

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2024	2025	2026	2027	2028
Capital Expenditures	\$1,396,546				
Operating Costs					
External Revenues (Grants)					
Program Income (County)					
In-Kind Match (County)					
NET FISCAL IMPACT	\$1,396,546				

ADDITIONAL FTE POSITIONS (Cumulative) _____

Is Item Included in Current Budget? Yes _____ No X
 Does this item include the use of federal funds? Yes X No _____
 Does this item include the use of state funds? Yes X No _____

Budget Account No: Fund 4111 Department 121 Unit A107-99 Object 6505
 4111 121 A479-136 6505
 4111 121 A484-021 6505
 Reporting Category _____

B. Recommended Sources of Funds/Summary of Fiscal Impact:

A Budget Transfer in the Airport's Improvement and Development Fund in the amount of \$426,244; including a transfer from Reserves in the amount of \$426,244. Unit breakout as follows: A107 = \$249,735; A479 = \$60,770; A484 = \$115,739; Total = \$426,244.

Certain items on Exhibit B-1 Summary of Fees of the agreement are already in the current budget as follows: A478 = \$163,284; A440 = \$582,188; A392 = \$64,830; Total = \$810,302.

\$426,244 + \$810,302 + \$160,000 (already in Budget A479) = \$1,396,546.

Grant reimbursement will be determined as invoices come in.

C. Departmental Fiscal Review: Webb Wuncanson Plw 10/11/23

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Development and Control Comments:

ASDUC 10/13/23
 OFMB GA 10/12 ESW 10-13-23
Ann J. Janney 10/20/23
 Contract Dev. and Control
 10/20/23

B. Legal Sufficiency:

Anne Telfant 10-19-23
 Assistant County Attorney

C. Other Department Review:

 Department Director

REVISED 11/17

(THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT)

Attachment No. 2

Project Name: General Engineering Consultant Services
 PBC Project No: DOA 22-13
 DBE Goal: 20.9%

Proposer	DBE Subcontractors	Prime	Subcontractor	Supplier	Subcontractor Type	Location	DBE %	Exclusions	Classification	Remarks	FDOT/NCP Verified	
AECOM Technical Services, Inc. 2080 Palm Beach Lakes Blvd., Suite 600, West Palm Beach, FL 33409	Brown & Phillips, Inc.		x		Topographic Survey	West Palm Beach, FL	2.00%		BM		x	
	Chandler Campbell & Dasche		x		DBE Support Services	Palm Beach Gardens, FL	1.00%		BM		x	
	Cyriacks Environmental Consulting Services		x		Environmental Planning Design, etc	Deerfield Beach, FL	3.50%		W		x	
	Hanson, Inc. (HMMH)		x		Noise Consulting and Sustainability	Burlington, MA	1.00%		W		x	
	Quantum Electrical Engineering		x		Electrical Engineering	West Palm Beach, FL	8.00%		W		x	
	Sightline, Inc		x		Airfield Markings	Culpeper, VA	0.50%		W		x	
	Tierra South Florida, Inc.		x		Geotech Engineering and Material Testing	West Palm Beach, FL	2.00%		Asian Pacific		x	
	Scalar Consulting Group Inc		x		Roadway Design & Construction	West Palm Beach, FL	4.00%		Asian Pacific		x	
								22.00%				

Schedule 3 (A) - AECOM Technical Services, Inc. has committed to meet a minimum of 22% DBE participation.

24-0109

BOARD OF COUNTY COMMISSIONERS
PALM BEACH COUNTY, FLORIDA
BUDGET TRANSFER

Advantage Document Numbers

BGRV:

BGEX: 121-101323*124

FUND 4111 Airport Improvement & Development Fund

ACCT. NUMBER	ACCOUNT NAME	ORIGINAL BUDGET	CURRENT BUDGET	INCREASE	DECREASE	ADJUSTED BUDGET	EXPENDED/ ENCUMBERED As of 10/05/23	REMAINING BALANCE
REVENUES/EXPENDITURES								
121-A107-6505	Design/Eng/Mgmt - CIP Adm	8,808,773	8,423,828	249,735	0	8,673,563	0	8,673,563
121-A479-6505	Design/Eng/Mgmt - CIP Adm	160,000	160,000	60,770	0	220,770	0	220,770
121-A484-6505	Design/Eng/Mgmt - CIP Adm	0	0	115,739	0	115,739	0	115,739
121-A900-9909	Reserves Improvement Program	17,216,760	15,956,992	0	426,244	15,530,748	0	15,530,748
Total Receipts and Balances		217,226,377	211,631,047	426,244	426,244	211,631,047		

Signatures & Dates

Office of Financial Management & Budget

INITIATING DEPARTMENT/DIVISION

Administration/Budget Department Approval

OFMB Department - Posted

By Board of County Commissioners

At Meeting of

Tuesday, November 9, 2023

Tennet Clark 10/05/23
ASDA 10/13/23

10/13/23

STATE OF FLORIDA, COUNTY OF PALM BEACH
I, JOSEPH ABRUZZO, Clerk of the County Court,
Comptroller certify this to be a true and correct copy
of the original filed in my office.

on 10/13/23

dated at West Palm Beach, Florida

By: *Joseph Abruzzo*
Deputy Clerk



**AMENDMENT NO. 1 TO CONTRACT
BETWEEN
PALM BEACH COUNTY DEPARTMENT OF AIRPORTS
AND
AECOM TECHNICAL SERVICES, INC.
FOR
GENERAL CONSULTING SERVICES
AT
PALM BEACH COUNTY AIRPORTS**

R2023 1654

This Amendment No. 1 to the Contract is made as of the _____ day of NOV 07 2023, 2023, by and between Palm Beach County, Florida (COUNTY) and AECOM TECHNICAL SERVICES, INC., a corporation authorized to do business in the State of Florida, hereinafter referred to as the CONSULTANT, whose Federal Tax I.D. number is 95-2661922.

WITNESSETH

WHEREAS, on July 11, 2023, the County entered into an Agreement (R2023-0980) with the Consultant for the Consultant to provide General Airport Consulting Services for the Palm Beach County Department of Airports, for a period of two (2) years, with three (3) one (1)-year renewal options, the exercise of which are within COUNTY'S sole control and discretion; and

WHEREAS, Article 26 of the Contract requires an amendment when the parties are able to define additional services and the parties have now defined those services;

NOW THEREFORE, in consideration of the mutual covenants herein contained, and such other good and valuable consideration, the receipt of which the parties hereby acknowledge, the parties agree to the following terms and conditions:

1. The parties hereby agree to amend the Contract to include the Scope of Services and Fees as outlined in Exhibit A. The total amount to be paid by the COUNTY to the CONSULTANT for professional services, including any out of pocket expenses, shall not exceed One Million Three Hundred Ninety Six Thousand Five Hundred Forty Five Dollars and Four Cents (\$1,396,545.04) for the services in Amendment No. 1 to the original Contract.
2. Except as specifically amended herein, all other terms and conditions of the Contract shall remain in full force and effect.

{Remainder of page intentionally left blank.}

IN WITNESS WHEREOF, the parties have caused the First Amendment to the Contract to be signed by the Mayor of the Board of County Commissioners and the Seal of said Board to be fixed hereto and attested by the Clerk of said board, and the CONSULTANT, AECOM TECHNICAL SERVICES, INC., has caused these presents to be signed in its corporate name by its duly authorized officer Andrew Kacer, Vice President, acting on behalf of said CONSULTANT, and the Seal of said CONSULTANT to be affixed hereto and attested by the Secretary of said CONSULTANT, the day and year first written above.

R2023 1654 NOV 07 2023
PALM BEACH COUNTY, FLORIDA
BOARD OF COUNTY COMMISSIONERS

ATTEST:

JOSEPH ABRUZZO
CLERK OF THE CIRCUIT COURT
& COMPTROLLER

By: [Signature]
Deputy Clerk



By: [Signature]
Gregg K. Weiss, Mayor

WITNESS:

Martin,
Clint

Digitally signed by Martin, Clint
DN: cn=Martin, Clint, ou=USTPA1
email=Clint.Martin@aecom.com
Date: 2023.10.03 14:18:50 -04'00'

SIGNATURE

Clint Martin

Name (type or print)

CONSULTANT:

AECOM Technical Services, Inc.
COMPANY NAME

Andrew Kacer

Digitally signed by Andrew Kacer
DN: C=US, E=andy.kacer@aecom.com,
O=AECOM, CN=Andrew Kacer
Date: 2023.10.03 14:17:40-04'00'

Signature

Andrew Kacer

Name (type or print)

Vice President

Title

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY

BY: [Signature]
County Attorney

APPROVED AS TO TERMS
AND CONDITIONS

By: [Signature]
Department Director

AMENDMENT NO. 1 INDEX

CERTIFICATE OF INSURANCE

EXHIBIT A: AMENDMENT NO. 1

EXHIBIT A-1	Task I-23-F45-A-010 F45 Stormwater Master Plan
EXHIBIT A-2	Task I-23-LNA-A-011 LNA Stormwater Master Plan
EXHIBIT A-3	Task I-23-PHK-A-012 PHK Stormwater Master Plan
EXHIBIT A-4	Task I-23-PBI-A-013 PBI Turnage Boulevard Rehabilitation
EXHIBIT A-5	Task I-23-PBI-A-014 PBI Terminal Wall Repairs
EXHIBIT A-6	Task I-23-DOA-A-015: Miscellaneous Planning & Engineering Services

EXHIBIT B: DETAILED FEES, EXPENSES AND PAYMENTS

EXHIBIT B-I Summary of Fees

EXHIBIT B-II Schedule of Payments

EXHIBIT C: PROPOSED SCHEDULES

EXHIBIT D: DBE

AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, FL 33607. Phone: 813-636-2425 Fax: 813-287-8591



CERTIFICATE OF INSURANCE



**Palm Beach County
Compliance Summary Report**

Vendor Number	Vendor Name	AM Best Rating	Insurance Carrier	Policy #	Eff. Date	Exp. Date	Coverage	Contract Number	Contract Name
DX00002334	AECOM Technical Services, Inc.		Compliant with Minor/Expiring Deficiencies					DOA 22-13	Consulting Professional Services
		A++g, XV	ACE American Insurance Company	ISA H10735531	4/1/2023	4/1/2024	Auto Liability		
		A++g, XV	ACE American Insurance Company	HDO G47334275	4/1/2023	4/1/2024	General Liability		
		A++g, XV	Illinois Union Insurance Company	EONG21654693005	4/1/2023	4/1/2024	Professional Liability		
		A++g, XV	Indemnity Insurance Company of North America	WLR C50710129	4/1/2023	4/1/2024	Workers Comp		

Risk Profile : Standard - Professional Services

Required Additional Insured : Palm Beach County Board of County Commissioners

Ownership Entity :

EXHIBIT A

This Amendment No. 1 is in accordance with the Contract (Agreement R2023-0980) for Consultant/Professional Services between Palm Beach County (COUNTY) and AECOM Technical Services, Inc. (CONSULTANT) dated July 11, 2023.

- | | |
|-------------|--------------------------------------------------------------------|
| EXHIBIT A-1 | Task I-23-F45-A-010 F45 Stormwater Master Plan |
| EXHIBIT A-2 | Task I-23-LNA-A-011 LNA Stormwater Master Plan |
| EXHIBIT A-3 | Task I-23-PHK-A-012 PHK Stormwater Master Plan |
| EXHIBIT A-4 | Task I-23-PBI-A-013 PBI Turnage Boulevard Rehabilitation |
| EXHIBIT A-5 | Task I-23-PBI-A-014 PBI Terminal Wall Repairs |
| EXHIBIT A-6 | Task I-23-DOA-A-015: Miscellaneous Planning & Engineering Services |

EXHIBIT A-1

PALM BEACH DOA GENERAL CONSULTING SERVICES

EXHIBIT A-1

Miscellaneous Planning, Engineering and Construction Services

North Palm Beach County General Aviation Airport (F45) Task I-23-F45-A-010 F45 Stormwater Master Plan

OVERVIEW

The Palm Beach Department of Airports (DOA) has requested that AECOM Technical Services, Inc. (CONSULTANT) provide Professional Engineering Services associated with developing the Task I-23-F45-A-010 F45 Stormwater Master Plan Project (Project) at North Palm Beach County General Aviation Airport (F45). The DOA is planning to accommodate potential increases in demand for F45. Based on its location, F45 presents numerous opportunities to increase revenue and a review of the airfield configuration demonstrates potential improvements in operational safety and efficiency with additional pavement and facilities.

Each of the proposed improvements will affect the stormwater management system at the airport and will require modification, resulting in the need to obtain permits from the South Florida Water Management District (SFWMD). To facilitate all future improvements included in the Airport Layout Plan (ALP) for F45 (which may occur over multiple development phases) the DOA has requested the AECOM Team to prepare a stormwater master plan that demonstrates the changes in the drainage infrastructure that will be required. The final stormwater master plan will be presented to the SFWMD as part of a Conceptual Environmental Resources Permit (ERP) application, to facilitate efficient permitting for all future phases of development.

