AGREEMENT FOR GENERAL AIRPORT
CONSULTING SERVICES

THIS AGREEMENT, made and entered into this 19th day of September, 2024, by and between the Gainesville-Alachua County Regional Airport Authority, with offices located at 3880 N.E. 39"' Street, Suite. A, Gainesville, Florida 32609 (hereinafter referred to as the "Owner"), and Environmental Science Associates Corporation (ESA), with offices located at 5404 Cypress Center Drive, Suite 125, Tampa, Florida 33609 (hereinafter referred to as "Consultant").

WHEREAS the Owner desires to engage a qualified and experienced Consultant to perform professional planning, engineering, environmental and consulting services for completion of an Airport Master Plan and Storm Water Master Plan for the Gainesville Regional Airport ("the Project") funded by the Federal Aviation Administration and the Florida Department of Transportation (the Funding Agencies); and

WHEREAS the Consultant responded to RFQ 23-002 and has been identified through a qualification-based selection process as set forth in U.S. Department of Transportation, Federal Aviation Administration Advisory Circular No. 150/5100-14D and the Florida Consultants Competitive Negotiation Act; and

WHEREAS, Consultant has heretofore represented to the Owner that it has the ability to perform such tasks as are necessary to complete the Project for the Owner in accordance with the requirements of the Funding Agencies and is willing to do so;

HOW, THEREFORE, in consideration of the mutual promises of the parties set forth hereafter, the parties agree as set forth below:

ARTICLE 1. CONSULTANT'S SERVICES

1.1 Nature of Services. The professional services to be provided by Consultant to the Owner under this Agreement shall include all tasks necessary to complete a "from scratch" Airport Master Plan in accordance with Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-6B, Airport Master Plans, and Florida Department of Transportation (FDOT) 2021-2022 Guidebook for Airport Master Planning. The Consultant shall also complete a Storm Water Master Plan in coordination and as part of the Airport Master Planning effort. The Project scope and tasks to be completed are detailed in Consultant's Proposal dated February 16, 2024 (the "Proposal"), which is attached hereto and made a part of the Agreement.

1.2 Notice to Proceed. The Consultant will begin work upon receipt Of a formal Notice to Proceed.

1.3 Additional Services. The Owner and Consultant intend for Consultant to be able to respond to needs as they arise, while complying with limitations upon the Owner's authority to act imposed by local, state, or federal law. When desiring to use Consultant's services for a project related to the Airport Master Plan and Storm Water Master Plana but outside of the detailed scope referenced in Paragraph 1.1 above, Owner shall request Consultant to submit a written Change Order or separate Task Order document, as applicable, to Owner for its review. Owner and Consultant shall mutually agree upon the terms of such Change Order or Task Order in writing, including without limitation, the additional fee for the work to be included and any additional contract time required. The Consultant shall begin work on any additional services upon receipt of the executed Change Order or Task Order. Once executed, the parties shall be bound by the terms.

ARTICLE 2. COMPENSATION

2.1 Payment made under this Agreement shall be made at the rate or lump sum fee schedule mutually agreed upon by the parties as set forth in the Proposal. For additional services at an hourly not-to-exceed basis, the Consultant shall notify the Owner in writing at the time that the Consultant anticipates that an amendment to the Upset Limit as set forth in the Task Order agreement may be required. Written approval from the Owner shall be required in order to authorize the Consultant to proceed with services above the Upset Limit.

2.2 The Owner will make diligent effort to gain appropriation of the necessary funds to provide compensation to the Consultant for the services provided under this Agreement. From time to time, Owner may rely upon funding assistance from other governmental agencies to finance additional services. In such instances, the Owner's obligation to compensate the Consultant is subject to the availability of appropriated funds for the work. The Owner shall not issue a Task Order under this Agreement unless the Owner has confirmed such funds will be available to finance the services to be performed by Consultant.

2.3 Once each month, the Consultant may submit to the Owner a separate invoice for services rendered for the Project or associated Task Orders under this Agreement. The invoice shall show the claimed percent of completion for each task to be completed as outlined in the Proposal. If requested, the Consultant shall provide the hourly rate and hours worked during the invoiced period for each classification of employee charging time pursuant to this Agreement, copies or evidence of the wholly or partially completed work product or other details and information as requested by the Authority. Each invoice shall provide a brief description of the specific world performed and its relationship to grants on federally and state funded projects. The Owner agrees to reimburse the Consultant for expenses incurred by the Consultant in accordance with the provisions of s. 112.061, Florida Statutes. The original invoices/receipts must be submitted to the Owner for reimbursement.

2.4 Payment to the Consultant shall be made after receipt and acceptance of a proper invoice, provided Consultant submits all claims for compensation upon forms and in a manner approved by the Owner.

Failure to submit invoices with the required information shall cause the invoice to be rejected and may result in delays in payment.

Three original invoices and copies of receipts presented for reimbursement must be submitted to the Authority for payment.

ARTICLE 3. GENERAL TERMS

3.1 This Agreement shall become effective from the date of execution by all required signatories. The time for completion shall be as shown in the Proposed Schedule in the Proposal but in any case, shall be completed within thirty (30) calendar months of the Notice to Proceed date referenced in paragraph 1.2 above.

3.2 Information available to the Owner and required by the Consultant shall be furnished at no cost to the Consultant in an expeditious manner for the orderly progress of the work. The Consultant shall be entitled to rely upon the accuracy thereof.

3.3 The Owner shall designate a single representative with respect to the work to be performed under this Agreement, and such person shall have complete authority to transmit instructions and receive information.

3.4 The Consultant is responsible for the professional quality, technical accuracy, timely completion and coordination of all designs, drawings, specifications, reports, and other services furnished by the Consultant under this Agreement. The Consultant shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in his design, drawings, specifications reports and other services. The Consultant shall perform its services consistent with the degree of care and skill ordinarily exercised by other similar professionals providing the same or similar services under the same or similar circumstances ("Standard of Care").

35 The Owner shall make available to the Consultant all pertinent design and test data, plans, specifications, etc., which have been prepared previously by the Owner or others and are in the possession of the Owner.

36 All building plans, blueprints, schematic drawings and diagrams, including draft, preliminary, and final formats are subject to the exemption contained in s.119.07(3) (ee), Florida Statutes, as amended.

37 The Owner shall provide access to, and make all provisions for, the Consultant to enter upon public and private lands as required for the Consultant to perform its work.

3.8 The Owner shall examine all studies, report, sketches, estimates, drawings, specifications, proposals and other documents presented by the Consultant and submit in writing any decision thereto within a reasonable time so as not to delay the work of the Consultant.

3.9 Both parties agree that for the purpose of this Agreement, the Consultant shall be an independent contractor, and not the employee of the Owner.

3.10 Consultant shall at all times be solely responsible for the payment of compensation to be paid to Consultant's sub-contractors.

ARTICLE 4. ASSURANCES

4.1 Compliance with Regulations. The Consultant shall comply with the Regulations relative to non-discrimination in Federally assisted programs of the Department of Transportation (hereinafter DOT), Table 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Agreement.

4.2 Non-Discrimination. The Consultant, with regard to the work performed by it during this Agreement, shall not discriminate on the grounds of sex, race, color, national origin, handicap or veteran status in the selection and retention of subcontractors, including procurement of materials and leases of equipment. This Agreement incorporates by reference the equal opportunity clause set forth in Section 202 of Executive Order 11246.

4.3 Sanctions for Noncompliance. In the event of the Consultant's noncompliance with the non-discrimination provisions of this Agreement, the Owner shall impose such contract sanctions as it, the Federal Aviation Administration, or the Department of Transportation may determine to be appropriate, including but not limited to:

withholding of payments to the Consultant under this Agreement until it complies; or

cancellation, termination or suspension of this Agreement in whole or in part, in which case, Owner will compensate Consultant for services performed prior to the date of such cancellation, termination or suspension.

4.4 Disadvantaged Business Enterprise (DBE) Assurances. It is the policy of the Department of Transportation (DOT) that disadvantaged business enterprises as defined in 49 CFR Parts 23 and 26 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this Agreement. Consequently, the DBE requirements of 49 CFR Parts 23 and 26 apply to this Agreement. The Consultant agrees to ensure that disadvantaged business enterprises as defined in 49 CFR Parts 23 and 26 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this Agreement. In this regard, the Consultant shall take all necessary and reasonable steps in accordance with 49 CFR Parts 23 and 26 to ensure that disadvantaged business enterprises have the maximum opportunity to compete for and perform contracts. The Consultant shall not discriminate on the basis of race, color, national origin, sex, handicap or veteran status in the award and performance of DOT-assisted contracts.

4.5 Solicitations for Sub-Contracts, Including Procurements of Materials and Equipment. In all solicitations, either by competitive bidding or negotiation, made by the Consultant for work to be performed under a sub-contract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Consultant of its obligations under this Agreement and the regulations relative to non-discrimination on the

grounds of sex, race, color, national origin, handicap or veteran status.

4.6 Information and Reports. The Consultant shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, and other sources of information, and its facilities as may be determined by the Owner and the Funding Agencies to ascertain compliance with applicable Regulations and grant requirements. Where any information required of the Consultant is in the exclusive possession of another who fails or refuses to furnish this information, the Consultant shall so certify to the Owner and the Funding Agencies and shall set forth what efforts it has made to obtain the information. Consultant must maintain the provide access to all of the required records for a period of three (3) years after final payment is made by the Owner.

4.7 Incorporation of Provisions. The Consultant shall include the provisions of paragraphs 4.1 through 4.6 in every subcontract, including procurements of materials and leases of equipment, unless exempted by the Regulations or directives issued pursuant thereto. The Consultant shall take such action with respect to any subcontract or procurement as the Owner and the Funding Agencies may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event the Consultant is involved in or is threatened with litigation with a subcontractor or supplier as a result of such direction, the Consultant shall notify the Owner of such litigation or threat of litigation, and the Owner shall have the option to enter into such litigation to protect its interest. In addition, the Consultant may request the United States to enter into such litigation to protect the interests of the United States.

4.8 Ownership and Reuse of Documents. The drawings and specifications are instruments of service; and as such, the original documents, tracings, and field notes are and remain the property of the Consultant whether the work for which they were prepared is executed or not. Copies of the aforementioned documents shall be made available to the Owner, at the Owner's request, upon project completion or in accordance with Article 5.

All documents, including Drawings and Specifications prepared by Consultant pursuant to this Agreement, are instruments of service in respect of the scope of work addressed in the agreement and any subsequent Change Orders or separate Task Orders under this Agreement. They are not intended or represented to be suitable for reuse by Owner or others on extensions of the work completed under this Agreement or on any other project completed by Consultant. Any reuse without written verification or adaptation by Consultant for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Consultant. Consultant may use reproductions of the Project documents without restriction or limitation on their use.

For documentation purposes, the original electronic CADD files will be retained by the Consultant. An electronic file containing the project drawings in PDF and CADD format shall be made available to the Owner, at the Owner's request, upon project completion or in accordance with Article S. Due to the potential that the information set forth in the electronic storage devices can be modified by the owner, unintentionally or otherwise, the Consultant reserves the right to remove all indicia of its ownership and/or involvement from each electronic display.

Any such use or reuse by the Owner and others, without written verification or CADD adaptation by the Consultant for the specific purpose intended will be at the Owner's sole

risl‹ and without liability or legal exposure to the Consultant. Any adaptation requested and approved by the Owner will entitle the Consultant to further compensation at rates to be mutually agreed upon by Owner and the Consultant.

4.9 Nondisclosure. Consultant shall not divulge information to anyone concerning any work undertaken under this Agreement, unless prior written approval is received from the Owner, and Consultant shall obtain similar agreements from persons and firms employed by Consultant. The Owner reserves the right to release all information and to determine the time, form, and content of such release.

