitted for each Fee item. Payment will be processed within 30 days from receipt of the invoice and supporting documentation by the Department of Airports, or within 10 business/working days from receipt of the Department of Airports approved invoice by the Auditor-Controller's office.

Stage	<u>Fee Allocation</u>	
	80%	100%
Task 1: Preliminary Design Phase	\$196,192	\$245,240
Task 2: Design Phase	\$1,099,784	\$1,374,730
Task 3: Design Survey Phase	\$246,832	\$308,540
		\$1,928,510

END OF EXHIBIT C

EXHIBIT C-1
ADMINISTRATIVE FEE COST BREAKDOWN