The project phases shall consist of the following:

- Task 1 - Data Collection and Review
- Task 2 - Existing Conditions Stormwater Model Development
- Task 3 - Proposed Conditions Stormwater Model Development
- Task 4 - Procurement of Conceptual ERP

The following Tasks will be coordinated and/or performed by AECOM:

- DOA Kick-Off Meeting
- Team and DOA Meetings
- Data Collection and Records Research
- Field Coordination for Site Visits
- Review Draft Report

- Review Final Report
- Develop Future Condition Tailwater Model/Input
- Task Management and Coordination

See the attached detailed scope of services from Chen Moore & Associates, Inc. (CMA), our subconsultant for this Task.

Project Team

This Project Team for the Professional Engineering Services to be provided by the Team are provided below:

Firm Name (CONSULTANT/SUBCONSULTANT)	Type of Services
AECOM Technical Services, Inc. (AECOM) (CONSULTANT)	Project Management;
Chen Moore & Associates, Inc. (CMA) (SUBCONSULTANT)	Stormwater Design/Permitting

Meetings

The CONSULTANT will attend the following meetings during this Task:

- a. Design K.O. Meeting;
- b. Team and DOA Coordination Meetings;
- c. Regulatory permitting agencies meetings, as applicable; and
- d. One (1) DOA Review Submittal Meeting.

Deliverables

The CONSULTANT will deliver the following major Deliverables (pdf):

- a. K.O. Meeting Minutes;
- b. Existing Conditions Technical Memorandum;
- c. Conceptual Opinion of Probable Construction Cost (OPCC);
- d. Future Conditions Technical Memorandum;
- e. Regulatory permitting agencies documentation;
- f. Draft Stormwater Master Plan; and
- g. Final Stormwater Master Plan.

Schedule

The anticipated duration of this Task 180 calendar days from the kick-off meeting.

Table B
 Labor/Fee Estimate Summary - CONSULTANT (AECOM Technical Services, Inc.) - Task I-23-F45-A-010 F45 Stormwater Master Plan

Billing Rate:	\$	340	\$	236	\$	270	\$	255	\$	201	\$	215	\$	128	\$	129	\$	96
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Task Description	Labor Estimate (Hours)											Fee Estimate (\$)		
	Principal	QC Reviewer	Senior Project Manager	Senior Planner	Design / Construction Manager	Project Manager / Senior Engineer	Project Engineer	Planner	Clerical	Total	Labor	Expenses	Total	
Task I-23-F45-A-010 F45 Stormwater Master Plan														
Total	0	21	22	0	30	0	62	0	18	153	\$26,590	\$0	\$26,590	
Attend One (1) DOA Kick-Off Meeting			2		2				2	6	\$ 1,134	\$ -	\$ 1,134	
Team and DOA Meetings		1	8		8		8		8	33	\$ 5,796	\$ -	\$ 5,796	
Data Collection and Records Research			4		2		8			14	\$ 2,506	\$ -	\$ 2,506	
Field Coordination for Site Visits					2					2	\$ 402	\$ -	\$ 402	
Review Draft Report		10					16			26	\$ 4,408	\$ -	\$ 4,408	
Review Final Report		10					16			26	\$ 4,408	\$ -	\$ 4,408	
Develop Future Condition Tailwater Model/Input					16					16	\$ 3,216	\$ -	\$ 3,216	
Task Management and Coordination			8				14		8	30	\$ 4,720	\$ -	\$ 4,720	
Total Fee - AECOM Technical Services, Inc.	0	21	22	0	30	0	62	0	18	153	\$26,590.00	\$0.00	\$26,590.00	

Subconsultant Fees	
1 Total Subconsultant Fee - Chen Moore & Associates (LS)	\$ 194,180.00
Total Fee - Subconsultants	\$ 194,180.00

GRAND TOTAL FEE - BASIC ENGINEERING SERVICES	\$ 220,770.00
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Prepared by: AECOM Technical Services, Inc.

July 11, 2023

SENT VIA E-MAIL (bwhitfield@chenmoore.com)

Mr. Andrew Kacer
AECOM
7650 West Courtney Campbell Causeway
Tampa, FL 33607

**Subject: North Palm Beach County General Aviation Airport (F45)
Stormwater Master Plan
CMA Proposal No. 23-0066.P0001-004**

Dear Mr. Kacer,

Chen Moore and Associates, Inc. (CMA) is pleased to submit the attached Scope of Services and associated fee estimate to assist your team with the stormwater master plan and permitting services for the referenced project.

PROJECT INTRODUCTION

The Palm Beach County Department of Airports (DOA) is looking to provide expansions and improvements to the North Palm Beach County General Aviation Airport (F45) to accommodate potential increases in demand. Based on its location, F45 presents numerous opportunities to increase revenue and a review of the airfield configuration demonstrates potential improvements in operational safety and efficiency with additional pavement and facilities.

Each of the proposed improvements will affect the stormwater management system at the airport and will require modification, resulting in the need to obtain permits from the South Florida Water Management District (SFWMD). To facilitate all future improvements included in the Airport Layout Plan (ALP) for F45 (which may occur over multiple development phases) the DOA has requested the AECOM Team to prepare a stormwater master plan that demonstrates the changes in the drainage infrastructure that will be required. The final stormwater master plan will be presented to the SFWMD as part of a Conceptual Environmental Resources Permit (ERP) application, to facilitate efficient permitting for all future phases of development.

The project phases shall consist of the following:

- Task 1 - Data Collection and Review
- Task 2 - Existing Conditions Stormwater Model Development
- Task 3 - Proposed Conditions Stormwater Model Development
- Task 4 - Procurement of Conceptual ERP

PROJECT STAFFING

Our staff and team are ready and prepared to work on this project. Chen Moore staff project roles shall be as follows:

Principal – Jason McClair, P.E.
Project Director – Brent Whitfield, P.E.
Senior Engineer – Cole Benjamin, P.E.
Project Engineer – David Cowan, P.E.
Associate Engineer – Brandon Sullivan

Subconsultants - None

SCOPE OF SERVICES

TASK 1 – Data Collection and Review

Consultant shall collect and review copies of all relevant data, including correspondence, archived record drawings, existing permits, plans or information provided by the DOA which may be beneficial to the work effort performed by the AECOM Team. Information provided by the DOA shall include, at a minimum, existing survey/topographic data and respective Airport Layout Plan. This task shall include one on-site investigation to collect pertinent information about the present-day condition of the project site. The AECOM Team will prepare a technical memorandum of the information collected. This task shall also include preparation for, and attendance by, the AECOM Team, of the project kick-off meeting (which will be held remotely).

TASK 2 – Existing Conditions Stormwater Model Development

Consultant shall include all relevant documentation required for development of the existing conditions stormwater model.

- Prepare stormwater model (ICPR) based on data collected from Task 1.
- Input and simulate the following design storm events:
 - 5yr/1day
 - 10yr/1day
 - 25yr/3day
 - 100yr/3day (Zero Discharge)
 - 500yr Design storm
- Establish the level of service for the existing stormwater network including identifying existing drainage concerns and confirming compliance with existing SFWMD-ERP permit requirements.
- Prepare Existing Conditions Technical Memorandum.
- Attend one (1) meeting with the DOA for project coordination.

TASK 3 – Proposed Conditions Stormwater Model Development

Consultant shall include all relevant documentation required for development of the proposed conditions stormwater model.

- Prepare stormwater model (ICPR) based on anticipated future development, as shown in the Airport Layout Plan.

- Develop modifications to the stormwater management system to accommodate required improvements including changes in sub-basin delineations, as well as, modifications to existing stormwater piping, detentions facilities, and outfalls.
- Input and simulate the following design storm events:
 - 5yr/1day
 - 10yr/1day
 - 25yr/3day
 - 100yr/3day (Zero Discharge)
 - 500yr Design storm
 - Future Conditions Rainfall Projection (Up to 2 scenarios)
- Evaluate impacts of 2040 and 2070 tailwater conditions for both NOAA intermediate Low and NOAA Intermediate High sea level conditions for (4 scenarios) for the 5y, 10y, 100y and 500y design storms.
- Establish the proposed level of service.
- Confirm site grading meets proposed level of service and revise, as needed, to meet the following criteria.
 - Edge of pavement and parking lot elevations set above 5yr/1day max stage
 - Roadway centerline elevation set above 10yr/1day max stage
 - No offsite overland discharge of 25yr/3day
 - All building FFEs set above 100yr/3day-No discharge max stage
 - Peak Discharge at the outfall for the 25y/3day event is equal to or less than existing conditions
- Confirm compliance with existing SFWMD-ERP permit requirements.
- Prepare Conceptual Opinion of Probable Construction Cost (OPCC) for proposed stormwater features.
- Prepare Future Conditions Technical Memorandum.
- Attend one (1) meeting with the DOA for project coordination.

TASK 4 – Procurement of Conceptual ERP

Consultant shall prepare and submit permit applications for the following regulatory authority:

- Stormwater Management - South Florida Water Management District (SFWMD)

This task shall include the effort to schedule and conduct a pre-application meeting with the South Florida Water Management District (SFWMD) pertaining to stormwater design, including the preparation of a meeting agenda and meeting minutes. The task shall also include preparing applications and supporting documentation, correspondence with regulatory reviewers, and any required responses for up to two rounds of comments and responses for Requests for Additional Information (RAI). The Consultant will prepare a Stormwater Master Plan Report that includes a narrative of the overall project, review of regulatory requirements, a summary of the existing and proposed condition stormwater model and respective level of service, as well as a narrative of the proposed improvements. Providing permit fees are not included and shall be the responsibility of the Owner.

The basis for the above scope of services and associated fee(s) are based on the following:

- No surveying, geotechnical investigation, or environmental assessments are required for this conceptual permitting effort and therefore are not included.
- Conceptual analyses exclusively pertain to stormwater. Analysis associated with water, wastewater, landscape architecture, irrigation, site planning, pavement, signage and markings, Maintenance of Traffic, and detailed grading are not included.

- Regulatory coordination is limited to SFWMD in consideration that the ERP application is for a Conceptual permit. No permitting through FDEP or USACE will be required.
- Client shall provide submittal fees for government agencies.
- No detailed engineering design or construction administration services were included in this proposal. If requested, this effort shall be rendered as an additional service.

Information to be provided by the Client:

- A signed and sealed boundary and topographic survey and associated digital CAD File.
- A letter from the property owner granting access to the site and giving approval for Consultant to perform the services listed above.
- Filing and permit application fees, review fees, impact fees or any other associated assessments by other governments/agencies.
- Copies of all relevant data, including correspondence, plans or information in the Client's possession which may be beneficial to the work effort performed by Consultant.
- Previous reports and assessments.
- Boundary survey or legal description of the site.

SCHEDULE AND FEES

Consultant shall schedule work upon receipt of signed approval for this project as required. Per discussions with your team, the goal is to start immediately upon notice to proceed and official authorization from the Client. The total lump sum fee for this project will be divided as follows:

<u>TASK(s)</u>	<u>Task Description</u>	<u>Lump Sum</u>	<u>Hourly</u>	<u>Total Fees</u>
WATER RESOURCES ENGINEERING AND STORMWATER PERMITTING				
TASK 1	Data Collection and Review	\$16,480.00	-	\$16,480.00
TASK 2	Proposed Conditions Stormwater Model Development	\$47,500.00	-	\$47,500.00
TASK 3	Proposed Conditions Stormwater Model Development	\$86,270.00	-	\$86,270.00
TASK 3	Procurement of Conceptual ERP	\$43,930.00	-	\$43,930.00
PROJECT TOTAL				\$194,180.00

Reimbursable expenses for the tasks above are included in the lump sum price. Additional reimbursables requested by the client shall be rendered as Additional Services. Should you have any questions, please do not hesitate to contact me at my office at +1 (561) 295-1716, my cell phone at +1 (561) 329-1797, or send me an electronic message at bwhitfield@chenmoore.com.