4.10 Public Entity Crime Statement. In accordance with the requirements of s. 287.133, Florida Statutes, the following statement is hereby made:

> A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a Contract to provide any goods or services to a public entity, may not submit a bid on a Contract with public entity for the construction or repair of a public building or public Work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a Contractor, Supplier, Subcontractor, or Consultant under a Contract with a public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 for a CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

4.11 The Consultant shall provide evidence of verification that all sub-contractors to the Consultant have been through the E-Verify process and have not been disbarred from participation in Federal and State funded programs.

4.12 The Consultant shall indemnify and hold harmless the Authority, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Consultant and other persons employed or utilized by the Consultant in the performance of this Agreement.

ARTICLE 5. TERMINATION

This Agreement may be terminated by either party upon seven (7) days written notice to the other party with or without cause.

5.1 The Owner may, by written notice terminate this agreement in whole or in part at any time, either (A) for the Owner's convenience or (B) because of Consultant's failure to fulfill the Agreement obligations and Consultant has not cured or commenced to cure such alleged failure within seven (7) days of receipt of written notice from the Owner. Upon receipt of such notice, services shall be: (1) immediately discontinued (unless the notice directs otherwise), and (2) all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated in performing this Agreement whether completed or in process delivered to the Owner. If such information has not been finalized by the Consultant, Consultant shall not be responsible for its accuracy.

5.2 If the termination is for the convenience of the Owner, an equitable payment for work performed under this Agreement shall be made pursuant to actual time worked, to be paid pursuant to the fee schedule set forth in the Proposal, but no amount shall be allowed for anticipated profit or unperformed services.

5.3 If the termination is due to failure to fulfill the Agreement obligations, the Owner may take over the world covered under this Agreement and prosecute the same to completion by agreement or otherwise. In such case, the Consultant shall be liable to the Owner for any additional cost occasioned to the Owner thereby.

5.4 If, after notice of termination for failure to fulfill Agreement obligations, it is determined that the Consultant had not so failed, the termination shall be deemed to have been effected for the convenience of the Owner. In such event, adjustment in the price for work performed under this Agreement, shall be made as provided in Paragraph 5.2 of this clause.

5.5 The rights and remedies of the Owner provided in this clause are in addition to any other rights and remedies provided by law or under this Agreement.

ARTICLE 6. INSURANCE

The Consultant shall, as a condition precedent to this Agreement, purchase and thereafter maintain such insurance as will protect Consultant from the claims set forth below which may arise out of or result from the Consultant's operations under this Agreement, whether such operations be by the Consultant or by anyone directly or indirectly employed by Consultant, or by anyone for whose acts Consultant may be liable.

A.	Workmen's Compensation and Disability	Statutory Requirements
B.	Employer's Liability	Statutory Requirements
C.	Comp. General Liability	
	Sec. 1 Bodily Injury	$1,000,000/occurrence $2,000,000/aggregate
	Sec. 2 Property Damage	$1,000,000/occurrence $2,000,000/aggregate
D.	Comp. Auto Liability	
	Sec. 1 Bodily Injury	$300,000/occurrence
	Sec. 2 Proper Damage	$300,000/aggregate
E.	Comp. Umbrella Liability*	$5,000,000/occurrence $5,000,000/aggregate

*Umbrella Liability must extend over General Liability, Auto Liability, and Employers Liability

(Workers Compensation)

F.	Professional Liability (errors andomissions)	$1,000,000/occurrence (not limited by annual aggregate)

Certificates of Insurance, naming Owner and the City of Gainesville as an "additional insured", (C through E only) showing such coverage then in force (but not less than the amount shown above) shall be filed with the Owner prior to commencement of any work. These Certificates shall contain a provision that coverage afforded under the policies will not be cancelled or nonrenewed until at least thin (30) days prior written notice has been given to the Owner. Notwithstanding any other provision of this Agreement, the Consultant shall provide all insurance coverage required by the documents provided by the Owner.

ARTICLE 7. SUCCESSORS AND ASSIGNS

The Owner, insofar as authorized by law, binds itself and its successors and assigns, and the Consultant binds its successors and assigns, to the other party of this Agreement and to the successors and assigns of such other party as the case may be. Except as above set forth, neither the Owner nor the Consultant shall assign, sublet, or transfer its or their own interest in this Agreement without the prior consent of the other.

ARTICLE 8. RIGHT OF APPROVAL

The obligations and duties to be performed by the Consultant under this Contract shall be performed by persons qualified to perform such duties efficiently. The Consultant, if the Authority shall so direct, shall replace any person employed by the Consultant in connection with the Work. The Authority reserves the right to approve the assignment of Consultant's personnel insofar as changes and substitutions made to personnel listed in response to Request for Qualifications 12-006. Said approval not to be unreasonably withheld

ARTICLE 9. NO THRID PARTY BENEFICIARIES

This Agreement is intended solely for the benefit of the Authority and the Consultant and their respective successors and permitted assigns and is not intended to and shall not confer any rights or benefits on any third party not a signatory hereto.

ARTICLE 10. NOTICE

Any notice, demand, request or other instrument which may be or required to be given under this Agreement, shall be delivered in person, sent by United States first class certified or registered mail, return receipt requested, postage prepaid, or sent by a reputable overnight courier service and shall be addressed to either paid at the address as hereinabove given. Either party may designate such other address as shall be given by written notice.

ARTICLE 11. CONTROLLING LAW AND VENUE

This Agreement, the rights and obligations of the parties hereto, and any claims or disputes relating thereto shall be governed by, interpreted, construed and enforced in accordance with the laws of the State of Florida. Venue for any suit, claim or action shall be Alachua County, Florida.

ARTICLE 12. SPECIAL PROVISIONS, ATTACHMENTS AND SCHEDULES

This Agreement (consisting of nine (9) pages), together with the attached Sample Task Order constitutes the entire agreement between Owner and Consultant. This Agreement and said attachment may only be amended, supplemented, modified or canceled by a duly executed written instrument.

ARTICLE 13. UNLAWFUL PROVISIONS

Should any terms herein be declared unlawful by any arbitrator or Court of competent jurisdiction, the balance of this Contract shall remain in full force and effect.

ARTICLE 14. AMENDMENT, MODIFICATION, WAIVER, CONSENT

No amendment, modification, waiver, or any consent to any departure from the express terms of this Contract shall be effective unless same is in writing and signed by an authorized representative of each Party, and then such amendment, modification, waiver, or consent shall be effective only in the specific instance and for the specific purpose given. Failure by GACRAA in any instance to insist on the Contractor's compliance with the Contract shall not be deemed a waiver of any requirement of the Contract. This Contract constitutes the entire understandings of the parties and no other agreements are binding unless in writing signed by or on behalf of the Parties.

ARTICLE 15. ATTORNEY'S FEES

In any litigation or arbitration, including appellate proceedings, arising out of or relating to this Contract, the prevailing party shall be entitled to recover reasonable attorney's fees and costs. However, the parties agree that any court or arbiter considering a request for fees pursuant to this article should avoid an "all or nothing" approach, and should instead consider a variety of factors in deciding whether either party could be fairly characterized as a prevailing party, and if so, the extent to which such party prevailed in the legal proceeding. If in the context of a particular legal proceeding, a court or arbiter in its discretion concludes that neither party prevailed, then there will be no assessment of fees or costs against either party.

ARTICLE 16. LIENS

Consultant agreed to promptly pay all persons and firms furnishing Consultant with labor, materials and/or equipment in the performance of the services by Consultant. Pursuant to

the Special Law creating the Authority, liens shall not be placed against Authority property, either by Consultant or any other party, whether in privity or not, with Authority or Consultant.

ARTICLE 17. APPLICABLE LAWS AND REGULATIONS

The Consultant shall comply with all applicable laws and regulations and shall fully indemnify and hold harmless and protect the Authority, the Authority's successors, assigns, agents, board members and employees of all of them against any loss, claim, liability, damage and expense arising from the Consultant's actual or alleged non-compliance with such regulations.

ARTICLE 18. SPECIAL PROVISIONS, ATTACHMENTS AND SCHEDULES

This Agreement (consisting of eleven (11) pages), together with the attached Sample Task Order constitutes the entire agreement between Owner and Consultant. This Agreement and said attachment may only be amended, supplemented, modified or canceled by a duly executed written instrument.

ARTICLE 19. PUBLIC RECORDS

IF THE CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONSULTANT'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS:

SUZANNE SCHIEMANN
Suzanne.schiemann@flygainesville.com
GAINESVILLE REGIONAL AIRPORT
3880 NE 39TH AVENUE, SUITE A
GAINESVILLE, FLORIDA 32609
(352) 373-0249 EXT: 113

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

CONSULTANT:

ENVIRONMENTAL SCIENCE ASSOCIATES CORPORATION.

By: _____

Printed Name: Michael R. Arnold

Title: Senior Vice President

ATTEST:

By: _____

Date: Sept. 12, , 2024

OWNER:

GAINESVILLE-ALACHUA COUNTY
REGIONAL AIRPORT AUTHORITY

By: _____

Printed Name: Allan J. Penksa

Title: Chief Executive Officer

ATTEST:

By: _____

Date: 9/19, 2024

Certified as to form:
GACRAA's Attorney _____

Date: 10/18, 2024

TASK ORDER

This Task Order No._____is an amendment to and made a part of the Agreement dated _____ _____, 2024, between Gainesville-Alachua County Regional Airport Authority (Owner) and Environmental Science Associates Corporation (Consultant). This Task Order No. _____includes the scope of services, costs, and schedule. The Scope of Services for this Task Order No._____are as follows:

A. SCOPE OF SERVICES

B. TIME OF PERFORMANCE

C. PAYMENT

D. EFFECTIVE DATE

This Task Order No._____is effective as of _____ _____

E. ORIGINAL AGREEMENT

All Terms and Conditions of the Agreement dated_____, 2024 shall remain the same and shall apply hereto.

F. ACCEPTANCE

By signature, the parties hereto accept the provisions of this Task Order No. _____

CONSULTANT:	OWNER:
ENVIRONMENTAL SCIENCE ASSOC.	GAINESVILLE-ALACHUA COUNTY REGIONAL AIRPORT AUTHORITY
By: _____	By: _____ Chief Executive Officer
Date: _____,2024	Date: _____,2024

SCOPE OF WORK – AIRPORT MASTER PLAN AND STORMWATER MASTER PLAN

Gainesville Regional Airport

Environmental Science Associates (ESA) in association with their subconsultants (ESA Team) will prepare a new master plan (project/study) for the Gainesville Regional Airport. This study will be conducted in accordance with Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-6B *Airport Master Plans* and Florida Department of Transportation (FDOT) *2021-2022 Guidebook for Airport Master Planning*. The objective of this scope of work is to prepare a comprehensive master plan document with a process that will obtain approval from the Gainesville-Alachua County Regional Airport Authority (GACRAA), the FAA, and FDOT. The project also includes a comprehensive stormwater master plan element to address current airport drainage issues and the future management of surface and stormwater.

The airport master plan effort will be a "from scratch" effort as defined by FDOT in their guidance. The primary goal of the master plan will be to create a 20-year development program that will maintain a safe, efficient, economical, and environmentally acceptable airport facility for the community. By achieving this goal, the document will provide guidance to satisfy the aviation demand in a financially feasible and responsible manner, while at the same time addressing the aviation, environmental, and socioeconomic issues of the community. In support of this goal, the following objectives will be attained:

- Ensure orderly development: consider short-term needs and long-term plans.
- Maximize level of service to commercial passenger operations.
- Provide for the growth of air cargo and general aviation.
- Ensure compliance with latest FAA design criteria, grant assurances, and policies.
- Provide flexibility to allow the airport to respond to changes in the aviation industry.
- Create an attainable stormwater master plan which supports the airport improvements.
- Meet FAA Airport Geographic Information System (AGIS) mandate.
- Create a new Airport Layout Plan (ALP) drawing set.
- Enhance role as a gateway to the community.
- Secure broad community buy-in for the future development program.