Respectfully submitted,



Brent Whitfield, PE
 Director – Water Resources

Attachment(s):
 Fee Estimate

Palm Beach County Department of Airports - AECOM
Stormwater Master Plan - F45
Fee Breakdown

Chen Moore and Associates

23-0066-P0001

	Project Principal	Project Director	Senior Engineer	Project Engineer	Associate Engineer	Administrative Staff	Total
Hourly Rate	\$ 360.00	\$250.00	\$200.00	\$150.00	\$125.00	\$90.00	
TASK 1 – DATA COLLECTION AND REVIEW							
Initial Field Visit		8	8		8		\$4,600.00
Existing Document Review		12	20	16	8		\$10,400.00
Project Kickoff Meeting and Project Setup		2	4			2	\$1,480.00
Task 1 Total	0	22	32	16	16	2	\$16,480.00
TASK 2 – DEVELOP EXISTING CONDITIONS MODEL							
Prepare ICPR Model (Based on Task 1 - Data Collection)		8	40	24	16		\$15,600.00
Simulate Design Storms (4 Storm Events - See SOW)		4	24	12	8		\$8,600.00
Establish Existing Level of Service		4	12	8	8		\$5,600.00
Prepare Existing Conditions Technical Memorandum		8	24	16	12		\$10,700.00
QA/QC		4	12	8	8		\$5,600.00
Coordination Meeting with PBCDOA		2	2		4		\$1,400.00
Task 2 Total	0	30	114	68	56	0	\$ 47,500.00
TASK 3 – DEVELOP PROPOSED CONDITIONS MODEL							
Prepare ICPR Model (Based on ALP)		4	16	12	8		\$7,000.00
Develop Modifications to Stormwater Management System		12	40	32	24		\$18,800.00
Simulate Design Storms (6 Storm Events & Alt TW per SOW)		8	48	36	30		\$20,750.00
Establish Proposed Level of Service		8	16	12	8		\$8,000.00
Prepare OPCC for Proposed Stormwater Features		8	12	8	4		\$6,100.00
Prepare Proposed Conditions Technical Memorandum		8	40	24	12	8	\$15,820.00
QA/QC		8	16	12	8		\$8,000.00
Coordination Meeting with PBCDOA		2	4		4		\$1,800.00
Task 3 Total	0	58	192	136	98	8	\$ 86,270.00
TASK 4 – PROCURE CONCEPTUAL ERP FROM SFWMD							
Prepare and Attend Kickoff Meeting with SFWMD		2	2		2		\$1,150.00
Prepare Stormwater Master Plan Report		12	32	24	16		\$15,000.00
Prepare and Submit Conceptual ERP		8	16	12	8	4	\$8,360.00
QA/QC		4	12	8	4		\$5,100.00
Coordination with SFWMD Staff/RAI Responses (Assume 2 RAI's)		12	28	20	16	8	\$14,320.00
Task 4 Total	0	38	90	64	46	12	\$43,930.00
TOTAL FEES							\$194,180.00

TASK	Total Hrs/Task	Total \$/Task
TASK 1 – DATA COLLECTION AND REVIEW	88	\$16,480.00
TASK 2 – DEVELOP EXISTING CONDITIONS MODEL	268	\$47,500.00
TASK 3 – DEVELOP PROPOSED CONDITIONS MODEL	492	\$86,270.00
TASK 4 – PROCURE CONCEPTUAL ERP FROM SFWMD	250	\$43,930.00
TOTAL	1098	\$194,180.00

EXHIBIT A-2

PALM BEACH DOA GENERAL CONSULTING SERVICES

EXHIBIT A-2

Miscellaneous Planning, Engineering and Construction Services

Palm Beach County Park Airport (LNA) Task I-23-LNA-A-011 LNA Stormwater Master Plan

OVERVIEW

The Palm Beach Department of Airports (DOA) has requested that AECOM Technical Services, Inc. (CONSULTANT) provide Professional Engineering Services associated with developing the Task I-23-LNA-A-011 LNA Stormwater Master Plan Project (Project) at Palm Beach County Park Airport (LNA). The DOA is planning to accommodate potential increases in demand for LNA. Based on its location, LNA presents numerous opportunities to increase revenue and a review of the airfield configuration demonstrates potential improvements in operational safety and efficiency with additional pavement and facilities.

Each of the proposed improvements will affect the stormwater management system at the airport and will require modification, resulting in the need to obtain permits from the South Florida Water Management District (SFWMD). To facilitate all future improvements included in the Airport Layout Plan (ALP) for LNA (which may occur over multiple development phases) the DOA has requested the AECOM Team to prepare a stormwater master plan that demonstrates the changes in the drainage infrastructure that will be required. The final stormwater master plan will be presented to the SFWMD as part of a Conceptual Environmental Resources Permit (ERP) application, to facilitate efficient permitting for all future phases of development.

The project phases shall consist of the following:

- Task 1 - Data Collection and Review
- Task 2 - Existing Conditions Stormwater Model Development
- Task 3 - Proposed Conditions Stormwater Model Development
- Task 4 - Procurement of Conceptual ERP

See the attached detailed scope of serves from Chen Moore & Associates, Inc. (CMA), our subconsultant for this Task.

Project Team

This Project Team for the Professional Engineering Services to be provided by the Team are provided below:

Firm Name (CONSULTANT/SUBCONSULTANT)	Type of Services
AECOM Technical Services, Inc. (AECOM) (CONSULTANT)	Project Management;
Chen Moore & Associates, Inc. (CMA) (SUBCONSULTANT)	Stormwater Design/Permitting

Meetings

The CONSULTANT will attend the following meetings during this Task:

- a. Design K.O. Meeting;
- b. Team and DOA Coordination Meetings;
- c. Regulatory permitting agencies meetings, as applicable; and
- d. One (1) DOA Review Submittal Meeting.

Deliverables

The CONSULTANT will deliver the following major Deliverables (pdf):

- a. K.O. Meeting Minutes;
- b. Existing Conditions Technical Memorandum;
- c. Conceptual Opinion of Probable Construction Cost (OPCC);
- d. Future Conditions Technical Memorandum;
- e. Regulatory permitting agencies documentation;
- f. Draft Stormwater Master Plan; and
- g. Final Stormwater Master Plan.

Schedule

The anticipated duration of this Task 180 calendar days from the kick-off meeting.

Table B
Labor/Fee Estimate Summary - CONSULTANT (AECOM Technical Services, Inc.) - Task I-23-LNA-A-011 LNA Stormwater Master Plan

Billing Rate:	\$	340	\$	236	\$	270	\$	255	\$	201	\$	215	\$	128	\$	129	\$	96
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Task Description	Labor Estimate (Hours)											Fee Estimate (\$)		
	Principal	QC Reviewer	Senior Project Manager	Senior Planner	Design/Construction Manager	Project Manager / Senior Engineer	Project Engineer	Planner	Clerical	Total	Labor	Expenses	Total	
Task I-23-LNA-A-011 LNA Stormwater Master Plan														
Attend One (1) DOA Kick-Off Meeting	0	11	19	0	24	0	42	0	18	114	\$19,654	\$0	\$19,654	
Team and DOA Meetings			2		2				2	6	\$1,134	-	\$1,134	
Data Collection and Records Research		1	5		6		6		8	26	\$4,328	-	\$4,328	
Field Coordination for Site Visits			4		2		4			10	\$1,994	-	\$1,994	
Review Draft Report					2					2	\$402	-	\$402	
Review Final Report							12			18	\$2,952	-	\$2,952	
Develop Future Condition Tailwater Model/Input							12			16	\$2,480	-	\$2,480	
Task Management and Coordination					12					12	\$2,412	-	\$2,412	
Total Fee - AECOM Technical Services, Inc.	0	11	19	0	24	0	42	0	18	114	\$19,654.00	\$0.00	\$19,654.00	

Subconsultant Fees	
1 Total Subconsultant Fee - Chen Moore & Associates (LS)	\$ 143,630.00
Total Fee - Subconsultants	\$ 143,630.00

GRAND TOTAL FEE - BASIC ENGINEERING SERVICES	\$163,284.00
	\$0.00

Prepared by: AECOM Technical Services, Inc.

July 11, 2023

SENT VIA E-MAIL (bwhitfield@chenmoore.com)

Mr. Andrew Kacer
AECOM
7650 West Courtney Campbell Causeway
Tampa, FL 33607

**Subject: Palm Beach County Park Airport (LNA)
Stormwater Master Plan
CMA Proposal No. 23-0066.P0001-004**

Dear Mr. Kacer,

Chen Moore and Associates, Inc. (CMA) is pleased to submit the attached Scope of Services and associated fee estimate to assist your team with the stormwater master plan and permitting services for the referenced project.

PROJECT INTRODUCTION

The Palm Beach County Department of Airports (DOA) is looking to provide expansions and improvements to the Palm Beach County Park Airport (LNA) to accommodate potential increases in demand. Based on planned improvements, LNA presents numerous opportunities to increase revenue and a review of the airfield configuration demonstrates potential improvements in operational safety and efficiency with additional pavement and facilities.

Each of the proposed improvements will affect the stormwater management system at the airport and will require modification, resulting in the need to obtain permits from the South Florida Water Management District (SFWMD). To facilitate all future improvements included in the Airport Layout Plan (ALP) for LNA (which may occur over multiple development phases) the DOA has requested the AECOM Team to prepare a stormwater master plan that demonstrates the changes in the drainage infrastructure that will be required. The final stormwater master plan will be presented to the SFWMD as part of a Conceptual Environmental Resources Permit (ERP) application, to facilitate efficient permitting for all future phases of development.

The project phases shall consist of the following:

- Task 1 - Data Collection and Review
- Task 2 - Existing Conditions Stormwater Model Development
- Task 3 - Proposed Conditions Stormwater Model Development
- Task 4 - Procurement of Conceptual ERP

PROJECT STAFFING

Our staff and team are ready and prepared to work on this project. Chen Moore staff project roles shall be as follows:

Principal – Jason McClair, P.E.
Project Director – Brent Whitfield, P.E.
Senior Engineer – Cole Benjamin, P.E.
Project Engineer – David Cowan, P.E.
Associate Engineer – Brandon Sullivan

Subconsultants - None

SCOPE OF SERVICES

TASK 1 – Data Collection and Review

Consultant shall collect and review copies of all relevant data, including correspondence, archived record drawings, existing permits, plans or information provided by the DOA which may be beneficial to the work effort performed by the AECOM Team. Information provided by the DOA shall include, at a minimum, existing survey/topographic data and respective Airport Layout Plan. This task shall include one on-site investigation to collect pertinent information about the present-day condition of the project site. The AECOM Team will prepare a technical memorandum of the information collected. This task shall also include preparation for, and attendance by, the AECOM Team, of the project kick-off meeting.

TASK 2 – Existing Conditions Stormwater Model Development

Consultant shall include all relevant documentation required for development of the existing conditions stormwater model.

- Prepare stormwater model (ICPR) based on data collected from Task 1.
- Input and simulate the following design storm events:
 - 5yr/1day
 - 10yr/1day
 - 25yr/3day
 - 100yr/3day (Zero Discharge)
 - 500yr Design Storm
- Establish the level of service for the existing stormwater network including identifying existing drainage concerns and confirming compliance with existing SFWMD-ERP permit requirements.
- Prepare Existing Conditions Technical Memorandum.
- Attend one (1) meeting with the DOA for project coordination.

TASK 3 – Proposed Conditions Stormwater Model Development

Consultant shall include all relevant documentation required for development of the proposed conditions stormwater model.

- Prepare stormwater model (ICPR) based on anticipated future development, as shown in the Airport Layout Plan.

- Develop modifications to the stormwater management system to accommodate required improvements including changes in sub-basin delineations, as well as, modifications to existing stormwater piping, detentions facilities, and outfalls.
- Input and simulate the following design storm events:
 - 5yr/1day
 - 10yr/1day
 - 25yr/3day
 - 100yr/3day (Zero Discharge)
 - 500yr Design storm
 - Future Conditions Rainfall Projection (Up to 2 scenarios)
- Evaluate impacts of 2040 and 2070 tailwater conditions for both NOAA intermediate Low and NOAA Intermediate High sea level conditions for (4 scenarios) for the 5y, 10y, 100y and 500y design storms.
- Establish the proposed level of service.
- Confirm site grading meets proposed level of service and revise, as needed, to meet the following criteria.
 - Edge of pavement and parking lot elevations set above 5yr/1day max stage
 - Roadway centerline elevation set above 10yr/1day max stage
 - No offsite overland discharge of 25yr/3day
 - All building FFEs set above 100yr/3day-No discharge max stage
 - Peak Discharge at the outfall for the 25y/3day event is equal to or less than existing conditions
- Confirm compliance with existing SFWMD-ERP permit requirements.
- Prepare Conceptual Opinion of Probable Construction Cost (OPCC) for proposed stormwater features.
- Prepare Future Conditions Technical Memorandum.
- Attend one (1) meeting with the DOA for project coordination.

TASK 4 – Procurement of Conceptual ERP

Consultant shall prepare and submit permit applications for the following regulatory authority:

- Stormwater Management - South Florida Water Management District (SFWMD)

This task shall include the effort to schedule and conduct a pre-application meeting with the South Florida Water Management District (SFWMD) pertaining to stormwater design, including the preparation of a meeting agenda and meeting minutes. The task shall also include preparing applications and supporting documentation, correspondence with regulatory reviewers, and any required responses for up to two rounds of comments and responses for Requests for Additional Information (RAI). The Consultant will prepare a Stormwater Master Plan Report that includes a narrative of the overall project, review of regulatory requirements, a summary of the existing and proposed condition stormwater model and respective level of service, as well as a narrative of the proposed improvements. Providing permit fees are not included and shall be the responsibility of the Owner.

The basis for the above scope of services and associated fee(s) are based on the following:

- No surveying, geotechnical investigation, or environmental assessments are required for this conceptual permitting effort and therefore are not included.
- Conceptual analyses exclusively pertain to stormwater. Analysis associated with water, wastewater, landscape architecture, irrigation, site planning, pavement, signage and markings, Maintenance of Traffic, and detailed grading are not included.

- Regulatory coordination is limited to SFWMD in consideration that the ERP application is for a Conceptual permit. No permitting through FDEP or USACE will be required.
- Client shall provide submittal fees for government agencies.
- No detailed engineering design or construction administration services were included in this proposal. If requested, this effort shall be rendered as an additional service.

Information to be provided by the Client:

- A signed and sealed boundary and topographic survey and associated digital CAD File.
- A letter from the property owner granting access to the site and giving approval for Consultant to perform the services listed above.
- Filing and permit application fees, review fees, impact fees or any other associated assessments by other governments/agencies.
- Copies of all relevant data, including correspondence, plans or information in the Client's possession which may be beneficial to the work effort performed by Consultant.
- Previous reports and assessments.
- Boundary survey or legal description of the site.

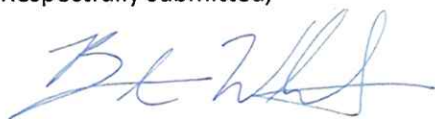
SCHEDULE AND FEES

Consultant shall schedule work upon receipt of signed approval for this project as required. Per discussions with your team, the goal is to start immediately upon notice to proceed and official authorization from the Client. The total lump sum fee for this project will be divided as follows:

<u>TASK(s)</u>	<u>Task Description</u>	<u>Lump Sum</u>	<u>Hourly</u>	<u>Total Fees</u>
WATER RESOURCES ENGINEERING AND STORMWATER PERMITTING				
TASK 1	Data Collection and Review	\$10,180.00	-	\$10,180.00
TASK 2	Proposed Conditions Stormwater Model Development	\$33,500.00	-	\$33,500.00
TASK 3	Proposed Conditions Stormwater Model Development	\$69,860.00	-	\$69,860.00
TASK 3	Procurement of Conceptual ERP	\$30,090.00	-	\$30,090.00
PROJECT TOTAL				\$143,630.00

Reimbursable expenses for the tasks above are included in the lump sum price. Additional reimbursables requested by the client shall be rendered as Additional Services. Should you have any questions, please do not hesitate to contact me at my office at +1 (561) 295-1716, my cell phone at +1 (561) 329-1797, or send me an electronic message at bwhitfield@chenmoore.com.

Respectfully submitted,



Brent Whitfield, PE
 Director – Water Resources

Attachment(s):
 Fee Estimate

CMA Proposal No. 23-0066.P0001-004

Palm Beach County Department of Airports - AECOM
Stormwater Master Plan - LNA
Fee Breakdown

Chen Moore and Associates

23-00066.P0001

	Project Principal	Project Director	Senior Engineer	Project Engineer	Associate Engineer	Administrative Staff	Total
Hourly Rate	\$ 360.00	\$250.00	\$200.00	\$150.00	\$125.00	\$90.00	
TASK 1 – DATA COLLECTION AND REVIEW							
Initial Field Visit		8	8				\$3,600.00
Existing Document Review		4	12	8	4		\$5,100.00
Project Kickoff Meeting and Project Setup		2	4			2	\$1,480.00
Task 1 Total	0	14	24	8	4	2	\$10,180.00
TASK 2 – DEVELOP EXISTING CONDITIONS MODEL							
Prepare ICPR Model (Based on Task 1 - Data Collection)		4	24	12	8		\$8,600.00
Simulate Design Storms (4 Storm Events - See SOW)		2	12	8	4		\$4,600.00
Establish Existing Level of Service		2	12	8	4		\$4,600.00
Prepare Existing Conditions Technical Memorandum		4	24	16	8		\$9,200.00
QA/QC		4	12	8	4		\$5,100.00
Coordination Meeting with PBCDOA		2	2		4		\$1,400.00
Task 2 Total	0	18	86	52	32	0	\$ 33,500.00
TASK 3 – DEVELOP PROPOSED CONDITIONS MODEL							
Prepare ICPR Model (Based on ALP)		8	16	12	8		\$8,000.00
Develop Modifications to Stormwater Management System		8	32	24	16		\$14,000.00
Simulate Design Storms (6 Storm Events & Alt TW per SOW)		6	32	24	16		\$13,500.00
Establish Proposed Level of Service		4	16	12	8		\$7,000.00
Prepare OPCC for Proposed Stormwater Features		8	12	8	4		\$6,100.00
Prepare Proposed Conditions Technical Memorandum		8	32	24	12	4	\$13,860.00
QA/QC		4	12	8	8		\$5,600.00
Coordination Meeting with PBCDOA		2	4		4		\$1,800.00
Task 3 Total	0	48	156	112	76	4	\$ 69,860.00
TASK 4 – PROCURE CONCEPTUAL ERP FROM SFWMD							
Prepare and Attend Kickoff Meeting with SFWMD		2	2		2		\$1,150.00
Prepare Stormwater Master Plan Report		8	24	16	12		\$10,700.00
Prepare and Submit Conceptual ERP		4	12	8	4	2	\$5,280.00
QA/QC		4	12	8	8		\$5,600.00
Coordination with SFWMD Staff/RAI Responses (Assume 2 RAI's)		4	16	12	8	4	\$7,360.00
Task 4 Total	0	22	66	44	34	6	\$30,090.00
TOTAL FEES							\$143,630.00
TASK		Total Hrs/Task		Total \$/Task			
TASK 1 – DATA COLLECTION AND REVIEW		52		\$10,180.00			
TASK 2 – DEVELOP EXISTING CONDITIONS MODEL		188		\$33,500.00			
TASK 3 – DEVELOP PROPOSED CONDITIONS MODEL		396		\$69,860.00			
TASK 4 – PROCURE CONCEPTUAL ERP FROM SFWMD		172		\$30,090.00			
TOTAL		808		\$143,630.00			

EXHIBIT A-3

PALM BEACH DOA GENERAL CONSULTING SERVICES

EXHIBIT A-3

Miscellaneous Planning, Engineering and Construction Services

Palm Beach County Glades Airport (PHK) Task I-23-PHK-A-012 PHK Stormwater Master Plan

OVERVIEW

The Palm Beach Department of Airports (DOA) has requested that AECOM Technical Services, Inc. (CONSULTANT) provide Professional Engineering Services associated with developing the Task I-23-PHK-A-012 PHK Stormwater Master Plan Project (Project) at Palm Beach County Glades Airport (PHK). The DOA is planning to accommodate potential increases in demand for PHK. Based on its location, PHK presents numerous opportunities to increase revenue and a review of the airfield configuration demonstrates potential improvements in operational safety and efficiency with additional pavement and facilities.

Each of the proposed improvements will affect the stormwater management system at the airport and will require modification, resulting in the need to obtain permits from the South Florida Water Management District (SFWMD). To facilitate all future improvements included in the Airport Layout Plan (ALP) for PHK (which may occur over multiple development phases) the DOA has requested the AECOM Team to prepare a stormwater master plan that demonstrates the changes in the drainage infrastructure that will be required. The final stormwater master plan will be presented to the SFWMD as part of a Conceptual Environmental Resources Permit (ERP) application, to facilitate efficient permitting for all future phases of development.

The project phases shall consist of the following:

- Task 1 - Data Collection and Review
- Task 2 - Existing Conditions Stormwater Model Development
- Task 3 - Proposed Conditions Stormwater Model Development
- Task 4 - Procurement of Conceptual ERP

See the attached detailed scope of serves from Chen Moore & Associates, Inc. (CMA), our subconsultant for this Task.

Project Team

This Project Team for the Basic Services and Special Services and the respective type of services to be provided by the Team are provided below:

Firm Name (CONSULTANT/SUBCONSULTANT)	Type of Services
AECOM Technical Services, Inc. (AECOM) (CONSULTANT)	Project Management
Chen Moore & Associates, Inc. (CMA) (SUBCONSULTANT)	Stormwater Design/Permitting

Meetings

The CONSULTANT will attend the following meetings during this Task:

- a. Design K.O. Meeting;
- b. Team and DOA Coordination Meetings;
- c. Regulatory permitting agencies meetings, as applicable; and
- d. One (1) DOA Review Submittal Meeting.

Deliverables

The CONSULTANT will deliver the following major Deliverables (pdf):

- a. K.O. Meeting Minutes;
- b. Existing Conditions Technical Memorandum;
- c. Conceptual Opinion of Probable Construction Cost (OPCC);
- d. Future Conditions Technical Memorandum;
- e. Regulatory permitting agencies documentation;
- f. Draft Stormwater Master Plan; and
- g. Final Stormwater Master Plan.

Schedule

The anticipated duration of this Task 180 calendar days from the kick-off meeting.

Table B
 Labor/Fee Estimate Summary - CONSULTANT (AECOM Technical Services, Inc.) - Task I-23-PHK-A-012 PHK Stormwater Master Plan

Billing Rate:	\$	340	\$	236	\$	270	\$	255	\$	201	\$	215	\$	128	\$	129	\$	96
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Task Description	Labor Estimate (Hours)											Fee Estimate (\$)		
	Principal	QC Reviewer	Senior Project Manager	Senior Planner	Design / Construction Manager	Project Manager / Senior Engineer	Project Engineer	Planner	Clerical	Total	Labor	Expenses	Total	
Task I-23-PHK-A-012 PHK Stormwater Master Plan														
Attend One (1) DOA Kick-Off Meeting	0	7	13	0	19	0	25	0	18	82	\$13,909	\$0	\$13,909	
Team and DOA Meetings		1	2		2		3		2	6	\$1,134	\$-	\$1,134	
Data Collection and Records Research			3		3		3		8	18	\$2,801	\$-	\$2,801	
Field Coordination for Site Visits			2		2		4			8	\$1,454	\$-	\$1,454	
Review Draft Report		3			2		6			2	\$402	\$-	\$402	
Review Final Report							6			9	\$1,476	\$-	\$1,476	
Develop Future Condition Tailwater Model/Input		3					6			9	\$1,476	\$-	\$1,476	
Task Management and Coordination			6		10		6			10	\$2,010	\$-	\$2,010	
Total Fee - AECOM Technical Services, Inc.	0	7	13	0	19	0	25	0	18	82	\$13,909.00	\$0.00	\$13,909.00	

Subconsultant Fees	
1 Total Subconsultant Fee - Chen Moore & Associates (LS)	\$ 101,830.00
Total Fee - Subconsultants	\$ 101,830.00

GRAND TOTAL FEE - BASIC ENGINEERING SERVICES	\$ 115,739.00
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Prepared by: AECOM Technical Services, Inc.

July 11, 2023

SENT VIA E-MAIL (bwhitfield@chenmoore.com)

Mr. Andrew Kacer
AECOM
7650 West Courtney Campbell Causeway
Tampa, FL 33607

**Subject: Palm Beach County Glades Airport (PHK)
Stormwater Master Plan
CMA Proposal No. 23-0066.P0001-004**

Dear Mr. Kacer,

Chen Moore and Associates, Inc. (CMA) is pleased to submit the attached Scope of Services and associated fee estimate to assist your team with the stormwater master plan and permitting services for the referenced project.

PROJECT INTRODUCTION

The Palm Beach County Department of Airports (DOA) is looking to provide expansions and improvements to the Palm Beach County Glades Airport (PHK) to accommodate potential increases in demand. A review of the existing facilities demonstrates that PHK presents opportunities to increase revenue and operational efficiency with additional pavement and facilities.

Each of the proposed improvements will affect the stormwater management system at the airport and will require modification, resulting in the need to obtain permits from the South Florida Water Management District (SFWMD). To facilitate all future improvements included in the Airport Layout Plan (ALP) for PHK (which may occur over multiple development phases) the DOA has requested the AECOM Team to prepare a stormwater master plan that demonstrates the changes in the drainage infrastructure that will be required. The final stormwater master plan will be presented to the SFWMD as part of a Conceptual Environmental Resources Permit (ERP) application, to facilitate efficient permitting for all future phases of development.

The project phases shall consist of the following:

- Task 1 - Data Collection and Review
- Task 2 - Existing Conditions Stormwater Model Development
- Task 3 - Proposed Conditions Stormwater Model Development
- Task 4 - Procurement of Conceptual ERP

PROJECT STAFFING

Our staff and team are ready and prepared to work on this project. Chen Moore staff project roles shall be as follows:

Principal – Jason McClair, P.E.
Project Director – Brent Whitfield, P.E.
Senior Engineer – Cole Benjamin, P.E.
Project Engineer – David Cowan, P.E.
Associate Engineer – Brandon Sullivan

Subconsultants – None

SCOPE OF SERVICES

TASK 1 – Data Collection and Review

Consultant shall collect and review copies of all relevant data, including correspondence, archived record drawings, existing permits, plans or information provided by the DOA which may be beneficial to the work effort performed by the AECOM Team. Information provided by the DOA shall include, at a minimum, existing survey/topographic data and respective Airport Layout Plan. This task shall include one on-site investigation to collect pertinent information about the present-day condition of the project site. The AECOM Team will prepare a technical memorandum of the information collected. This task shall also include preparation for, and attendance by, the AECOM Team, of the project kick-off meeting.