These goals and objectives will be further vetted during the initial project tasks to serve as guiding principles throughout the development of the study.

Task 1: Project Initiation

Task 1.1 Study Design

The ESA Team will initiate the project by organizing and leading scoping discussions to refine the study design. The ESA Team will document the goals and objectives and overarching themes, as well as guiding principles of the study. It's anticipated this task will largely focus on detailing a development or redevelopment strategy for the various functional areas, facilities, and infrastructure of the airport.

Product(s): Detailed scope of work and project costs, pre-meeting coordination, and scheduling.

Task 1.2 Project Kick-off Meeting

The success of any project is predicated on the entire Project Team (ESA Team, GACRAA staff, FAA, and FDOT) working together and maintaining open lines of communication. The ESA Team will facilitate a Project Team Kick-off Meeting involving key members from the ESA Team, GACRAA staff, FAA, and FDOT, as well as airport traffic control tower (ATCT) management, local representatives, and any other key stakeholders identified by GACRAA staff. At the Project Team Kick-off Meeting, study goals will be reviewed, the schedule discussed, and the communication protocols established. Members of the Project Team will be identified for participation in the overall stakeholder coordination and public outreach elements of the study (described further in Task 9).

Product(s): The ESA Team will prepare the Project Team Kick-off Meeting agenda, handouts, etc. and document the agreed upon project goals, communication protocols, and Project Team members identified during the meeting. Up to five (5) members of the ESA Team will participate in the Project Team Kick-off Meeting.

Assumption(s): The airport will provide the space for the kick-off meeting with support from the ESA Team for outreach and coordination.

Task 1.3 Tenant and User Interviews

At the onset of the study, interviews will be scheduled with major tenants and users of the airport. These one-on-one meetings will be conducted over two (2) different days to initiate a dialogue that will continue throughout the project to facilitate development of different study elements. **Tenants and users will include, but not be limited to, the passenger airlines, fixed base operators (FBO), parking/rental car companies, general aviation aircraft operators, etc.**

Task 1.4 Aerial Mapping and Airports Geographic Information System (AGIS)

Since the Airports Geographic Information System (AGIS) data collection process is a long lead time item, it will begin as early as possible in the project. This effort will be conducted in accordance with FAA ACs 150/5300-16B, -17C, and -18B, with further guidance from the FAA Southern Region and the Office of Airports Safety and Standards in Washington, D.C.

Due to the types of existing and potential future instrument approaches, the AGIS effort will follow the standards for a Vertically Guided Runway survey from FAA AC 150/5300-18B (specifically the Table 2-1 requirements for an ALP) and will be focused around performing three main tasks:

1.4.1 Vertically Guided Approach Obstruction Analysis

An Obstruction Analysis of both existing Runways 11-29 and 7-25 based on FAA AC 150/5300-18B *Vertically Guided Approach Obstruction Identification Surfaces* will be conducted. This includes:

- Initiate and complete the AGIS project process on the AGIS web portal as an Instrument Procedure Development survey.
- Develop scope of work and plans as required.
- Since the airport does possess existing Primary and Secondary Airport Control Stations (PACS/SACS), they will be recovered and utilized as the basis of control in accordance with FAA AC 150/5300-16B.
- Establish photogrammetric control and collect stereo imagery covering the surface area defined by the Vertically Guided Runway standards.

- Estimated 20 control points and 5 check points.
- Collect imagery at a 0.5 foot ground-sample distance, flight layout will be provided.
- Collected with leaf-on conditions.

- Geo-referencing of aerial photography.
- Runway critical point survey on all usable runways.
- Runway profile survey on all usable runways.
- Inventory of navigational aids associated to the airport (within 10 nautical miles of airport reference point) including the associated perpendicular points.
- Obstruction analysis for objects penetrating the Vertically Guided surfaces.
  - The ESA Team will request existing obstruction data for the airport from the FAA for review with the Obstruction Identification Surfaces (OIS).
  - If information is not available, a collection of objects penetrating the OIS will be collected using the density selection criteria.
- Development of new ortho-photography of entire project area.
  - Pixel resolution of 0.5 feet over entire project area.
- The VGA Imaginary Surfaces shall show 50 foot interval contours which are labeled.
- Collect major landmark features within imagery coverage.
- Population of the digital files with calculable and required attributes.

Product(s): Develop AGIS compliant data files containing the safety critical data required to achieve instrument approach procedure development. Develop the final Imagery Acquisition Report and Project Report for AGIS.

1.4.2 Analysis of Features within Obstruction Identification Surfaces

An Obstruction Analysis for the features within 12.5 feet of the 14 Code of Federal Regulations (CFR) Part 77 *Safe, Efficient, Use, and Preservation of the Navigable Airspace*, Precision Instrument Runway OIS for the Runway 11-29 approaches (truncated to 20,000 feet in length) and the Non-Precision Type "C" OIS for the Runway 7-25 Visual "B" approaches will be conducted. This includes:

- Obstruction analysis for surface penetrations and features within 12.5 feet of the CFR Part 77 surfaces.
  - All features which penetrate these surfaces lowered 12.5 feet are to be collected.
  - Ground elevations will be provided for any object within 12.5 feet of the specified CFR Part 77 surfaces. Exact accuracy of the ground positions may vary depending upon the visibility of the ground within the aerial imagery. Where major elevation breaks are not present, it is anticipated that the 200 foot grid will be used to calculate the majority of ground elevations.
- Areas of tree canopy that penetrate the specified OIS lowered 12.5 feet shall be contoured at 5 foot contour intervals. Individual trees extending significantly above the tree canopy shall not be contoured but will have a spot elevation on top.
  - The outline of the limits of the tree canopy penetrating the OIS lowered 12.5 feet is to be identified.
- Areas of terrain that penetrate the specified OIS lowered 12.5 feet shall be contoured at 1 foot contour intervals.
- Obstruction accuracies will meet the National Map Accuracy standards for 1" = 800' scale photography.
- Spot elevations on a 200 foot grid inside the specified CFR Part 77 Approach Surfaces.

- This grid will not be provided in obscured areas or areas over water.
- Areas of ground penetration will be captured at a 100 foot grid interval.
- The outline of the limits of the ground penetrating the OIS lowered 12.5 feet shall be identified.

- All railroad and road centerlines will have spot elevations where they cross the extended runway centerline and the exterior limits of the OIS.
- Top height for all buildings on airfield property shall be provided.
- The CFR Part 77 surfaces shall show 50 foot interval contours which are labeled.

Product(s): Develop and deliver a Microsoft Excel file containing information on all obstacles that were collected within 12.5 feet of the OIS. This spreadsheet will contain northing, easting, elevation, penetration depth, station, and offset information. Develop and deliver an AutoCAD file containing information on all obstacles that were collected within 12.5 feet of the OIS.

1.4.3 Planimetric and Topographic Mapping

This task will utilize the imagery collected for airspace analysis in Tasks 1.4.1 and 1.4.2 for development of planimetric and topographic mapping. This will include:

- Develop mapping features to generate 1"=100' scale mapping at 1 foot contour intervals.
- Mapping will include features required for standard ALP base mapping as part of AGIS.
- Attributes that are required or calculable will be populated and submitted to AGIS as an Existing Data project.

Product(s): The ESA Team will submit all data collected and the associated deliverables in the formats specified in the appropriate ACs to the FAA's Office of Airports, Airports Surveying - GIS Program. All data submissions to the FAA will be through the program's web site at http://airports-gis.faa.gov.

Assumption(s): GACRAA staff will provide the movement area escort(s) required for the portion of the surveys on the Security Identification Display Area (SIDA) of the airport.

Task 2: Existing Conditions

This task will evaluate and document the baseline conditions for all physical features and the operational characteristics of the airport. The identification of the size, condition, use, etc. of the various airport facilities forms the foundation for subsequent efforts and analyses of the study.

To the extent possible, the ESA Team will assess the condition of the airport facilities and surrounding features using existing airport records, drawings, studies, and reports. It is assumed the airport will provide any existing digital plans since no field surveying will be conducted outside of the AGIS geodetic control and property boundary surveys.

Task 2.1 Airfield Facilities and Surrounding Airspace

- Runways (length, width, condition, strength, features, etc.)
- Taxiways (length, width, condition, strength, features, etc.)
- Lighting, Marking, and Signage (type, condition, etc.)
- Navigational and Visual Approach Aids (FAA and airport owned)
- Instrument Approach Procedures (arrival and departure)
- Air Traffic Management, Airspace, and Obstructions (for airport and surrounding region)

Task 2.2 Passenger Terminal Facilities

- Curbfront
- Ticketing
- Baggage Systems
- Passenger Security Screening
- Passenger Holdrooms
- Passenger Conveniences
- Concessions
- Gates and Aircraft Parking Apron
- Ground Access, Circulation, and Auto Parking
- Rental Car Facilities

Task 2.3 General Aviation Facilities

- Aircraft Parking Aprons (size, condition, strength, etc.)
- Aircraft Storage Hangars (size, facilities, condition, etc.)
- Aviation Related Tenants (FBOs, businesses, corporate flight department, air taxi, charter, flight training, private owners, etc.)

Task 2.4 Support Facilities

- Airport Traffic Control Tower (facilities, operations, procedures, etc.)
- Airport Administration Space (size, facilities, condition, etc.)
- Airport Maintenance Facilities (size, equipment, condition, location, etc.)
- Aircraft Rescue and Fire Fighting (size, equipment, condition, location, etc.)
- Aviation Fuel Storage and Dispensing Systems (size, equipment, condition, location, etc.)
- Airfield Electrical Vault (size, location, equipment, condition, etc.)

Task 2.5 Airport, Community, and Surrounding Area Features

- Non-Aviation Related Uses (on-airport facilities)
- Landside Access and Parking (outside of passenger terminal facilities)
- Environmental Data (various to support tasks of environmental analyses)
- Utilities (general information on water and sanitary sewer services available)
- Surrounding Land Use and Zoning (on- and off-airport property)
- Socioeconomic Data (obtain historic data and future projections for population, income, employment rates, types of employment, housing starts, etc. from Woods & Poole Economics, Inc.)

Task 2.6 Airport Data

- Meteorological Data (historic wind, temperature, and cloud ceiling data)
- Operational Data (various to support tasks of aviation forecasts – in addition to the official airport and ATCT records, this effort will also obtain the most recent 12 months of FlightAware data).

Product(s): Two (2) full day site visits by three (3) ESA Team members of the airport property will be conducted to support this effort. Documentation detailing the existing airport facility conditions suitable for incorporating as part of a detailed chapter in the first working paper.

Task 2.7 Catchment Area Leakage Study

An analysis will be conducted to identify and document the airport's historic commercial passenger service area, where those passengers travel to/from, and the potential for the market to change in the future. The historic passenger retention and leakage will be documented detailing airport and airline use for passenger traffic originating in the airport's catchment area. The catchment area will be defined by zip code and jointly agreed upon by the ESA Team and GACRAA. Similarly, the ESA Team and GACRAA will jointly agree on airports of origin (competing airports) to be included in the study. In addition to GNV, this would likely include the Jacksonville, Daytona Beach, Orlando-Sanford, Orlando, Tampa, and St. Pete-Clearwater International Airports. The market will be further defined and analyzed by documenting passenger drive times, traffic, and fares for the catchment area's top 100 origin and destination passenger markets. The analyses will also include a comparison with a previous year or period (i.e. 2019 pre-COVID, etc.) to be selected by GACRAA.

Product(s): Documentation detailing the airport's commercial service activity, demographics about the local area's travel trends, and evaluation of passenger service trends will be included as a supporting document to the aviation forecasts in the first working paper.

Assumption(s): No passenger surveys or focus groups will be conducted under this scope.

Task 3: Aviation Forecasts

Task 3.1 Evaluation of Historic and Previous Forecasts

At the onset of the aviation activity forecasts, an evaluation of the historic activity since the last airport master plan will be conducted. Additionally, for comparison purposes, existing forecasts for the airport will be documented and evaluated. At a minimum this will include the projections from the 2014 ALP Update Narrative Report, FDOT's Florida Aviation System Plan, and the FAA's Terminal Area Forecast (TAF). Industry trends will also be documented from various sources such as the FAA's Aerospace Forecasts, Transportation Research Board (TRB) publications, industry groups, etc.

Product(s): Documentation detailing historic activity and previous forecasts will be incorporated as part of an aviation forecast chapter in the first working paper.

Task 3.2 Baseline Forecast Preparation

Upon completion and analysis of the aforementioned inventory tasks and historic projections, aviation demand forecasts will be developed. In addition to typical industry standards and formulas (regression analysis, market share analysis, simple annual growth, etc.), the ESA Team will temper the forecasts by reviewing the overall economic activity in Gainesville, Alachua County, and the surrounding area.

The ESA Team will conduct an overall socioeconomic evaluation of the region to include an identification and examination of the driving factors for the growth of aviation activity in the airport's service area. This will incorporate any pertinent data that has been previously collected by local entities. The goal will be to determine the potential for and extent of shifts in aviation demand for the Gainesville, Alachua County, and surrounding area. The ESA Team will utilize this data to assist in their identification of potential changes in existing domestic passenger traffic patterns for the airport, as well as other commercial and general aviation activity.

Baseline forecasts will be developed utilizing historic aviation activity data (local as well as regional and national), industry trends, and socioeconomic factors. The baseline forecasts will be representative of and support the continuation of the existing usage patterns of the airport. The ESA Team will develop forecasts for the 5, 10, and 20-year planning periods. These forecasts will be used to interpolate annual forecasts as needed. Output from this task will include:

- Projections of Passenger Enplanements
- Passenger Service Activity Forecasts (utilizing industry trends, potential commercial aircraft fleet mix, and expected passenger boarding load factors)
- Total Based Aircraft (utilizing existing airport data and industry trends)
- Based Aircraft Fleet Mix (by specific aircraft categories)
- General Aviation Activity Forecasts (total operations as well as itinerant and local splits)
- Air Cargo Operations
- Military Operations
- Total Annual Operations
- Peaking Characteristics (peak month, average day of the peak month, and peak hour of the average day - for commercial passenger enplanements and operations, as well as for overall operations)
- Categories of Operations (total local versus total itinerant, instrument activity, day/night splits, and overall aircraft operational fleet mix)
- Critical Aircraft (documentation of the existing and expected future critical aircraft)

Product(s): Documentation detailing the final baseline activity projections will be incorporated as part of an aviation forecast chapter in the first working paper.

Assumption(s): Does not include a full commercial airline market analysis or passenger leakage study.

Task 3.3 Alternate Forecast Scenarios

Additionally, two (2) alternate scenario based projections will be developed based on "what-if" situations and information obtained in the master plan analyses up to this point in the study process. These scenarios will represent significant deviations (either increases or decreases) to the baseline forecasts that could occur during the course of the 20-year planning period.

This effort will explore how the current commercial passenger and air cargo airline trends could create potential circumstances that would impact the activity at the airport. Example scenarios would include an analysis of the potential activity associated with one or more of the following scenarios:

- Entrance of a new, regularly scheduled passenger air carrier airline.
- Expanded domestic and/or charter operations and enplanements.
- Significant increase in an air cargo or another commercial aircraft operator.

Product(s): Documentation detailing the alternate forecast scenarios will be incorporated as part of an aviation forecast chapter in the first working paper.

Task 3.4 Baseline Forecast Review Coordination

The final selected baseline forecasts will be compared to the most recent FAA TAF to determine if they are within the FAA's range for consistency (within 10 percent of the TAF in the 5-year period and 15 percent of the TAF in the 10-year period). The ESA Team will coordinate the formal review of the selected forecasts

with the FAA, as well as FDOT, and incorporate any comments as appropriate. This will include one (1) meeting with both the FAA's Orlando Airports District Office (ADO) and FDOT staffs attending.

Product(s): Draft agency transmittal letters and a final approved baseline forecast incorporating any FAA and FDOT comments.

Task 4: Facility Assessment and Requirements

Task 4.1 Airfield Demand Capacity Analysis

The ESA Team will use the methods detailed in FAA's AC 150/5060-5 *Airport Capacity and Delay* to calculate the airfield capacity of the current runway and taxiway system under different operating flows and meteorological conditions. A runway and taxiway flow analysis will also be conducted to evaluate potential existing airfield conflict areas, choke points, and hot spots. Four (4) figures will be developed (in coordination with ATCT management) to reflect traffic flows and ground movements when each runway end is active.

Product(s): Airfield capacity estimates/calculations, four (4) airfield flow analyses/diagrams, and documentation of facility needs for capacity/safety enhancement will be incorporated as part of the facility requirements chapter in the second working paper.

Assumption(s): No simulation will be conducted as part of this task.

Task 4.2 Airfield Facility Requirements

The ESA Team will apply the airfield standards and methodologies of both FAA AC 150/5300-13B, *Airport Design* and AC 150/5325-4B *Runway Length Requirements for Airport Design* to determine the adequacy of the airfield's runway length, width, and strength, and supporting taxiway systems. This will be based on the existing and future critical aircraft for each runway. All applicable runway and taxiway design standards, protective imaginary surfaces, and setbacks will be reviewed for compliance, given the existing and future critical aircraft.

In addition, an analysis will be conducted on the potential impacts and/or limitations the current airfield system has on both the existing and future operational aircraft fleet mixes. The intent is to quantify and document to the extent possible, any operational constraints that result as a direct result of the physical and operational characteristics of the airport.

Product(s): Airfield facility needs will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.3 Navigational Aids and Airspace

The ESA Team will coordinate with the FAA on potential navigational aid and changing airspace issues intended to improve the utility of the airport, while at the same time minimizing potential impacts. Any potential changes to the published instrument approach and departure procedures, as well as any other planned navigational aid improvements will be documented and evaluated.

Product(s): Requirements for navigational aids and airspace will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.4 Requirements for Passenger Terminal Facilities

An evaluation of future passenger terminal needs will be conducted based on the activity levels established in the forecast. This effort includes a review of existing terminal drawings to determine the current space for functional areas. It also includes all spaces from the length of curb for passenger drop off and pickup to the aircraft parking apron. The ESA Team will identify the demand for the different functional areas of the passenger terminal using FAA, Airport Cooperative Research Program (ACRP), and other industry standards based overall and peaking projections identified in the activity forecasts. Key elements to be evaluated include:

- Curbfront
- Ticketing
- Baggage Systems
- Passenger Security Screening
- Passenger Holdrooms
- Passenger Conveniences
- Concessions
- Gates and Aircraft Parking Apron
- Ground Access, Circulation, and Auto Parking
- Rental Car Facilities

Product(s): Passenger terminal needs will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.5 Requirements for General Aviation Facilities

The following general aviation facilities will be evaluated to determine existing and future requirements:

- FBO Facilities
- Conventional and Maintenance Hangars
- T-hangars
- Based Aircraft and Transient Aircraft Apron and Tie-down Space
- FBO Facilities

Product(s): The general aviation requirements will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.6 Support Facility Requirements

The following airside support facilities will be evaluated for the planning period:

- Air Cargo Facilities
- Maintenance Repair and Overhaul (MRO) Facilities
- Airport Traffic Control Tower (including line of sight considerations)
- Airport Administration Facilities
- Airport Maintenance Facilities
- Aircraft Rescue and Fire Fighting (ARFF)
- Aviation Fuel Storage and Dispensing Systems
- Airfield Electrical Vault

Product(s): The support facility requirements will be incorporated as a part of the facility requirements chapter in the second working paper.

Task 4.7 Landside Facility Requirements

Landside facilities to be evaluated include the need to provide improved ground access and automobile parking to existing facilities as well as to any new development areas on the airport. While this includes the non-aviation related uses, as well as the aviation related, particular emphasis will be placed on the needs for new development areas on the airport.

Product(s): Landside facility requirements will be incorporated as a part of the facility requirements chapter in the second working paper.

Assumption(s): If needed, GACRAA will deploy their traffic counters to update the last counts made in 2018 for airport roads.

Task 5: Environmental Analyses

Task 5.1 Natural Resources and Environmental Overview

In general, the environmental analyses serve to assist in selecting preferred development alternatives which minimize potential environmental impacts. It also serves to point out potential areas of concern through the use of a threshold analysis, i.e., identifying which aspects of the preferred development plan might exceed industry standards for no significant impact. Development that exceeds these thresholds may require mitigation or a more comprehensive evaluation of alternatives. The ESA Team will review each area of potential concern so GACRAA staff is made aware of: 1) the level of potential impact, 2) whether further environmental study is required prior to implementation, and 3) whether the proposed improvements will comply with applicable state and federal laws.

The environmental documentation will follow the guidance provided in FAA's Order 5050.4B *Environmental Handbook* and FAA Order 1050.1E *Environmental Impacts: Policies and Procedures*. The first step for this will be to establish a baseline assessment of the current airport environmental condition. To establish this baseline, the following areas within the entire airport property boundary will be reviewed:

- Air quality
- Biological resources (including fish, wildlife, and plants)
- Climate
- Coastal resources
- Department of Transportation Act, Section 4(f)
- Farmlands
- Hazardous materials, solid waste, and pollution prevention
- Historical, architectural, archeological, and cultural resources
- Land use
- Natural resources and energy supply
- Noise and compatible land use
- Socioeconomics, environmental justice, and children's environmental health and safety risks
- Visual effects (including light emissions)
- Water resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

This effort is primarily based on existing information. While no wetland mapping or detailed field investigation is included in this task, two (2) ESA Team members will conduct a one (1) day site visit to validate documented features of the airport property. Once the baseline condition is established, lists of probable impacts that could result from any proposed development will be prepared and quantified. Those impacts that could require further study will be identified.

Product(s): The various analyses will be incorporated as part of a comprehensive environmental overview chapter in the third working paper.

Assumption(s): GACRAA staff will provide the movement area escort(s) required for the portion of the site visit that is on the Security Identification Display Area (SIDA) of the airport.

Task 5.2 Noise Modeling

As part of the environmental overview, the ESA Team will prepare an assessment of the potential noise impacts that would result from the activity levels and fleet mix from the final approved baseline aviation forecasts. The ESA Team will prepare the new noise contour maps, using the Aviation Environmental Design Tool (AEDT) for both the base year (existing airfield conditions) and a future year using the approved aviation forecasts. The single future year modeled (5, 10, or 20 year horizon) will be determined during the course of the study. The contours will be depicted on land use base maps with a supporting table that indicates the acreage of each land use type that is impacted by the 55, 60, 65, 70, and 75 DNL noise levels. This effort will not constitute a CFR Part 150 noise study.

Product(s): The noise analyses will be incorporated as part of a comprehensive environmental overview chapter in the third working paper.

Assumption(s): GACRAA staff will provide previous noise studies to document past efforts, outcomes, and model assumptions.

Task 5.3 Recycling, Reuse, and Waste Reduction Plan

Per FAA Order 5100.38D, Change 1 *Airport Improvement Program Handbook*, master plans funded with Airport Improvement Program (AIP) dollars must address issues related to an airport's recycling, reuse, and waste reduction programs. This includes:

- Reviewing waste management contracts;
- Assessing the feasibility of solid waste recycling at the airport;
- Identifying operations and maintenance requirements;
- Identifying the potential for cost savings or generation of revenue; and
- Minimizing the generation of waste at the airport.