TASK 2 – Existing Conditions Stormwater Model Development

Consultant shall include all relevant documentation required for development of the existing conditions stormwater model.

- Prepare stormwater model (ICPR) based on data collected from Task 1.
- Input and simulate the following design storm events:
 - 5yr/1day
 - 10yr/1day
 - 25yr/3day
 - 100yr/3day (Zero Discharge)
 - 500yr Design Storm
- Establish the level of service for the existing stormwater network including identifying existing drainage concerns and confirming compliance with existing SFWMD-ERP permit requirements.
- Prepare Existing Conditions Technical Memorandum.
- Attend one (1) meeting with the DOA for project coordination.

TASK 3 – Proposed Conditions Stormwater Model Development

Consultant shall include all relevant documentation required for development of the proposed conditions stormwater model.

- Prepare stormwater model (ICPR) based on anticipated future development, as shown in the Airport Layout Plan.

- Develop modifications to the stormwater management system to accommodate required improvements including changes in sub-basin delineations, as well as, modifications to existing stormwater piping, detentions facilities, and outfalls.
- Input and simulate the following design storm events:
 - 5yr/1day
 - 10yr/1day
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 - 500yr Design Storm
 - Future Conditions Rainfall Projection (Up to 2 scenarios)
- Evaluate impacts of 2040 and 2070 tailwater conditions for both NOAA intermediate Low and NOAA Intermediate High sea level conditions for (4 scenarios) for the 5y, 10y, 100y and 500y design storms.
- Establish the proposed level of service.
- Confirm site grading meets proposed level of service and revise, as needed, to meet the following criteria.
 - Edge of pavement and parking lot elevations set above 5yr/1day max stage
 - Roadway centerline elevation set above 10yr/1day max stage
 - No offsite overland discharge of 25yr/3day
 - All building FFEs set above 100yr/3day-No discharge max stage
 - Peak Discharge at the outfall for the 25y/3day event is equal to or less than existing conditions
- Confirm compliance with existing SFWMD-ERP permit requirements.
- Prepare Conceptual Opinion of Probable Construction Cost (OPCC) for proposed stormwater features.
- Prepare Future Conditions Technical Memorandum.
- Attend one (1) meeting with the DOA for project coordination.

TASK 4 – Procurement of Conceptual ERP

Consultant shall prepare and submit permit applications for the following regulatory authority:

- Stormwater Management - South Florida Water Management District (SFWMD)

This task shall include the effort to schedule and conduct a pre-application meeting with the South Florida Water Management District (SFWMD) pertaining to stormwater design, including the preparation of a meeting agenda and meeting minutes. The task shall also include preparing applications and supporting documentation, correspondence with regulatory reviewers, and any required responses for up to two rounds of comments and responses for Requests for Additional Information (RAI). The Consultant will prepare a Stormwater Master Plan Report that includes a narrative of the overall project, review of regulatory requirements, a summary of the existing and proposed condition stormwater model and respective level of service, as well as a narrative of the proposed improvements. Providing permit fees are not included and shall be the responsibility of the Owner.

The basis for the above scope of services and associated fee(s) are based on the following:

- No surveying, geotechnical investigation, or environmental assessments are required for this conceptual permitting effort and therefore are not included.
- Conceptual analyses exclusively pertain to stormwater. Analysis associated with water, wastewater, landscape architecture, irrigation, site planning, pavement, signage and markings, Maintenance of Traffic, and detailed grading are not included.

- Regulatory coordination is limited to SFWMD in consideration that the ERP application is for a Conceptual permit. No permitting through FDEP or USACE will be required.
- Client shall provide submittal fees for government agencies.
- No detailed engineering design or construction administration services were included in this proposal. If requested, this effort shall be rendered as an additional service.

Information to be provided by the Client:

- A signed and sealed boundary and topographic survey and associated digital CAD File.
- A letter from the property owner granting access to the site and giving approval for Consultant to perform the services listed above.
- Filing and permit application fees, review fees, impact fees or any other associated assessments by other governments/agencies.
- Copies of all relevant data, including correspondence, plans or information in the Client's possession which may be beneficial to the work effort performed by Consultant.
- Previous reports and assessments.
- Boundary survey or legal description of the site.

SCHEDULE AND FEES

Consultant shall schedule work upon receipt of signed approval for this project as required. Per discussions with your team, the goal is to start immediately upon notice to proceed and official authorization from the Client. The total lump sum fee for this project will be divided as follows:

<u>TASK(s)</u>	<u>Task Description</u>	<u>Lump Sum</u>	<u>Hourly</u>	<u>Total Fees</u>
WATER RESOURCES ENGINEERING AND STORMWATER PERMITTING				
TASK 1	Data Collection and Review	\$8,580.00	-	\$8,580.00
TASK 2	Proposed Conditions Stormwater Model Development	\$23,600.00	-	\$23,600.00
TASK 3	Proposed Conditions Stormwater Model Development	\$46,560.00	-	\$46,560.00
TASK 3	Procurement of Conceptual ERP	\$23,090.00	-	\$23,090.00
PROJECT TOTAL				\$101,830.00

Reimbursable expenses for the tasks above are included in the lump sum price. Additional reimbursables requested by the client shall be rendered as Additional Services. Should you have any questions, please do not hesitate to contact me at my office at +1 (561) 295-1716, my cell phone at +1 (561) 329-1797, or send me an electronic message at bwhitfield@chenmoore.com.

Respectfully submitted,



Brent Whitfield, PE
 Director – Water Resources

Attachment(s):
 Fee Estimate

Palm Beach County Department of Airports - AECOM
Stormwater Master Plan - PHK
Fee Breakdown

Chen Moore and Associates

23-00066.P0001

	Project Principal	Project Director	Senior Engineer	Project Engineer	Associate Engineer	Administrative Staff	Total
Hourly Rate	\$ 360.00	\$250.00	\$200.00	\$150.00	\$125.00	\$90.00	
TASK 1 – DATA COLLECTION AND REVIEW							
Initial Field Visit		8	8				\$3,600.00
Existing Document Review		2	8	6	4		\$3,500.00
Project Kickoff Meeting and Project Setup		2	4			2	\$1,480.00
Task 1 Total	0	12	20	6	4	2	\$8,580.00
TASK 2 – DEVELOP EXISTING CONDITIONS MODEL							
Prepare ICPR Model (Based on Task 1 - Data Collection)		2	16	12	8		\$6,500.00
Simulate Design Storms (4 Storm Events - See SOW)		2	8	8	4		\$3,800.00
Establish Existing Level of Service		2	8	4	2		\$2,950.00
Prepare Existing Conditions Technical Memorandum		2	16	12	4		\$6,000.00
QA/QC		2	8	4	2		\$2,950.00
Coordination Meeting with PBCDOA		2	2		4		\$1,400.00
Task 2 Total	0	12	58	40	24	0	\$ 23,600.00
TASK 3 – DEVELOP PROPOSED CONDITIONS MODEL							
Prepare ICPR Model (Based on ALP)		4	12	8	4		\$5,100.00
Develop Modifications to Stormwater Management System		4	24	16	8		\$9,200.00
Simulate Design Storms (6 Storm Events & Alt TW per SOW)		4	16	14	10		\$7,550.00
Establish Proposed Level of Service		4	12	8	8		\$5,600.00
Prepare OPCC for Proposed Stormwater Features		6	8	4	2		\$3,950.00
Prepare Proposed Conditions Technical Memorandum		4	24	16	8	4	\$9,560.00
QA/QC		2	8	8	4		\$3,800.00
Coordination Meeting with PBCDOA		2	4		4		\$1,800.00
Task 3 Total	0	30	108	74	48	4	\$ 46,560.00
TASK 4 – PROCURE CONCEPTUAL ERP FROM SFWMD							
Prepare and Attend Kickoff Meeting with SFWMD		2	2		2		\$1,150.00
Prepare Stormwater Master Plan Report		4	16	12	8		\$7,000.00
Prepare and Submit Conceptual ERP		2	8	8	4	2	\$3,980.00
QA/QC		2	12	8	4		\$4,600.00
Coordination with SFWMD Staff/RAI Responses (Assume 2 RAI's)		2	16	12	4	4	\$6,360.00
Task 4 Total	0	12	54	40	22	6	\$23,090.00
TOTAL FEES							\$101,830.00

TASK	Total Hrs/Task	Total \$/Task
TASK 1 – DATA COLLECTION AND REVIEW	44	\$8,580.00
TASK 2 – DEVELOP EXISTING CONDITIONS MODEL	134	\$23,600.00
TASK 3 – DEVELOP PROPOSED CONDITIONS MODEL	264	\$46,560.00
TASK 4 – PROCURE CONCEPTUAL ERP FROM SFWMD	\$134	\$23,090.00
TOTAL	576	\$101,830.00

EXHIBIT A-4

PALM BEACH DOA GENERAL CONSULTING SERVICES

EXHIBIT A-4

Miscellaneous Planning, Engineering and Construction Services

Palm Beach International Airport (PBI)

Task I-23-PBI-A-013 PBI Turnage Boulevard Rehabilitation

OVERVIEW

The Palm Beach Department of Airports (DOA) has requested that AECOM Technical Services, Inc. (CONSULTANT) provide Professional Engineering Services associated with developing the Task I-23-PBI-A-013 PBI Turnage Boulevard Rehabilitation Project (Project) at Palm Beach International Airport (PBI). This Project follows the AECOM completion of the DOA Task 1-19-PBI-A-019 James L. Turnage Boulevard Rehabilitation Study (Asphalt Concrete Roadway), where the preliminary assessment of the road, including geotechnical data collection, as well as preliminary recommendations for corrective actions, and program budgeting, were developed. James L. Turnage Boulevard (Turnage Boulevard) serves as the primary entrance to PBI, and this project will serve to rehabilitate the roadway, its ground mounted signage, its marking, as well as the associated roadway features. Improvements to the overhead Wayfinding signage will be developed by the DOA under a separate project.

Project Team

This Project Team for the Professional Engineering Services to be provided by the Team are provided below:

Firm Name (CONSULTANT/SUBCONSULTANT)	Type of Services
AECOM Technical Services, Inc. (AECOM) (CONSULTANT)	Project Management
Quantum Electrical Engineering (QEE) (SUBCONSULTANT)	Electrical Engineering/Lighting
Scalar Consulting Group, Inc. (Scalar) (SUBCONSULTANT)	Roadway Design
Tierra South Florida, Inc. (TSF) (SUBCONSULTANT)	Geotechnical Engineering
Brown & Phillips, Inc. (B&P) (SUBCONSULTANT)	Surveying and Underground Utility Locates

The scope of this Project is to develop a complete set of construction documents for the Turnage Boulevard Rehabilitation, as shown in **Attachment 1**. The design will be in accordance with the requirements of in the Florida Department of Transportation (FDOT) standards and the COUNTY's Thoroughfare Road Design Procedures (2019 or Latest Version). The approximate project length is 2.50 miles. Improvements include milling and resurfacing of the existing roadway pavement, existing drainage system review and modifications, signal modifications at Australian Avenue and upgrading the existing signing and pavement markings. Roadway, Signals and Signing and Pavement Marking Plans will be prepared in accordance with the COUNTY's Thoroughfare Road Design Procedures, FDOT Greenbook, FDOT Standard Plans, and FDOT Design Manual.

The CONSULTANT will prepare construction documents; and support the DOA during the bid and award services. A brief overview of pertinent tasks to be performed by the CONSULTANT for the Project includes:

1. Attend One (1) DOA Design Kick-Off Meeting and prepare meeting minutes;
2. Coordinate One (1) Internal Design Team Kick-Off Meeting;
3. Coordinate Data Collection, Records Research and Review of As-Built information;
4. Field Coordination Meetings (At beginning of survey and throughout geotechnical services);
5. Validate Program Cost Estimate;
6. Facilitate Design Coordination meetings via conference calls and webinars;
7. Prepare 35%, 65%, 96% and 100% Contract Documents, General Provisions, Technical Specifications, Drawings, Project Schedule, and Cost Estimates;
8. Attend Four (4) DOA Submittal Review Meetings. Prepare meeting agenda and meeting minutes (35%, 65%, 96%, and 100% Contract Documents). Prepare PowerPoint Presentations, sketches, and agenda for meetings (as applicable);
9. Task Management/Task Administration – Coordination with DOA, DOA Operations, Permitting Agencies (if applicable), Subconsultants, and other stakeholders;
10. Provide Quality Assurance for all deliverables;
11. Prepare and Assemble Final Bid Documents: Project Manual, Technical Specifications and Drawings;
12. Assist DOA in Advertisement and Bidding of Task – Issue Addendums, attend Pre-bid conference, prepare meeting minutes, coordinate a site visit, and answer contractor questions;
13. Evaluate Bids and Prepare Bid Recommendations Award Letter and Bid Tabulations;
14. Task Management;
15. Task Coordination (FDOT, PBC, DOA Operations, SFWMD, Other Consultants, and other interested project stakeholders); and,
16. Construction Administration Services and Resident Project Representative Services will not be included in this task authorization.