Site visits for the Recycling, Reuse, and Waste Reduction Plan (RRWRP) will be conducted over two (2) full days by two (2) ESA staff members during which solid wastes from the major sources will be visually inspected, photographed, and documented. Volumes of the waste materials will also be estimated during observations. To address feasibility, the existing providers of recycling services for facilities managed by GACRAA and their ability to provide recycling or waste reduction services for targeted materials will be assessed. This will include both traditional recycling such as cans/bottles/paper, and more innovative approaches such as "food rescue" that could provide food products to needy people when those foods are close to their expiration date.

Based on the information gathered, opportunities for waste minimization will be identified. General cost factors (e.g. high, medium, or low) associated with the implementation of each measure will also be identified. This information is intended to guide future implementation decisions.

ESA will review the airport's agreements with service providers that remove waste and recyclables from the facilities. If such contracts or purchase orders exist between other airport occupants and service providers, ESA will attempt to review those as well. Any local, state, or federal laws/regulations that could constrain the waste and recycling services to the airport will also be reviewed. This includes state or local "flow control" laws as well as requirements for sterilizing wastes that originate outside the U.S.

Product(s): The solid waste recycling analysis will be incorporated as part of a comprehensive environmental overview chapter in the third working paper.

Task 5.4 Stormwater Master Plan

As with most airports in Florida, the drainage and management of surface and stormwater is key to enabling further development of GNV. This stormwater master plan will guide and incorporate the proposed development areas from the concurrent airport master planning effort so that the drainage and stormwater management needs are met. Goals of this study include:

- Collect and document all prior permitting.
- Review past planning/stormwater planning efforts and bring forward elements that GNV staff agree are still desired and/or necessary.
- Create Geographic Information System (GIS) inventory of existing stormwater management infrastructure using survey and field collected data.
- Develop hydrologically conditioned Digital Elevation Model (DEM).
- Verification of Federal Emergency Management Agency (FEMA) modeling and mapping.
- Build a 1D/2D existing conditions Interconnected Channel and Pond Routing (ICPR) model.
- Identify and assess future development alternatives including proposed stormwater management features with regard to stormwater quality and quantity.
    - Investigate options to consolidate existing Stormwater Management Facilities (SWMF's) to other areas or relocate them offsite. Specifically, investigate the use of smart ponds to provide water quality off airport property.
    - Consolidate and optimize the airfield drainage system, eliminate open conveyances to the maximum extent practicable.
- Develop a capital improvement plan for maintenance and expansion of the Airport's stormwater infrastructure.
- Identification of funding sources to aid in stormwater infrastructure improvements.

The stormwater master plan will be done with consideration of St. Johns River Water Management (SJRWMD) criteria as well as the latest applicable FAA guidance including:

- FAA AC 150/5320-5D, *Airport Drainage Design*
- FAA AC 150/5200-33C, *Hazardous Wildlife Attractants On or Near Airports*

5.4.1 Data Collection

Stormwater System

Accurate and complete inventory of stormwater features on the airport is critical to the accuracy of the stormwater model. The ESA Team will inventory the drainage structures and conveyance on the airfield and create a comprehensive feature dataset for use in the ICPR model and for planning future drainage system preservation and improvement projects. This survey will include the condition and material types of all pipes based on end of pipe inspection. Based on the initial survey, video inspection of critical pipes and/or pipes with suspected condition issues under airfield infrastructure will be conducted. The surveyed information will be included in the ICPR model along with other details that may be needed for analysis of future development area alternatives.

Digital Elevation Model (DEM)

Current DEM based on aerial LiDAR data collected by others will be obtained for use in the stormwater model.

FEMA Data/Modeling

Effective Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) data will be obtained from FEMA along with current effective hydrologic and hydraulic modeling used to establish the regulatory flood zone boundaries. An assessment of the methods and data used for the modeling will be completed and needs assessed.

Environmental Resource Permit History

Existing Environmental Resource Permits (ERPs) within the airport property limits will be researched and documented in a spreadsheet and GIS shapefile. Permits information will be saved in a spreadsheet and sorted by status so that outstanding permit actions can be identified. If there are any compliance or permitting actions identified, they will be summarized.

Existing Stormwater Planning Documents

The ESA Team will review all previous stormwater master planning documentation provided by GACRAA staff and provide a summary of past recommendations. Any past recommendations/improvement projects that may be incomplete will be identified and if still beneficial will be documented for incorporation into the analysis.

Existing GIS Data

In support of the ICPR modeling, soil and land use data will be downloaded from publicly accessible locations such as SJRWMD, Alachua County, and United States Geological Survey (USGS), then edited to the reflect the existing site conditions based on current aerial imagery and existing geotechnical data.

Product(s): The stormwater data collection elements will be produced in a format that can also be utilized for various sections of the environmental overview chapter of the third working paper, as well as portions of the alternatives analyses of Task 6. The overall stormwater master plan will be included as a stand-alone document. The stormwater data elements will include:

- GIS data set of stormwater features on the airport property.
- Hydrologically conditioned DEM.
- Summary of FEMA modeling/mapping.
- Summary of past ERP and outstanding items (if any).
- ERP spreadsheet and GIS data set.

- ✈ Summary of past stormwater planning efforts.

Assumption(s): GACRAA staff will assist in coordination of on-airport ground survey, primarily by providing the movement area escort(s) required for the portion of the surveys on the Security Identification Display Area (SIDA) of the airport and by providing all documentation of past stormwater planning efforts.

5.4.2 Drainage Study

Existing Conditions ICPR Model

The ESA Team will create an ICPR model to incorporate hydraulic details such as drainage structures and conveyances. The ICPR model will be a 1D/2D surface water/groundwater model built using the current DEM, along with publicly available land use and soil data and permit information. Land use and soil data will be revised based on the best available on-site collected data. Model results will be evaluated and compared to one known event.

Assumption(s): Existing geotechnical data will suffice for modeling and no new geotechnical exploration will be done to support the modeling.

FEMA Model/Mapping Assessment

Following the acquisition of the current effective model, a corrected effective model will be developed by incorporating the survey and LiDAR data collected as part of the overall airport master planning effort. Results from this modeling will be mapped and compared to the current effective flood hazard areas shown on the FIRM. No floodway determination runs will be completed.

Alternative Analysis

Following selection of a recommended development alternative, the ESA Team will revise the future land use mapping so that the stormwater needs from those development areas can be assessed. Stormwater management facilities will be located in appropriate areas and conceptually sized to meet SJRWMD, FAA, and local water quality and quantity requirements. Coordination meetings with each of these entities will be conducted and documented in the drainage plan for the airport.

Upon completion of the alternatives analysis and agency coordination, the ESA Team will apply for a conceptual ERP, if it is deemed beneficial by the SJRWMD and GNV staff.

Capital Improvement Plan

Recommended drainage improvement projects to preserve the function of the existing system as well as improvement projects to support future development will be identified. Rough order of magnitude costs for improvement projects to the stormwater facilities will be generated. Through coordination with the GACRAA staff, a maintenance budget will be established along with planned improvement projects for maintenance of the existing stormwater system.

Product(s): The drainage study elements will be produced in a format that can also be utilized for various sections of the environmental overview chapter of the third working paper, as well as portions of the alternatives analyses of Task 6. The overall stormwater master plan will be included as a stand-alone document. The drainage study elements will include:

- ✈ Existing and proposed ICPR models.

- Capital Improvement Plan budgets for maintenance and proposed improvements to the stormwater infrastructure.

Task 6: Alternatives for Airport Development

The alternatives analysis provides the framework for making decisions regarding future airport development options. Information from previous tasks will be utilized to conduct the different evaluations under this task.

Task 6.1 Constraints Analysis

An analysis will be conducted of the operational, physical, and environmental constraints of the airfield prior to defining any airport alternatives. This effort will identify factors that could impact project feasibility, the community, the environment, or long-term viability of the airport. The constraints for consideration include (but not limited to) the design standards, required protective imaginary surfaces, and setbacks associated with the existing airfield, as well as other features which may affect development options, including wetland boundaries, flood zones, and areas optioned to existing airport tenants. The various constraining elements will be summarized in text format and reflected on a single detailed figure of the airport and immediate surrounding area.

Product(s): Facility constraints and the resulting detailed figure will be incorporated as part of the airport development alternatives chapter in the third working paper.

Task 6.2 Initial Development Options

The ESA Team will create and analyze initial development options that follow the standard criteria contained in FAA AC 150/5070-6B *Airport Master Plans* and FDOT's *2021-2022 Guidebook for Airport Master Planning*. This will include up to three (3) initial development options for each of the following major categories:

- Airfield Improvements (changes is runway endpoints, taxiway configurations, removal of surfaces, and/or new movement areas).
- Passenger Terminal Facilities (based on the airside, terminal, and landside requirements identified in preceding tasks).
- General Aviation Facilities (to include options for FBO facilities, air cargo, MRO facilities, aircraft parking areas, airside access, automobile parking areas, and landside access)
- Other Aviation Related Support Facilities (to include potential new, expanded, or relocated sites for facilities such as air traffic control, airport administration, airport maintenance, ARFF, fuel storage, airfield electrical vault, etc.)
- Non-Aviation Related Uses

The following are typical evaluation criteria that the ESA Team will apply to the development of suitable options/alternatives:

- Adherence to FAA/FDOT standards;
- Consistency with study goals and objectives;
- Non-interference with operational and safety requirements;
- Optimal use of existing facilities, utilities, and topography;
- Efficiency in ground access;
- Flexibility to accommodate changes in demand and facility expansion;

- Provides the most benefit for the costs involved;
- Least impacts to the social and physical environments; and
- Provides the best revenue-generating potential while meeting the intended demand.

The ESA Team will prepare a matrix analysis to determine the best option(s) for each major category. This matrix will contain screening criteria similar to those described above in order to compare the different options presented.

Product(s): A ranking of the initial options will be incorporated as part of the airport development alternatives chapter in the third working paper.

Task 6.3 Recommended Development Alternatives

The ESA Team will work with the GACRAA staff, FAA, and FDOT to further evaluate the best options selected for each of the major development alternatives described above. During this process, elements of the different initial development options may be combined to create a modified or improved development alternative for each major category included in the previous tasks. This provides the opportunity to incorporate some or all of the best features in order to develop the final alternative, which would be subject to the same evaluation criteria utilized for the initial options. This process will also make any adjustments necessary to ensure the preferred alternatives for each major category do not impact each other.

Product(s): The final recommended airport development alternatives will be incorporated as a chapter of the third working paper.

Task 7: Airport Layout Plan Drawing Set

Task 7.1 Airport Layout Plan Set Preparation

The ESA Team will prepare an Airport Layout Plan (ALP) Drawing set in accordance with FAA guidelines per the requirements outlined in AC 150/5070-6B *Airport Master Plans* and consistent with the checklist provided in FAA ARP SOP 2.00 *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)*. The ALP Drawing set will rely upon the data collected in the airport mapping/AGIS task and at a minimum will include the following sheets:

7.1.1 Title Sheet

To include the airport location map, vicinity map, index of drawings, approval blocks, date, etc.

7.1.2 Airport Data Sheet

To include the recent 10-year wind rose, airport data table, runway data table, taxiway data table, modifications of standards approval table, declared distance table, and legend.

7.1.3 Airport Layout Plan Drawing

A drawing depicting existing facilities and the future improvements of the 20-year planning horizon. To include various details such as dimensions, imaginary surfaces (safety and critical), topography, etc. This may ultimately include two sheets, one which only includes existing facilities and the other which reflects both existing and future facilities of a traditional ALP.

7.1.4 Terminal Area Drawing (2 sheets)

Drawing sheets depicting a larger scale drawing of the existing and proposed development including building data table, commercial terminal facilities, general aviation terminal facilities, hangars, aircraft parking, landside access, automobile parking, rental car facilities, security fencing/gates, and other key features.

7.1.5 Airport Airspace Drawings (2 sheets)

Drawings depicting the future CFR Part 77 *Safe, Efficient, Use, and Preservation of the Navigable Airspace* surfaces including ultimate plan view, existing profile view, future profile view, and obstruction data tables. The primary sheet and then an additional sheet to fully depict the precision instrument approach surfaces to Runway 29.

7.1.6 Inner Portion of the Approach Surface Drawings (3 sheets)

Two of the drawing sheets will depict the existing and future plans and profiles of the inner portion of the runway approach surfaces along with surface penetrations, out to the points 100 feet above the established runway end elevations. These drawings will also depict the Threshold Siting and Glideslope Qualification Surfaces as required. A third sheet will be prepared to depict both the centerline profiles and Runway Safety Areas of both runways.

7.1.7 Runway Departure Surface Drawing (2 sheets)

Drawing sheets depicting the instrument departure surface plan and profile views and obstruction data tables off of each runway end.

7.1.8 Land Use Drawings (2 sheets)

Drawings depicting the on-airport and off-airport land uses with features to include the updated noise contours (both base year and future scenario selected), safety areas/zones, property line, jurisdiction boundaries, and other details as required.

Product(s): An ALP Drawing set created in AutoCAD using the AGIS data for the base file. A chapter, which describes each of the ALP drawing sheets, will also be prepared for inclusion in the fourth working paper.

Task 7.2 Airport Layout Plan Review Coordination

The ESA Team will coordinate the review of the ALP Drawing set with the FAA and FDOT and incorporate comments as appropriate. This will include one (1) meeting with both the FAA's Orlando ADO and FDOT staff attending.

Product(s): Draft agency transmittal letters and a final approved ALP drawing set incorporating any FAA and FDOT comments.

Task 8: Recommended Development Program

While the following tasks are listed in a sequential order, they may be conducted simultaneously or at different times than presented to assess the different elements necessary to generate the final 20-year development program.

Task 8.1 Inventory of Financial Information

The ESA Team will gather information which affects the financial management of the airport's development program and confirm the structure, constraints, requirements, and opportunities to implement the next 20-year capital improvement program (CIP). The primary purpose is to gain an understanding of the legal documents and agreements which affect the financial management of the airport. As such this will include interviews with key GACRAA staff to gain an understanding of the airport's objectives and preferences for financing the CIP. The data gathering will include:

- Historic, detailed (account-by-account) financial statements and audit reports for the past three years.
- Detailed year-to-date financial statements for the current year with budget remaining amounts.
- Most recent capital budget (internal as well as CIP submitted to the FAA and FDOT).
- Official statements and loan agreements for any outstanding debt issues.
- Ordinances, resolutions, administrative rules, regulations, and policies establishing the airport and affecting its financial management.
- Airline agreements.
- Ground transportation agreements.
- Restaurant, lounge, gift shop, and specialty retail concession agreements.
- FBO agreements, large hangar leases, typical T-hangar leases by size, improved ground leases, unimproved ground leases, cargo facility leases, and other general aviation agreements.
- Other airport lease, concession, use, and privilege agreements.
- FAA, Transportation Security Administration (TSA), state, and local grant records.
- PFC quarterly reports for the most recently submitted report and the same report submitted one year earlier.
- Historic funding sources for the CIP.

Product(s): Sections describing the structure and requirements of airport financial management for inclusion in the recommended development program chapter of the fourth working paper.

Task 8.2 Preliminary Financial Analysis

The ESA Team will prepare a Preliminary Financial Analysis for the CIP. This preliminary evaluation includes considering the airport's overall capability to fund capital development and finance airport operations. The analysis identifies potential funding sources, including debt, that may be practical alternatives for financing capital development projects. Key steps of this include:

- Review updated financial and legal information gathered during the Inventory of Financial Information task related to financial condition, airport policies, administrative regulations, grant status and airport user agreements which affect the financial management of the airport, and which will affect the financial reasonableness of implementing the CIP.
- Review the aviation forecast and alternative capital development concepts. Review preliminary development costs and schedules for the CIP alternatives to consider possible revisions in the development scope and timing.
- Develop summary level financial projections of funding sources, funding requirements, and other information to provide a basis for assessing preliminary financial plans of the CIP alternatives. Revenue and capital funding projections will be compared with operating and maintenance (O&M) expense and capital expenditure projections to identify a balanced approach for developing and funding the program.

- ✈ Conduct workshop sessions with airport officials to review and discuss the preliminary financing schedules. Resolve funding shortfalls identified in the capital program alternatives by revising the CIP schedule, CIP scope, and/or capital funding sources. Identify funding preferences, potential debt requirements, and other funding resources that the airport may want to utilize.

Product(s): Financing schedules summarizing the Preliminary Financial Analysis which indicates whether the potential sources of funding will be reasonably available in the amounts and time frame required to support the scope and schedule of the alternative development concepts. This documentation will be included in the recommended development program chapter of the fourth working paper.

Task 8.3 Financial Implementation Plan Development

The ESA Team will prepare a detailed financial plan for implementation of the selected master plan CIP alternative. The Financial Implementation Plan resulting from this task will present reasonable guidelines, on a preliminary basis, for matching projected financial resources with financial needs. Airline rates and charges and costs per enplaned passenger resulting from the capital program will be calculated at a summary level using the airport's current methodology and airline lease agreements for determining user fees. Potential revenue enhancement opportunities for non-airline revenues will be identified. Key steps of this include:

- ✈ Develop projection of Operations and Maintenance (O&M) expenses by reviewing historic expenses to identify trends and anticipated increases/decreases. Review the potential effect of the selected CIP on projected O&M expenses. Interview GACRAA staff to develop appropriate O&M projection assumptions and to identify other anticipated changes.
- ✈ Develop projection of non-airline operating revenues by reviewing historic non-airline revenues (including concessions, parking, car rentals, general aviation, FBO activities, fuel flowage, hangar leases, commercial/industrial, and other leases) to determine trends for future projections. Interview GACRAA staff to develop appropriate non-airline revenue assumptions.
- ✈ Develop projection of capital improvement expenditures by reviewing the selected CIP project list with construction cost estimates, escalation rates, and scheduling of expenditures to determine the annual need for capital funding. Interview GACRAA staff to develop appropriate projection assumptions.
- ✈ Determine funding sources for the financial plan and develop projection for financing the CIP by reviewing the summary of potential funding sources developed in the Preliminary Financial Analysis task (including federal and state grants, PFCs, economic development funds, debt funding, net revenues, bank financing, other sources) with GACRAA staff and determine sources to be used for financing the program. Develop a projection of capital financing based on the annual amount and availability of funds. Interview GACRAA staff to develop appropriate projection assumptions.
- ✈ Develop a summary level projection of airline rates and charges. Interview GACRAA staff to develop appropriate projection assumptions.
- ✈ Evaluate the reasonableness of projected airline rates and charges and cost per enplaned passenger by calculating the cost per enplaned passenger resulting from the financial projection. Compare the projected airline rates and charges and the cost per enplaned passenger with that of other airports of similar size and operation.

Product(s): Detailed Financial Implementation Plan for inclusion in the recommended development program chapter of the fourth working paper.

Task 8.4 Cost Estimates

The ESA Team will assign costs to each project (both horizontal and vertical construction) in the recommended development program. This consists of refining any probable cost estimates prepared in earlier tasks by adding significant detail for the construction costs, as well as any associated engineering, inspection, administrative, or contingency costs.

Product(s): Individual spreadsheets for each project reflecting the detailed items considered to develop the individual project cost estimates (materials, quantities, unit costs, etc.).

Task 8.5 Development Program

The ESA Team will provide recommendations for development in the form of preferred phases of improvements. In addition to the financial evaluations and cost estimates described above, key elements of this effort include refining the proposed development schedule. The ESA Team will refine the proposed project phasing based on final input from the GACRAA staff, FAA, and FDOT, as well as by applying such technical realities such as design time, FAA and FDOT grant administration, project scheduling, environmental compliance, construction permitting, construction time, and others. A final comparison will also be made based on the estimated costs of implementing the recommended development plan (including associated phasing plans) with the availability of funds from the various financial sources and the financial feasibility identified.

Product(s): The completion of the 20-year recommended development program chapter of the fourth working paper.

Task 9: Stakeholder Coordination and Public Outreach

Task 9.1 GACRAA Coordination

This task includes four (4) in-person meetings with GACRAA staff, the ESA Project Manager and relevant task leaders based on the agenda topics. The ESA Team will provide any necessary meeting materials such as a PowerPoint presentation or handouts to update the GACRAA staff on the various sections and progress of the study.

In addition, ESA's Project Manager will set up a bi-weekly call with the GACRAA staff to review project activity and status, throughout the course of the study. Participation in the bi-weekly call is limited to two or three people from both the ESA Team and GACRAA staff, as the goal is to provide a brief project update.

Task 9.2 Technical Working Group Meetings

To ensure that the master plan moves forward smoothly, the ESA Team will organize, schedule, and participate in meetings with a technical working group for the study. Members of the technical working group will be determined through discussions between the ESA Team and airport management. The technical working group meetings will consist of a presentation of the current project elements for discussion and to solicit input from the members of the technical working group.

The ESA Team will manage the technical working group meetings, scheduling, agendas, presentations, handouts, and notes. Attendance and active participation in the working group meetings by ESA's Project Manager and relevant task leaders will be based on the agenda topics. A total of four (4) working group meetings have been included in this task.

Task 9.3 Agency Coordination

9.3.1 Gainesville Regional Airport Traffic Control Tower

This task includes two (2) virtual meetings the airport's ATCT personnel to collect information and/or discuss key issues with ATCT management. The ESA Team will provide any necessary meeting materials.

9.3.2 FAA Orlando Airport District Office (ADO)

This task includes two (2) virtual meetings with the FAA Orlando ADO by ESA's Project Manager and relevant task leaders during the project as required to obtain input and guidance. The ESA Team will provide any necessary meeting materials.

9.3.3 FDOT District 2 Office

This task includes two (2) virtual meetings with the FDOT District 2 staff by ESA's Project Manager and relevant task leaders during the project as required to obtain input and guidance. The ESA Team will provide any necessary meeting materials.

Task 9.4 Public Outreach

9.4.1 Project Website

A website dedicated to the project will be developed to facilitate public outreach and participation in the study. This site will create a simple portal to exchange study documents and ideas, in addition to conveying information related to meetings, presentations, and/or workshops in a timely fashion. This site will also serve as a public repository for the dissemination of the study working papers and will be linked to the airport's website. The ESA Team will create, host, and maintain the project website throughout the duration of the study as well as for a period of up to one year after the study has been completed.

9.4.2 Public Open House #1

An advertised, public open house will be held shortly after the first working paper is publicly made available. At the workshop, the ESA Team will be responsible for discussing (on a one-on-one basis) with those in attendance the master plan process, the goals and objective of the study, operational background data, work to date, and the project schedule. The ESA Team will provide up to fifteen (15) large presentation board exhibits outlining information as appropriate. In addition, the ESA Team will provide handouts, sign-in sheets, and comment forms for the workshops. Up to four (4) members of the ESA Team will be available for the public open house.

9.4.3 Public Open House #2

A second advertised, public open house will be held upon completion of the third working paper. At the workshop, the ESA Team will be responsible for discussing (on a one-on-one basis) with those in attendance, the airport's needs over the 20-year planning horizon, and the development options considered, along with the preferred alternatives. The ESA Team will provide up to fifteen (15) large presentation board exhibits outlining information as appropriate. In addition, the ESA Team will provide handouts, sign-in sheets, and comment forms for the workshops. Up to four (4) members of the ESA Team will be available for the public open house.

Task 9.5 Presentations

This task includes two (2) presentations to GACRAA, but may also include a joint session with representatives from the City of Gainesville and/or Alachua County. While the second presentation is envisioned to be at the end of the master planning process for approval, the first meeting and associated

topics will be determined during the course of the study. The ESA Team will prepare the PowerPoint presentation and three (3) members will participate at each presentation.