Our scope of services will be as follows: Phase 1 consists of five (5) subphases (35%, 65%, 96%, 100% and Bid Documents).

A brief definition for each of the Phases included in the scope of services is provided below:

PHASE 1A -CONSULTANT will develop the Schematic Documents to a predetermined completion milestone (35% of completion). CONSULTANT will perform site/pavement assessment, obtain survey and geotechnical data for the Project and develop Program Costs, Schedule, and Schematic Plans.

PHASE 1B -CONSULTANT will develop the Contract Documents to 65% to allow the Project to be reviewed and preliminarily submitted for applicable permitting agencies. CONSULTANT will update Program Costs, Schedule, and Design Plans.

PHASE 1C -CONSULTANT will develop the Contract Documents to 96% to advance the design and further update Program Costs, Schedule, and Design Plans.

PHASE 1D -CONSULTANT will develop the Contract Documents to 100% to advance the design and further update Program Costs, Schedule, and Design Plans.

PHASE 1E -CONSULTANT will develop Bid Documents and assist the DOA in obtaining Bids and in the Award of a Construction Contract, as required.

1.0 PHASE 1A – 35% CONTRACT DOCUMENTS

The CONSULTANT will prepare a presentation/agenda for the Project's Kick Off meeting. All key stakeholders will be invited to this meeting: DOA/Airport Staff, CONSULTANT'S key staff; and Subconsultants. The Kick-Off meeting's discussion items will include: stakeholder identifications, project limits, safety and operational impacts, permitting, design services, design standards, schedule, budget and construction constraints. The CONSULTANT will prepare and distribute the meeting minutes which will highlight outstanding action items and meeting details. Immediately following the Kick-Off Meeting, field investigative services associated with the survey and geotechnical services will begin. All investigative services will be coordinated with DOA Operations prior to beginning work.

The CONSULTANT will prepare the following as a part of Phase 1A:

1.1. Documents Data Collection and Records Research

The Consultant will review existing DOA designs, as-builts, record drawings, and information regarding the proposed Project components and gather information for use

during subsequent design phases. All pertinent record documents associated with the cargo ramp expansion and adjacent areas will be obtained from the DOA records database.

1.2. Field Investigative Services and Design Development

1.2.1 Site Evaluation

The AECOM Team will perform site visits to evaluate the existing conditions and collect data. AECOM will also be on site at the beginning of the topographic survey and throughout the geotechnical investigations. The AECOM Team will evaluate the existing condition of the pavement, signage, marking, utilities, drainage infrastructure, and any other above ground infrastructure within the project limits.

1.2.2 Topographic Survey and Utility Locates

B&P will perform the surveying services for this task. The major components of the survey are the development of a topographic survey within the area shown on the **Attachment** included in the attached B&P detailed scope and fee. The topographic survey will obtain data, including the pavement, signs, utilities, and drainage structures. Cross sections will be obtained along the roadway at 50-foot intervals. The points on paved surfaces will be taken at all grade breaks or other visible surface anomalies picked up. B&P will also perform utility locates and clearances for the geotechnical data collection. See the attached B&P scope and fee for a more detailed description of the B&P services. B&P will also locate underground utilities in the vicinity of the proposed roadway signage, to avoid conflicts and perform up to twelve (12) test-holes or soft figs where required for underground utility confirmation.

1.2.3 Geotechnical/subsurface investigations

TSF will perform the geotechnical/subsurface investigations services for this Project. The major components of the geotechnical/subsurface investigations services include performing twelve (12) SPT borings to a depth of 12 feet to determine the subsurface conditions.

1.2.4 Pavement Condition Evaluation

AECOM/Scalar will review the condition of the existing pavement within the project limits. This analysis will be in addition to the onsite pavement condition evaluation developed under the DOA Task 1-19-PBI-A-019 James L. Turnage Boulevard Rehabilitation Study (Asphalt Concrete Roadway). Based on this review, we will determine the final location of the geotechnical data acquisition.

1.2.5 Geometry

Scalar will develop any recommended changes to the current roadway geometry and provide these recommendations in the 35% Schematic Drawing set.

1.2.6 Electrical/Lighting

QEE will perform the electrical design services for this contract. The scope of work will improvements to the Enplane and Deplane lighting. QEE will review the on-site electrical existing conditions, design replacement of the existing first generation LED fixture, and provide photometric lighting calculations.

1.3. Meetings

The CONSULTANT will attend the following meetings during this Phase:

- a. Design K.O. Meeting;
- b. Team Coordination Meetings;
- c. Regulatory permitting agencies meetings, as applicable; and
- d. One (1) DOA Review Submittal Meeting.

The CONSULTANT will submit pdf copies of all Contract Documents required under this Phase 1A for review comments and approval by the DOA.

1.4. Deliverables

The CONSULTANT will deliver the following major Deliverables (pdf):

- a. K.O. Meeting Minutes;
- b. Topographic Survey;
- c. Geotechnical Report;
- d. Meeting minutes from all applicable meetings of this Phase;
- e. Regulatory permitting agencies documentation;
- f. 35% Drawings;
- g. 35% List of Technical Specifications;
- h. 35% Project Program Cost Estimates; and,
- i. 35% Project Schedule.

2.0 PHASE 1B - 65% SUBMITTAL

Following the 35% Complete Contract Documents approval the CONSULTANT will develop 65% Complete Contract Documents from the approved 35% Submittal. These 65% documents will consist of the information contained in the 35% documents, as well as incorporate any comments provided and by DOA, Permit Agencies, or other authorized reviewers, as directed by DOA.

2.1 Meetings

The CONSULTANT will attend the following meetings during this Phase:

- a. Team Coordination Meetings, as applicable;
- b. Regulatory permitting agencies meetings, as applicable; and,
- c. One (1) DOA Review Submittal Meeting.

The CONSULTANT will submit pdf copies of all Contract Documents required under this Phase 1B for review comments and approval by the DOA.

2.2 Deliverables

- a. Meeting minutes from all applicable meetings of this Phase;

- b. Response to DOA 35% Design review comments;
- c. Regulatory permitting agencies documentation;
- d. 65% Contract Drawings;
- e. 65% Project Manual - Technical Specifications;
- f. 65% Project Cost Budget Estimates; and
- g. 65% Project Schedule.

3 PHASE 1C - 96% SUBMITTAL

Following the 65% Complete Contract Documents approval the CONSULTANT will develop 96% Complete Contract Documents from the approved 65% Complete Contract Documents. They will consist of the information contained in the 65% documents, as well as incorporate any comments provided and by DOA, Permit Agencies, or other authorized reviewers, as directed by DOA.

3.1 Meetings

The CONSULTANT will attend the following meetings during this Phase:

- a. Team Coordination Meetings, as applicable;
- b. Regulatory permitting agencies meetings, as applicable; and,
- c. One (1) DOA Review Submittal Meeting.

3.2 Deliverables

The CONSULTANT will deliver the following major Deliverables for this Phase:

- a. Meeting minutes from all applicable meetings of this Phase;
- b. Response to DOA 65% Design review comments;
- c. Regulatory permitting agencies documentation;
- d. 96% Contract Drawings;
- e. 96% Project Manual - Technical Specifications, Front Ends and General Provisions;
- f. 96% Project Cost Budget Estimates; and,
- g. 96% Project Schedule.

4 PHASE 1D - 100% SUBMITTAL

Following the 96% Complete Contract Documents approval the CONSULTANT will develop 100% Complete Contract Documents from the approved 96% Complete Contract Documents. They will consist of the information contained in the 96% documents, as well as incorporate any comments provided and by DOA, Permit Agencies, or other authorized reviewers, as directed by DOA.

4.1 Meetings

The CONSULTANT will attend the following meetings during this Phase:

- a. Team Coordination Meetings, as applicable;
- b. Regulatory permitting agencies meetings, as applicable; and,
- c. One (1) DOA Review Submittal Meeting.

4.2 Deliverables

The CONSULTANT will deliver the following major Deliverables for this Phase:

- a. Meeting minutes from all applicable meetings of this Phase;
- b. Response to DOA 96% Design review comments;
- c. Regulatory permitting agencies documentation;
- d. 100% Contract Drawings;
- e. 100% Project Manual - Technical Specifications, Front Ends and General Provisions;
- f. 100% Project Cost Budget Estimates; and,
- g. 100% Project Schedule.

5.0 PHASE 5 - BIDDING AND AWARD OF CONTRACT

Bid & Award Services

After authorization to proceed with the Bidding Phase, CONSULTANT will assist the DOA in advertising for and obtaining bids via the County's Vendor Self-Service Website. CONSULTANT will support the DOA in conducting a pre-bid conference to share pertinent bidding and technical information and requirements with prospective bidders; issue addenda as appropriate to interpret and clarify or expand the Bidding Documents during the Bidding phase; and attend the bid opening, prepare bid tabulation sheets and assist DOA in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment and services.

5.1 Deliverables

- a. PDF copy of the Bid Documents
- b. Pre-Bid Conference Agenda and Meeting Minutes
- c. Addenda as required during the bid process
- e. Bid Tabulation
- f. Bid Recommendation Letter

5.1 Schedule

The anticipated duration for this project is 270 calendar days.

Assumptions:

1. DOA will provide all record documents applicable to this task.
2. DOA will pay for all permitting costs.
3. Construction Administration and Resident Project Representative Services are not included in this scope of services. If requested, the CONSULTANT will perform Construction Administration and Resident Project Representative Services via a separate task order.
4. In providing opinions of probable construction costs, the DOA understands that the CONSULTANT has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinions of probable construction costs provided herein shall be based on the CONSULTANT'S qualifications and experience. The CONSULTANT makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.

5. CONSULTANT shall not be responsible for the means, methods, techniques, and sequences, procedures of construction or selection of materials selected by the Contractor or the safety precautions and programs incident to the work of the Contractor. The CONSULTANT shall not guarantee the performance of the Contractor nor be responsible for the acts, errors, omissions, or the failure of the Contractor to perform the construction work in accordance with the Contract Documents.

Table B
Labor/Fee Estimate Summary - CONSULTANT (AECOM Technical Services, Inc.) - Task L23-PBI-A-013 PBI Turnage Blvd Rehabilitation

Billing Rate:	\$	340	\$	236	\$	270	\$	255	\$	201	\$	215	\$	128	\$	129	\$	96
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Task Description	Labor Estimate (Hours)											Fee Estimate (\$)	
	Principal	QC Reviewer	Senior Project Manager	Senior Planner	Design/Construction Manager	Project Manager / Senior Engineer	Project Engineer	Planner	Clerical	Total	Labor	Expenses	Total
Task L23-PBI-A-013 PBI Turnage Blvd Rehabilitation													
1A 35% Submittal	0	9	12	0	24	0	32	0	4	81	\$14,668	\$0	\$14,668
Attend One (1) DOA Kick-Off Meeting			2		2				4	4	\$ 942	\$ -	\$ 942
Team and DOA Meetings		1	4		4				4	13	\$ 2,504	\$ -	\$ 2,504
Data Collection and Records Research			2		2		4			8	\$ 1,454	\$ -	\$ 1,454
Field Coordination for Site Visits			2		4					4	\$ 804	\$ -	\$ 804
On-Site w Geotechnical Data Collection			2		2		16			20	\$ 2,990	\$ -	\$ 2,990
35% Schematic Plans		6	2		4		4			14	\$ 2,732	\$ -	\$ 2,732
35% Schematic Program Cost Estimate		2			4		4			10	\$ 1,788	\$ -	\$ 1,788
Facilitate 35% Design Review Meeting			2		2		4			8	\$ 1,454	\$ -	\$ 1,454
1B 65% Submittal	0	16	10	0	16	0	0	0	4	46	\$10,076	\$0	\$10,076
Team and DOA Meetings			2		2				4	8	\$ 1,326	\$ -	\$ 1,326
65% CDs		8	2		4					14	\$ 3,232	\$ -	\$ 3,232
65% Specifications		4	2		4					10	\$ 2,288	\$ -	\$ 2,288
65% Program Cost Estimate		4	2		4					10	\$ 2,288	\$ -	\$ 2,288
Facilitate 65% Design Review Meeting			2		2		4			4	\$ 942	\$ -	\$ 942
1C 98% Submittal	0	22	10	0	24	0	0	0	4	60	\$13,100	\$0	\$13,100
Team and DOA Meetings			2		2				4	8	\$ 1,326	\$ -	\$ 1,326
98% CDs		8	2		8					18	\$ 4,036	\$ -	\$ 4,036
98% Specifications		4	2		4					10	\$ 2,288	\$ -	\$ 2,288
98% Program Cost Estimate		10	2		8					20	\$ 4,508	\$ -	\$ 4,508
Facilitate 98% Design Review Meeting			2		2		4			4	\$ 942	\$ -	\$ 942
1D 100% Submittal	0	24	7	0	29	0	0	0	8	68	\$14,151	\$0	\$14,151
Team and DOA Meetings			2		2				8	12	\$ 1,710	\$ -	\$ 1,710
100% CDs		10	2		8					18	\$ 3,968	\$ -	\$ 3,968
100% Specifications (Include Front End)		4	2		4					14	\$ 3,092	\$ -	\$ 3,092
100% Program Cost Estimate		10	2		8					18	\$ 3,968	\$ -	\$ 3,968
Facilitate 100% Design Review Meeting			3		3				6	6	\$ 1,413	\$ -	\$ 1,413
1E BID AND AWARD SERVICES	0	8	15	0	34	32	53	4	32	178	\$30,024	\$0	\$30,024
Bid Drawings			1		2		12			17	\$ 2,638	\$ -	\$ 2,638
Bid Technical Specifications			2		1		1			5	\$ 1,084	\$ -	\$ 1,084
Bid Front End Specifications & General Provisions			2		1		1			5	\$ 1,084	\$ -	\$ 1,084
Bid Project Construction Cost Estimate			2		3		2			6	\$ 1,358	\$ -	\$ 1,358
ISO 9001 - QA/QC Review			3		1		2			4	\$ 672	\$ -	\$ 672
Task Management and Coordination		6			1			4		10	\$ 1,932	\$ -	\$ 1,932
Assist DOA in Advertisement and Processing of Bid Documents			4		4				32	44	\$ 5,816	\$ -	\$ 5,816
Prepare and attend Pre-Bid Meeting, Prepare Minutes			2		4		4			14	\$ 2,176	\$ -	\$ 2,176
Prepare and Maintain Bid Holders Log			4		4		4			12	\$ 2,176	\$ -	\$ 2,176
Respond to Contractor's Request for Information (RFIs)			2		6		8			8	\$ 1,024	\$ -	\$ 1,024
Prepare and Issue Addenda		2	2		8		16			14	\$ 3,036	\$ -	\$ 3,036
Attend Bid Opening Meeting			2		8		4			36	\$ 6,388	\$ -	\$ 6,388
Prepare, Review and Evaluate Bid Tabulation and Bid Forms			1		1		2			4	\$ 512	\$ -	\$ 512
Total Fee - AECOM Technical Services, Inc.	0	79	54	0	127	32	85	4	52	433	\$82,019.00	\$0.00	\$82,019.00