Product(s): The ESA Team will provide the materials required for the different briefings, meetings, and public open houses. The ESA Team will also schedule the online meetings required during the project.

Assumption(s): The airport will provide the space for all management briefings, working group meetings, public open houses, and presentations. The airport will provide the advertisement for the public open houses with support from the ESA Team for the content and format.

Task 10: Project Deliverables

Task 10.1 Working Paper Development

In recognition of the need for timely and continuous sharing of documentation, interim working papers will be prepared that will guide the master plan development. The working papers will become the basis for the chapters and appendices of the final report. As the draft working papers are prepared, the ESA Team will provide electronic copies (in a PDF format) to GACRAA staff for their initial review. After, each will be submitted to FAA and FDOT for their review.

A total of four (4) working papers will be provided during the course of the project:

Working Paper #1	Introduction, Existing Conditions, and Aviation Forecasts
Working Paper #2	Facility Assessment and Requirements
Working Paper #3	Environmental Analyses and Alternatives for Airport Development
Working Paper #4	Airport Layout Plans and Recommended Development Program

As noted previously, elements of the stormwater master plan will be included as part of Working Paper #3. Comments received will be reviewed and incorporated as appropriate into the comprehensive draft report.

Task 10.2 Draft Master Plan Report and ALP Drawing Set

A consolidated Draft Master Plan Report will be prepared that incorporates all comments from the four working papers, along with a Draft ALP Drawing set. The draft report and drawing set will initially be submitted to GACRAA staff for review before being sent to FAA and FDOT for their review. The draft report and drawing set will be provided as electronic copies (in a PDF format).

Task 10.3 Final Master Plan Report and ALP Drawing Set

Comments on the draft report and drawing set will be utilized to create the final project deliverables. The Final Master Plan Report and Final ALP Drawing Set will be provided as electronic copies (in a PDF format). In addition, two (2) printed copies of the Final Master Plan Report and three (3) full size Final ALP Drawing Set plots will also be provided. All of the digital files (Word, PDF, AutoCAD, etc.) utilized to create the final report and drawing set will also be transmitted to GACRAA staff.

Task 10.4 Draft and Final Stormwater Master Plan Report

A Stormwater Master Plan technical report will be prepared. The report will be submitted as a stand-alone document. Comments on the draft report will be addressed to prepare the final report, which will be submitted as an electronic copy (in a PDF format). Two (2) printed copies of the flow diagrams and related

documents will also be provided. Electronic copies of all geodatabase stormwater infrastructure files used in the study, as well as the supporting ICPR model and GIS data files will be transmitted to GACRAA staff.

Task 11: Project Administration

Task 11.1 Project Management

The master plan project will be actively managed to ensure the project stays on track. These efforts may include but are not limited to tracking project milestones and updating the project schedule, reviewing subconsultant invoices, preparing monthly invoices, and monthly progress reports.

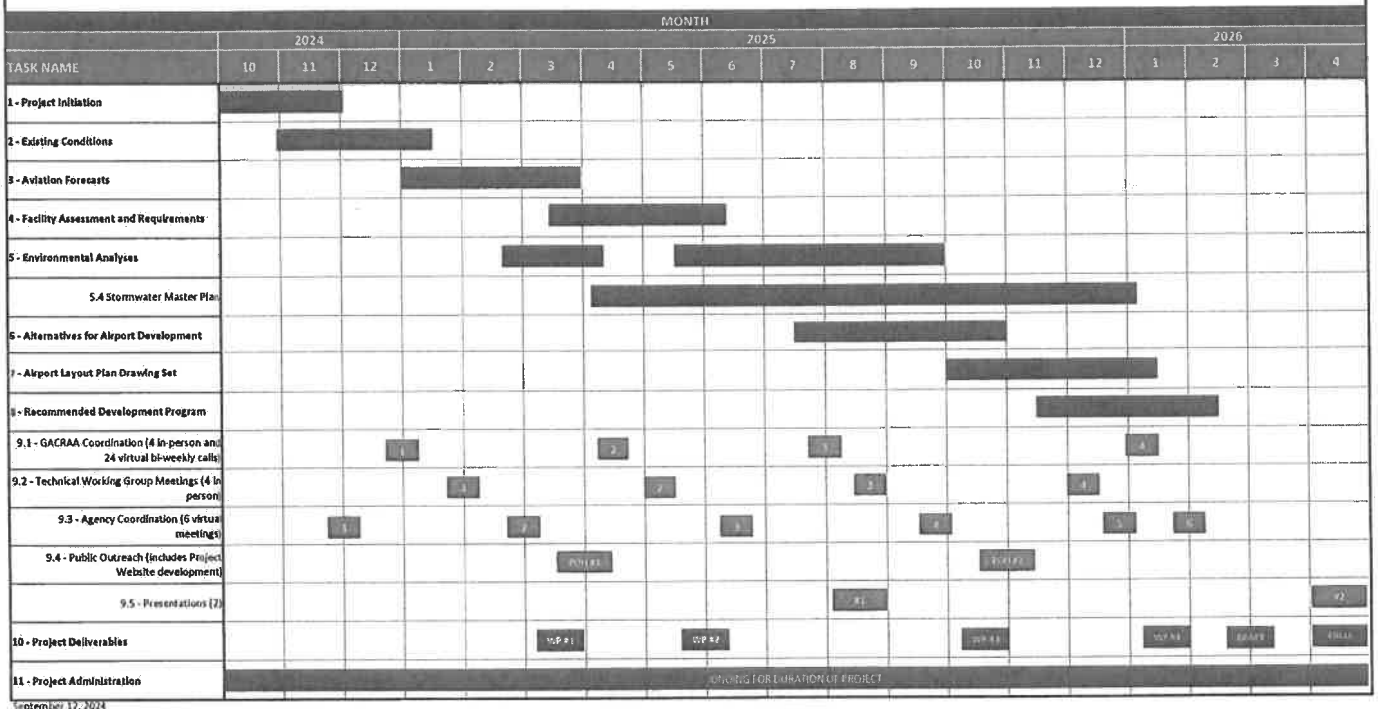
Task 11.2 Quality Assurance and Control

ESA's Quality Assurance/Quality Control (QA/QC) process will be applied to all work products; making sure documents, data, and coordination between team members adhere to ESA's rigorous standards. This includes review of project elements by staff not connected to the project to ensure that the work products are straight forward and easy to understand by the general public.

Task 11.3 Expenses

This subtask has been included to provide a line item in the related fee estimate for the costs associated with conducting elements of the scope. Details pertaining to the various expenses are included on the individual ESA Team member fee spreadsheets.

PROPOSED SCHEDULE
AIRPORT MASTER PLAN AND STORMWATER MASTER PLAN
Gainesville Regional Airport



September 12, 2024

LEGEND	
POH	Public Open House
WP	Working Paper

ESA LUMP SUM FEE SUMMARY **April 17, 2024**
AIRPORT MASTER PLAN AND STORMWATER MASTER PLAN
Gainesville Regional Airport

	Task		Estimate
1	Project Initiation	$	49,520
	WOOLPERT - Aerial Mapping and AGIS	$	140,000
	HANSON - Miscellaneous Tasks	$	10,426
2	Existing Conditions	$	51,288
	ASM - Catchment Area Leakage Study	$	27,500
3	Aviation Forecasts	$	55,128
4	Facility Assessment and Requirements	$	79,888
5	Environmental Analyses	$	78,032
	HANSON - Stormwater Master Plan	$	229,510
6	Alternatives for Airport Development	$	72,712
7	Airport Layout Plan Drawing Set	$	83,236
8	Recommended Development Program	$	33,652
	LEIBOWITZ AND HORTON - Financial Tasks	$	85,730
	HANSON - Cost Estimates	$	14,920
9	Stakeholder Coordination and Public Outreach	$	102,276
	HANSON - Meetings and Presentations	$	43,194
10	Project Deliverables	$	71,712
11	Project Administration	$	49,398
	Expenses	$	14,440
	Total	**$**	**1,292,562**

Task #	Task Name/Description	[redacted]	[redacted]	Senior Principal Consultant 3	Principal Consultant 4	Principal Consultant 2	[redacted]	[redacted]	[redacted]	Total Hours	Labor Price	Task Totals
	ESA Labor Category											
		$338	$309	$308	$282	$229	$223	$200	$161			
Task 1	Project Initiation									-	$ -	Task 1
1.1	Study Design	6			10				16	32	$ 7,424	$ 49,520.00
1.2	Project Kick-off Meeting (3 in-person for 1 day)	8			12		8		16	44	$ 10,448	
1.3	Tenant and User Interviews (2 in-person for 2 days)	4			32			16	36	88	$ 19,372	
1.4	Aerial Mapping and AGIS	2			8		16	16	16	58	$ 12,276	
Task 2	Existing Conditions									-	$ -	Task 2
2.1	Airfield Facilities and Surrounding Airspace	2			12				24	38	$ 7,924	$ 51,288.00
2.2	Passenger Terminal Facilities	4			8		16		16	44	$ 9,752	
2.3	General Aviation Facilities	2			16				24	42	$ 9,052	
2.4	Support Facilities	2			4		16	8	16	46	$ 9,548	
2.5	Airport, Community, and Surrounding Area Features	4			8			16	8	36	$ 8,096	
2.6	Airport Data	2			4				8	14	$ 3,092	
2.7	Catchment Area Leakage Study	2			8		4			14	$ 3,824	
Task 3	Aviation Forecasts									-	$ -	Task 3
3.1	Evaluation of Historic and Previous Forecasts	2			12		8		16	38	$ 8,420	$ 55,128.00
3.2	Baseline Forecast Preparation	2			40		24		56	122	$ 26,324	
3.3	Alternative Forecast Scenarios (2)	2			16		8		24	50	$ 10,836	
3.4	Baseline Forecast Review Coordination	2			16		8		16	42	$ 9,548	
Task 4	Facility Assessment and Requirements									-	$ -	Task 4
4.1	Airfield Demand Capacity Analysis	2			8				16	26	$ 5,508	$ 79,888.00
4.2	Airfield Facility Requirements	2			16		8		32	58	$ 12,124	
4.3	Navigational Aids and Airspace	2			8				12	22	$ 4,864	
4.4	Requirements for Passenger Terminal Facilities	4			8		40		16	68	$ 15,104	
4.5	Requirements for General Aviation Facilities	8			36				40	84	$ 19,296	
4.6	Support Facility Requirements	4			16		8		36	64	$ 13,444	
4.7	Landside Facility Requirements	2			16		8		16	42	$ 9,548	
Task 5	Environmental Analyses									-	$ -	Task 5
5.1	Natural Resources and Environmental Overview (2 in-person for 1 day)	2		8	8	40		16	16	90	$ 20,332	$ 78,032.00
5.2	Noise Modeling	4	24		8			40	16	92	$ 21,600	
5.3	Recycling, Reuse, and Waste Reduction Plan (2 in-person for 2 days)	2			36			8	72	118	$ 24,020	
5.4	Stormwater Master Plan	4		16	16				8	44	$ 12,080	
Task 6	Alternatives for Airport Development									-	$ -	Task 6
6.1	Constraints Analysis	2			24			8	36	70	$ 14,840	$ 72,712.00
6.2	Initial Development Options	8			40		36	24	80	188	$ 39,692	
6.3	Recommended Development Alternatives	4			16		12	16	40	88	$ 18,180	
Task 7	Airport Layout Plan Drawing Set									-	$ -	Task 7
7.1	Airport Layout Plan Set Preparation (min. of 16 sheets)	8			64		36		256	364	$ 69,996	$ 83,236.00
7.2	Airport Layout Plan Review Coordination	2			24				36	62	$ 13,240	
Task 8	Recommended Development Program									-	$ -	Task 8
8.1	Inventory of Financial Information	2			4				8	14	$ 3,092	$ 33,652.00
8.2	Preliminary Financial Analysis	2			4				8	14	$ 3,092	
8.3	Financial Implementation Plan Development				4				8	14	$ 3,092	
8.4	Cost Estimates	2			8				16	26	$ 5,508	
8.5	Development Program	2			24		8	16	40	90	$ 18,868	
Task 9	Stakeholder Coordination and Public Outreach									-	$ -	Task 9
9.1	GACRAA Coordination (4 in-person by 2 staff and 24 virtual bi-weekly calls)	16			80				80	176	$ 40,848	$ 102,276.00
9.2	Technical Working Group Meetings (4 in-person by 2 staff)	16			40				40	96	$ 23,128	
9.3	Agency Coordination									-	$ -	
9.3.1	Gainesville Regional Airport Traffic Control Tower (2 virtual)				4				4	8	$ 1,772	
9.3.2	FAA Orlando Airports District Office (2 virtual)	2			4				4	10	$ 2,448	
9.3.3	FDOT District 2 Office (2 virtual)	2			4				4	10	$ 2,448	
9.4	Public Outreach									-	$ -	
9.4.1	Project Website				16				8	24	$ 5,800	
9.4.2	Public Open House #1 (4 in-person, 3 from ESA)	8			12				16	36	$ 8,664	
9.4.3	Public Open House #2 (4 in-person, 3 from ESA)	8			12				16	36	$ 8,664	
9.5	Presentations (2 in-person by 2 staff)	8			16				8	32	$ 8,504	
Task 10	Project Deliverables									-	$ -	Task 10
10.1	Working Paper Development	8			36	8	16	16	96	180	$ 36,912	$ 71,712.00
10.2	Draft Master Plan Report and ALP Drawing Set	4			16	4	4	8	40	76	$ 15,712	
10.3	Final Master Plan Report and ALP Drawing Set	2			8	2	2	4	32	50	$ 9,788	
10.4	Draft and Final Stormwater Master Plan Report	4		4	16	4			8	36	$ 9,300	