Lump Sum	\$501,238.47
TM	\$80,949.44
Expenses	\$0.00
Total	\$582,187.91

Subconsultant Fees	
1 Total Subconsultant Fee - Quantum Electrical Engineering (LS)	\$ 28,945.00
2 Total Subconsultant Fee - Brown & Phillips (TM)	\$ 66,120.00
3 Total Subconsultant Fee - Terra South Florida (TM)	\$ 14,829.44
4 Total Subconsultant Fee - Scalar (LS)	\$ 390,274.47
Total Fee - Subconsultants	\$ 500,168.91

GRAND TOTAL FEE - BASIC ENGINEERING SERVICES \$ 582,187.91

September 7, 2023

AECOM Technical Services, Inc.
Mr. Andy Kacer P.E.
Southeast Aviation Manager
7650 West Courtney Campbell Causeway
Tampa, FL 33607

Subject: Electrical Services Design Fee Proposal for the Palm Beach County Department of Airports (DOA) PBI Turnage Road Improvements – Enplane & Deplane Lighting.

Dear Andy:

Quantum Electrical Engineering, Inc. (Quantum) is pleased to provide AECOM an electrical services design fee proposal for the Palm Beach County Department of Airports (DOA) PBI Turnage Road Improvements – Enplane & Deplane Lighting. The following items are included in our scope:

Design Documents

- Includes coordination meetings with DOA Departments and AECOM Design Team.
- Includes record drawings reviews & on-site electrical verifications of existing conditions with the assistance of DOA Electrical Maintenance Department.
- Design replacement of existing first generation LED lighting fixtures on the Enplane and Deplane Levels with new LED lighting fixtures. Includes plan layouts, panel schedules, lighting control schedules and electrical details.
- Provide photometric lighting calculations (point-by-point) for the new Enplane and Deplane Levels per DOA, Palm Beach County and Illuminating Engineering Society (IES) recommendations and standards.
- The electrical design shall be per the DOA's requirements, Florida Building Code and National Electrical Code (NEC).

Bid & Award/Permit

- Includes attending pre-bid meeting and associates site visit.
- Includes responses to RFIs and addenda revisions.
- Includes permit comment responses and associated plan revisions.
- Includes review of electrical bid results.

Exclusions and Assumptions

- AECOM shall provide all base drawings to Quantum in AutoCAD 2022 or higher.
- Quantum shall provide 1-set of electronic electrical plans & specifications to AECOM for 60%, 100% reviews, bid documents and permit documents.

Palm Beach County
2755 Vista Parkway, Suite I-12
West Palm Beach, FL 33411
561.210.9224

www.QuantumElectricalEngineering.com

Broward County
5571 N. University Drive, Suite 101
Coral Springs, FL 33067
954.369.5810

- AECOM shall provide all printing of plans & specifications for reviews, bid phase, permits and construction phases.
- Does not include any structural design or wind loading calculations.
- Does not include construction services.

Design Documents Lump-Sum fee is:	\$ 27,405.00
<u>Bid & Award Lump-Sum fee is:</u>	<u>\$ 1,540.00</u>
Our proposed total Lump-Sum fee is:	\$ 28,945.00

(See attachment breakdown)

Sincerely,



Amy L. Champagne-Baker, PE
President

Palm Beach County
2755 Vista Parkway, Suite I-12
West Palm Beach, FL 33411
561.210.9224

www.QuantumElectricalEngineering.com

Broward County
5571 N. University Drive, Suite 101
Coral Springs, FL 33067
954.369.5810

PALM BEACH COUNTY DEPARTMENT OF AIRPORTS- PBI TURNAGE ROAD IMPROVEMENTS - ENPLANE & DEPLANE LIGHTING
QUANTUM ELECTRICAL ENGINEERING, INC.
SCOPE FEE SUMMARY
FEE PROPOSAL ELECTRICAL SERVICES to AE 9/7/2023

Rate	\$170.00	\$150.00	\$145.00	\$85.00	\$140.00	\$50.00			
	Proj. Mgr.	Prof. Eng	Proj. Eng	CADD/Tech	Field Eng.	Clerical	Total		TOTAL
PHASE OF WORK	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Expenses	TASK COST
Design Documents									
60% Design Documents									
Design Review Mtgs with DOA & AE		1					1		\$150.00
Site Investigation, Record Drawing Review and Discovery		4					4		\$600.00
Electrical Design Drawings		24	36	48			108		\$12,900.00
Specifications & Cost Estimate		8	4			2	14		\$1,880.00
QA/QC & Comment Incorporation		4	2	4			10		\$1,230.00
Subtotal	0	41	42	52	0	2	137		\$16,760.00
100% Design Documents									
Design Review Mtgs with DOA & AE		1					1		\$150.00
Electrical Design Drawings		16	24	36			76		\$8,940.00
Specifications & Cost Estimate		4	2			1	7		\$940.00
QA/QC & Comment Incorporation		2	1	2			5		\$615.00
Subtotal	0	23	27	38	0	1	89		\$10,645.00
Bid & Award/Permit									
Attend Pre-Bid Meeting		2					2		\$300.00
RFI Responses and Addendum Revisions		2		2		1	5		\$520.00
Review of Bid Results & Recommendation		1					1		\$150.00
Permit Responses and Revisions		2		2		2	6		\$570.00
Subtotal	0	7	0	4	0	3	14		\$1,540.00
Grand Total Hours	0	71	69	94	0	6	240		
Grand Total Labor Cost	\$0.00	\$10,650.00	\$10,005.00	\$7,990.00	\$0.00	\$300.00			\$28,945.00

August 28, 2023

Mr. Andrew Kacer, P.E.
AECOM
7650 West Courtney Campbell Causeway
Tampa, FL 33607

**Re: James L. Turnage Boulevard (2.3± miles) at Palm Beach International Airport (PBI)
Pavement Rehabilitation Study - Route Topographic Survey**

Dear Andy:

Thank you for the opportunity to provide you with the following services for the subject site. This proposal is based on documentation and information provided by your office. The scope of services is as follows:

SCOPE OF SERVICES

I. ROUTE TOPOGRAPHIC SURVEY

Utilizing airport control from our previous surveys, we will perform a route topographic survey to support your design of roadway improvements for James L. Turnage Boulevard at Palm Beach International Airport (PBI). This survey will tie in all visible features such as, but not limited to, signs, light poles, sidewalks, edge of pavement, curbing, utilities, and drainage structures. We will attempt to get as-built information on all the pipes leading out of any storm structures found. We will show invert elevations, pipe sizes and materials for all pipes located including outfall pipes. We will obtain cross sections along the route at 50' intervals. These cross sections will cover the roadway to the toe of the adjacent slope next to the road. No trees will be located. The limits for the area to be surveyed are shown in blue on Attachment 'B'.

II. UTILITY TARGETING SERVICES

We will scan and target any underground utilities at the location of thirty-four (34) proposed double post signs (68 individual locations). An area of 10' in diameter will be scanned and cleared around each proposed sign post. If underground utilities are designated, we will field locate the designates and add them to the survey.

III. TEST HOLES

We will perform up to twelve (12) test holes at locations to be determined by you. We will then locate the test holes and add them to the survey.

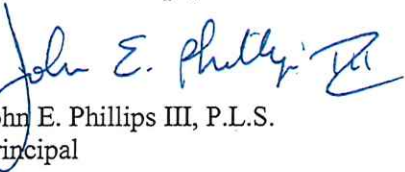
IV. CLOSURE

A drawing will be produced which will show all the features located. We propose to provide AECOM with hard copies, a digitally signed PDF file, and an AutoCAD file in the version requested. We will perform the scope of services for an **hourly, not-to-exceed fee of \$66,120.00** (\$42,120.00 for the survey, \$18,000.00 for utility targeting, and \$6,000.00 for 12 test holes), see Attachment 'A' for an hourly breakdown).

Kacer
August 28, 2023
Page 2

Please do not hesitate to call me with any questions you might have regarding this proposal. We look forward to working with you on this project.

Brown & Phillips, Inc.


John E. Phillips III, P.L.S.
Principal

Attachment

JEP/mb

This Proposal accepted this ____ day of _____, 2023

By: _____
AECOM

Print Name: _____

Title: _____



BROWN & PHILLIPS, Inc.
 PROFESSIONAL SURVEYING SERVICES

ATTACHMENT 'A'

James L. Turnage Boulevard at Palm Beach International Airport (PBI)
 Pavement Rehabilitation Study

Type of Survey: Route Topographic

Size: 2.3± miles

Date: August 28, 2023

TASK	SURVEY CREW	CADD TECH	SURVEY TECH	PLS	COMMENTS
Meetings and Coordination				3	
Horizontal Project Network Control	20		4	1	Establish control and right-of-way
Vertical Project Network Control	20		4	1	Find/set benchmarks along corridor
Tie In Improvements, Cross Sections and As-builts	120		20	8	Locate above ground features, 50' cross sections and spot elevations, obtain asbuilt data (240± x-sects)
Underground Utilities	20		2	1	Locate marked utilities and test holes
Topographic Survey		75	10	6	Prepare topographic survey (22± sheets)
Total Hours:	180	75	40	20	
Rate/Hour	\$156.00	\$96.00	\$96.00	\$150.00	
Subtotal:	\$28,080.00	\$7,200.00	\$3,840.00	\$3,000.00	
Total Labor Cost:					\$42,120.00

<u>Optional S.U.E.Services:</u>	<u>quantity</u>	<u>unit</u>	<u>cost/unit</u>	<u>total</u>	
Utility Targeting	9	day	\$2,000.00	\$18,000.00	
Test Holes	12	each	\$500.00	\$6,000.00	
Total S.U.E. Services:					\$24,000.00
TOTAL PRICE					\$66,120.00

Figure 3-1. Pavement Design Roadway Section (MAP)





Revised September 7, 2023
August 31, 2023

AECOM Technical Services, Inc.
7650 West Courtney Campbell Causeway
Tampa, Florida 33607

Attention: Mr. Andy Kacer, P.E., SE Aviation Manager

Re: **Proposal for Geotechnical Services**
Proposed Multi Post Signs – James L Turnage Boulevard
Palm Beach International Airport
West Palm Beach, Florida
TSF Proposal No.: 2308-590

Dear Andy:

As requested, **TSFGeo** is pleased to submit this proposal for the above-referenced project. The proposal is based on information provided by AECOM via email on August 22, 2023. We understand that the project will include several Muti-post signs along James L Turnage Boulevard. This proposal includes an outline of our proposed scope of work, an estimate of the total fees, and our anticipated schedule for completion of the work.