Task 11	Project Administration									-	$ -	Task 11
11.1	Project Management		18		108					126	$ 36,018	$ 49,398.00
11.2	Quality Assurance and Control		36		8					44	$ 13,380	
11.3	Expenses (see below)									-	$ -	
										-	$ -	
										-	$ -	Task Totals
										-	$ -	$ 726,842.00
										-	$ -	
Total Hours		194	78	28	974	58	286	212	1,456	3,286		Cross Check
Total Labor Costs		$ 59,672	$ 24,102	$ 8,624	$ 274,668	$ 13,292	$ 63,778	$ 42,400	$ 234,416		$ 726,842	$ 726,842
Percent of Effort - Labor Hours Only		5.9%	2.4%	0.9%	29.6%	1.8%	8.7%	6.5%	44.3%	100.0%		3,286
Percent of Effort - Total Project Cost		5.1%	1.9%	0.7%	21.2%	1.0%	4.9%	3.3%	18.1%		56.2%	

PROJECT COST ESTIMATE SUMMARY TABLE

ESA Labor Cost		$ 726,842
ESA Labor Technology and Data Management Fee ——————>	0%	$ -
ESA Non-Labor Expenses		
Reimbursable Expenses (see Attachment A for detail)		$ 14,440
ESA Equipment Usage (see Attachment A for detail)		$ -
Subtotal ESA Non-Labor Expenses		$ 14,440
Subconsultant Costs (see Attachment B for detail)		$ 551,280
PROJECT TOTAL		$ 1,292,562

Cost Proposal: ESA Non-Labor Expenses by Task

Reimbursable Costs	Total	0% on Costs	Subtotal	Task Number 1	2	3	4	5	6	7	8	9	10	11
Project Supplies	$ 3,000	$ -	$ 3,000		$ 3,000.00									
Printing/Reproduction	$ 5,300	$ -	$ 5,300									$ 3,750.00	$ 1,550.00	
Document and Map Reproductions (CD + Digital Photo)	$ -	$ -	$ -											
Postage and Deliveries	$ -	$ -	$ -											
Mileage	$ 4,400	$ -	$ 4,400	$ 524.00				$ 260.00				$ 3,615.60		
Vehicle Rental	$ -	$ -	$ -											
Lodging	$ 800	$ -	$ 800	$ 400.00				$ 400.00						
Airfare	$ -	$ -	$ -											
Other Travel Related	$ 940	$ -	$ 940	$ 140.00				$ 120.00				$ 680.00		
-	$ -	$ -	$ -											
-	$ -	$ -	$ -											
-	$ -	$ -	$ -											
Total Reimbursable Costs (for all tasks)	$ 14,440	$ -	$ 14,440	$ 1,064.00	$ 3,000.00	$ -	$ -	$ 780.00	$ -	$ -	$ -	$ 8,045.60	$ 1,550.00	$ -
Reimbursable Costs by Task (including mark-up)				$ 1,064.00	$ 3,000.00	$ -	$ -	$ 780.00	$ -	$ -	$ -	$ 8,045.60	$ 1,550.00	$ -

ASM Fee

PROPOSAL FOR SERVICES

COMMERCIAL TERMS

Client:	***The Gainesville-Alachua County Regional Airport Authority – Allan Penksa, Chief Executive Officer***
Services:	Catchment Area Leakage Study for GNV Airport for a full year to be determined

A. Catchment area of between 10 and 90 miles to be determined in consultation with the airport.

B. Top 100 domestic origin/destination airports to and from GNV.

C. Top 100 international origin/destination airports to and from GNV.

D. Leakage to top 5 airports in the region.

E. Fares associated with travel from the catchment area to any of the competing airports.

F. Drive time analysis between GNV and competing airports.

G. Leakage by zip code to 5 airports by zip code.

H. Top origin and destination by zip code.

I. Leakage by zip code to 5 airports by airline.

J. Extra option - comparison with a previous year or period (i.e. 2019 pre-Covid, etc)

Initial Term:	April 1, 2024 – July 31, 2024
Effective Date:	June 1, 2024
Primary Consultant:	Martin Kammerman
Fees:	$27,500 for resident and visitor leakage report for a full year (domestic + Int'l)
	Includes 10-90 mile ring range section

Hanson Fee

Gainesville Regional Airport Master Plan
Fee Proposal - Hanson Professional Services Inc.
October 2, 2013

Project Role / Category / Task	Principal Principal $ 309.00	Sr. Engineer EAS VIII $ 265.00	Proj. Manager EAS VII $ 265.00	Stormwater Mgmt EAS VII $ 265.00	Client Liaison EAS VI $ 182.00	Financial EAS VI $ 182.00	QA/QC EAS VI $ 240.00	Civil Design EAS V $ 156.00	GIS Analysis EAS IV $ 150.00	Plan Production EAS III $ 120.00	Civil PE EAS $ 135.00	Website Admin VI $ 135.00	Editor Admin V $ 105.00	Admin Admin IV $ 88.00	Subtotal Hours	Subtotal Fee	Reimbursable Expense Travel	Reimbursable Expense Subconsultant	Total	Total Labor and Expense
Task 1 Project Initiation																				
1.1 Study Design	2		8	8										4	22	$ 5,210			$ -	$ 5,210
1.2 Kick-off Meeting			8	8										2	18	$ 4,416	$ 600		$ 600	$ 5,016
Subtotal	2	0	16	16	0	0	0	0	0	0	0	0	0	6	40	$ 9,626	$ 600	$ -	$ 600	$ 10,426
Task 3.4.1 Stormwater Master Plan - Data Collection																				
Stormwater System Inventory			2	16					24		24				58	$ 10,470	$ 200	$ 45,000	$ 45,200	$ 55,670
Digital Elevation Model			2	2					2						6	$ 1,360			$ -	$ 1,360
FEMA Data/Modeling			2	24					8		8				42	$ 9,170			$ -	$ 9,170
Permit History			2	16							40				58	$ 10,170	$ 200		$ 200	$ 10,370
Planning Documentation			2	8							8				18	$ 3,730			$ -	$ 3,730
GIS Data			2	4					24						30	$ 5,190			$ -	$ 5,190
Subtotal	0	0	12	70	0	0	0	0	54	0	76	0	0	0	212	$ 40,090	$ 400	$ 45,000	$ 45,400	$ 85,490
Task 3.4.2 Drainage Study																				
Existing Conditions XPX Model			2	80					80		160				322	$ 59,030		$ 5,000	$ 5,000	$ 64,030
FEMA Model/Mapping			2	80					80		80				322	$ 59,030			$ -	$ 59,030
Alternatives Analysis			2	24					40		40				106	$ 17,295			$ -	$ 17,295
Capital Improvement Plan			2	40					24		24				90	$ 16,830			$ -	$ 16,830
Report			4	40			16				60				140	$ 26,300			$ -	$ 26,300
Subtotal	0	0	12	264	0	0	16	0	224	0	364	0	0	0	880	$ 119,010	$ -	$ 5,000	$ 5,000	$ 144,010
Task 3.4 Cost Estimates																				
CIP Project Estimates			4	4			24				40			8	80	$ 14,120	$ 600		$ 600	$ 14,720
Subtotal	0	0	4	4	0	0	24	0	0	0	40	0	0	8	80	$ 14,120	$ 600	$ -	$ 600	$ 14,720
Task 8 Coordination and Public Outreach																				
8.1 GACRAA Coordination	2		38	38											78	$ 20,728	$ 600		$ 600	$ 21,328
8.2 Technical Working Group Meetings	2		16	16											34	$ 9,058	$ 400		$ 400	$ 9,458
8.4.4 Presentations	2		16	16			4		8		8				54	$ 12,338			$ -	$ 12,338
Subtotal	6	0	70	70	0	0	4	0	8	0	8	0	0	0	166	$ 42,124	$ 1,000	$ -	$ 1,000	$ 43,124
Total Hours/Category	8	0	114	340	0	0	44	0	282	0	504	0	0	8	1106	245810	3000	50000	53000	$ 298,050
																			Total	$ 298,050

Leibowitz and Horton Fee

Leibowitz and Horton Labor Detail

Task #	Task Name/Description	Steve Horton	Monica Weddle	Total Hours	Labor Price
		$390	$280		
Task 8	Recommended Development Program				
8.1	Inventory of Financial Information	8	20	28	$ 8,720
8.2	Preliminary Financial Analysis	32	60	92	$ 29,280
8.3	Financial Implementation Plan Development	48	80	128	$ 41,120
				-	$ -
Task 11	Project Administration			-	$ -
11.3	Expensese			-	$ 6,250
				-	$ -
Total Hours		88	160	248	
Total Labor Costs		$ 34,320	$ 44,800		$ 85,370
Percent of Effort - Labor Hours Only		35.5%	64.5%	100.0%	

Woolpert Fee

LUMP SUM FEE: 18B COMPLIANT AIRPORT LAYOUT PLAN/INSTRUMENT PROCEDURE DEVELOPMENT SURVEY

GNV Fee Estimates	
Task Description	**Fee Estimate**
Task 1 - Preparations and Communications	$3,225.00
Task 2 – Aeronautical Field Survey	$11,850.00
Task 3 - Aerial Photography Acquisition, Scanning, Analytic Triangulation	$27,125.00
Task 4 – Photogrammetric Obstruction Analysis	$12,250.00
Task 5 – Topographic and Planimetric Mapping	$55,125.00
Task 6– Progress Reporting, Deliverables and Final Project Report	$16,825.00
Task 6 – Ortho Imagery	$9,675.00
Reimbursable Expenses	$3,925.00
Lump Sum Fee –Airport Layout Plan/ Instrument Procedure Development Survey for GNV =	**$140,000.00**

Additional Services (Not in Scope)

- Utility surveys
- Tree surveys
- Property and/or right-of-way surveys
- Subdivision design
- Easement preparation
- Construction layout
- Hydrographic studies
- GIS consulting services