PROPOSED SCOPE OF WORK

Geotechnical Investigation Services will include the following:

- Attend One (1) Design Kick-Off Meeting;
- Perform twelve (12) SPT borings to a depth of 15 feet to determine the subsurface conditions;
- Utility Coordination (Utility locates by Brown and Phillips);
- Soil Boring Location Plan;
- Soil Boring profile denoting boring number, Unified Soil Classification (USC), location of groundwater table depth, number of blows, standard penetration resistance in blows per foot, northing and easting, date performed, and depth in feet;
- Soil parameters

The Geotechnical Report will include soil parameters, a summary of findings, and will be signed and sealed by a registered professional geotechnical engineer in the State of Florida. The report will include exhibits and figures to illustrate the geotechnical investigation and findings.

Prior to drilling at the project site, TSF will notify the local utility companies and request that underground utilities be marked. Our experience, however, is that the utility companies will not mark privately owned or airside utilities. **It is our understanding that all utilities will be cleared via GPR by Brown and Phillips.**

ESTIMATED FEES

It is proposed that the fee for the performance of the services outlined above is determined on a unit price basis in accordance with the attached Fee Schedule and that the work be performed pursuant to TSF's General Conditions enclosed herewith and incorporated into this proposal. On the basis of the proposed quantities, the estimated total fee is:

FIELD INVESTIGATION	\$7,950.00
LABORATORY TESTING	\$750.00
ENGINEERING/COORDINATION/MANAGEMENT	<u>\$6,129.44</u>
TOTAL (GEOTECH)	<u>\$14,829.44</u>

Our estimate covers the work needed to present our findings in a formal report. Not included are reviews of foundation drawings, preparation of construction specifications, special conferences and any other work requested after submittal of our report.

Boring, sampling, and testing requirements are functions of the subsurface conditions encountered. Therefore, the estimated fee previously indicated is approximate, and compensation for the exploration will be based on the actual work and tests performed. We will endeavor to keep the exploration cost at a minimum consistent with good engineering practice. Based on our understanding of the project a breakdown is attached.

SCHEDULE AND AUTHORIZATION

TSF will proceed with the work after receipt of a signed copy of this proposal. With our present schedule, we can commence work within several days of project approval (weather permitting) and fieldwork will take about 3 to 4 days to complete. The written report can be submitted in about three weeks after completion of the field exploration, depending on the extent of the laboratory-testing program. Verbal preliminary results can be provided to appropriate parties prior to submittal of the written report.

We at TSF appreciate the opportunity to submit this proposal and look forward to working with you on this project. If you should have any questions concerning our proposal, please contact our office.

Respectfully submitted,

TIERRA SOUTH FLORIDA, INC.

Raj Krishnasamy, P.E.
President

Ramakumar Vedula, P.E.
Principal Engineer

Attachments: 1. Fee Estimate
2. Site Plan

AUTHORIZED BY:	INVOICE TO:
Firm:	Firm:
Name:	Name:
Title:	Address:
Date:	Phone #:
	Fax #:

Figure 3-1. Pavement Design Roadway Section (MAP)

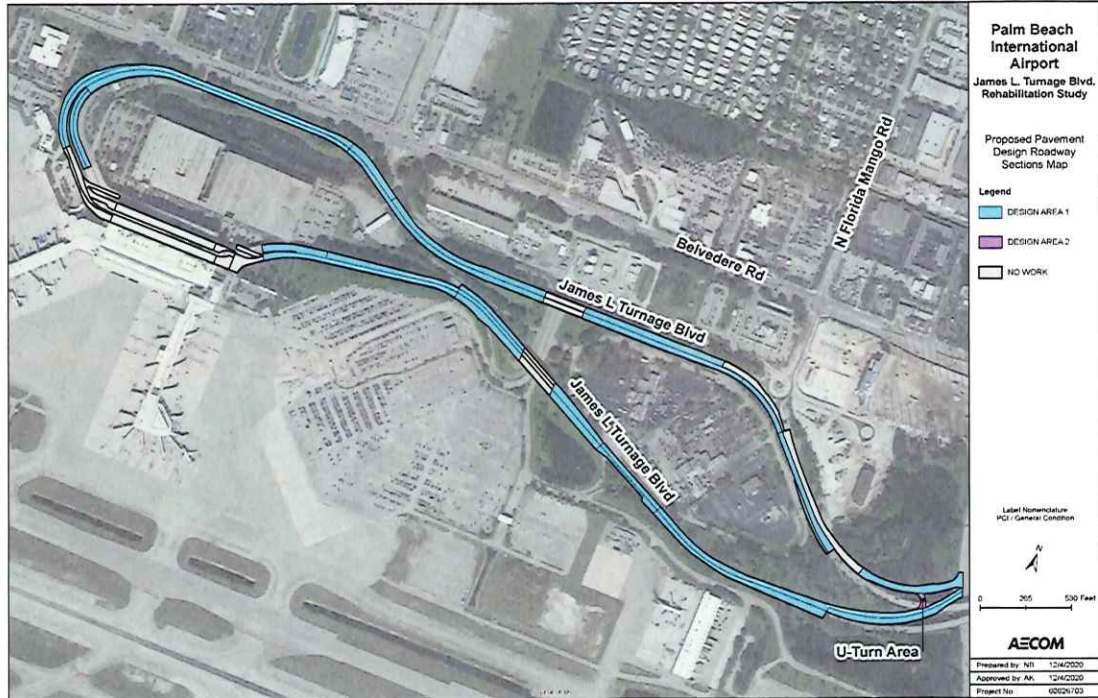


EXHIBIT "A"**James L. Turnage Boulevard Rehabilitation****Palm Beach County Department of Airports (DOA)****SCOPE OF WORK****PURPOSE**

The purpose of this Exhibit is to describe the scope of work and responsibilities of Scalar Consulting Group Inc. (SCALAR) with regards to the design and preparation of a complete set of construction contract plans for the James L. Turnage Boulevard Rehabilitation project described herein. The scope is prepared in accordance with the Palm Beach County (COUNTY) Thoroughfare Road Design Procedures. AECOM (CONSULTANT) is the Client. The owner of the Project is the Palm Beach County Department of Airports (DOA).

The general objective is for SCALAR to prepare a set of construction plans to be used by the Contractor to properly mill and resurface James L. Turnage Boulevard from/to Australian Avenue. Prior to initiating the design phase, SCALAR shall prepare a Typical Section Package for the DOA. The intent of the Typical Section Package will be to determine the proposed lane configuration and widths, as well as identify areas that will be milled and resurfaced, the depth of milling and any additional improvements i.e., minor reconstruction/widening needed. The attached sketch shows the limits of design area.

Other elements of work will include, but may not be limited to: roadway design, harmonization with adjacent roads, drainage design, signing and pavement markings, side street intersections, engineer's cost estimates, environmental/ drainage permits, quantity computation books, meetings with stakeholders, and all necessary incidental items as listed and estimated in this scope of work. The Scope of Services establishes the applicable items described in the Florida Department of Transportation (FDOT) standards and the COUNTY's *Thoroughfare Road Design Procedures* (2019 or Latest Version), *Typicals for Pavement Markings, Signing & Geometrics*, and *Access Management Standards* relevant to the accomplishment of the specific work under this contract. The scope outlines which of the items of work will be the responsibility of SCALAR or the DOA.

PROJECT DESCRIPTION & SCOPE

SCALAR will provide professional engineering services in connection with the rehabilitation of James L. Turnage Boulevard. The approximate project length is 2.50 miles. Improvements include milling and resurfacing of the existing roadway pavement, existing drainage system review and modifications, signal modifications at Australian Avenue and upgrading the existing signing and pavement markings. Roadway, Signals and Signing and Pavement Marking Plans will be prepared in accordance with the COUNTY's Thoroughfare Road Design Procedures, Florida Department of Transportation's (FDOT) Greenbook, FDOT Standard Plans, and FDOT Design Manual. SCALAR shall provide to DOA the following items of professional services:

1.0 Typical Section Package

The intent of the Typical Section Package would be to establish the lane configuration for the milling and resurfacing and reconstruction areas.

2.0 Specifications

SCALAR will prepare special provisions for construction specifications, if applicable.

3.0 Project General Tasks

Project Coordination: SCALAR shall perform FAA coordination via the notice criteria tool online to determine any impacts with proposed work.

Cost Estimates: SCALAR shall prepare the Engineer's Estimate of Probable Cost and provide it at the 65%, 96%, 100% and Final Plans submittals. The Engineer's Estimate shall be adjusted and re-submitted at Final Plans Submittal as a signed and sealed Final Cost Estimate.

Contract Maintenance: Includes the project management effort for complete setup and maintenance of files, developing monthly progress reports, schedule updates, work effort to develop and execute SCALAR's agreements, etc.

4.0 Roadway Design

Final construction drawings (Master Plans to Final Plans) will be prepared. Milling and resurfacing of existing pavement and reconstruction of U-turn area will be included in design/analysis. Roadway design tasks included in the attached staff hour estimates are as follows:

4.1 Typical Section Package

Early in the design, the Design Team shall provide a Typical Section Package for approval by the DOA prior to the Master Plans Submittal.

Roadway Typical Sections: Design will be based on FDOT Standards and the COUNTY's *Thoroughfare Road Design Procedures, Typicals for Pavement Markings, Signing & Geometrics* and *Access Management Standards*. Proposed typical sections will include 1 mainline and 9 ramp typicals.

4.2 Pavement Design

SCALAR shall incorporate the standard Pavement Design approved by the DOA and COUNTY.

4.3 Horizontal/Vertical Master Design Files

SCALAR shall design the geometrics using the standards as stated in the FDOT's Florida Design

Manual (FDM) and COUNTY's *Thoroughfare Road Design Procedures* with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, pedestrian/bicycle concerns, ADA requirements, access management and scope of work.

4.4 Traffic Control Analysis

Maintenance of Traffic (MOT) Analysis will be based on maintaining capacity and access to terminals, parking, and other necessary areas during construction. Temporary (short-term) detours will be evaluated, but not for entire construction phases. Positive drainage will be always maintained during construction as part of the Contractor's responsibility for providing TCP for this project. Traffic Control Plans will not be assembled and provided by SCALAR, for the roadway component, however typical sections and details will be developed.

4.5 Design Report

SCALAR shall prepare a Design Documentation Report to document existing project conditions and proposed roadway/bridge improvements. The initial Design Report will be submitted at the 96% Phase and updated prior to the Final Plans submittal. The Design Report will include design notes, data, and calculations to document the design conclusions reached during the development of the contract plans.

4.6 Computation Book & Engineer's Estimate

SCALAR shall prepare Computation Books (geometric, drainage and quantity), per COUNTY requirements. This includes all efforts required to develop the sign/sealed Computation Books to be included at Final Submittal. Computation Books will be provided as part of the 96%, 100% and Final Plans Submittals. SCALAR is also to assemble and submit a 65%, 96%, and Final Plans Engineer's Cost Estimate consisting of an editable excel-format file.

4.7 Field Reviews

Includes site visits required to obtain existing data needed to assist in providing a complete roadway design, as identified in this scope of work.

4.8 Technical Meetings

Includes meetings with the DOA or other Agency staff, between disciplines and SCALAR, such as access management meetings, typical section design meetings, progress review meetings (phase review), and miscellaneous meetings necessary for all elements of the roadway analysis identified in this scope of work.

4.9 Quality Assurance/Quality Control (QA/QC)

SCALAR shall be responsible for the professional quality, technical accuracy and coordination of all designs, drawings, specifications and other services furnished by SCALAR under this contract.

5. Roadway Plans

SCALAR shall prepare Roadway, Drainage, Utility Adjustment Sheets, notes, and details as shown in Table 1 - Anticipated Plan Sheets. The plans should include, but are not limited to, the following sheets necessary to convey the intent and scope of the project for the purposes of construction.

- 5.1 Key Sheet
- 5.2 Typical Section Sheet(s)
- 5.3 Typical Section Details
- 5.4 General Notes/Pay Item Notes Sheet
- 5.5 Roadway Plan Sheets
- 5.6 Special Profiles
- 5.7 Intersection Layout Details
- 5.8 Roadway Soil Survey Sheets
- 5.9 Miscellaneous Drainage Detail Sheets
- 5.10 SWPPP Sheets

TABLE 1 – Anticipated Plan Sheets & Submittal Items

	Phase			
	35%	65%	96%	100%
Key Sheet	P	P	C	F
Notes to Reviewer Sheet (8.5" x 11"; stand-alone)	P	P	C	N/A
Summary of Pay Items		P	C	F
Drainage Maps	P	C	C	F
Typical Sections	C	C	F	F
General Notes/Pay Item Notes	P	P	C	F
Summary of Quantities			C	F
Summary of Drainage Structures	P	C	C	F
Drainage Structure Sheet(s)	P	C	C	F
Roadway Analysis (Geometrics)	P	C	F	F
Roadway Plan and Profile (w/Utilities)	P	C	F	F
Reference Points	P	P	C	F
Intersection Layout/Detail – Happy Hollow	P	P	C	F
Special Detail(s)		C	C	F
Drainage Design	P	P	C	F
Retention/Detention Ponds	P	C	C	F
Retention Pond Cross Sections	P	C	C	F
Roadway Soil Survey		P	C	F
Roadway Cross Sections		P	C	F
Utility Adjustment Plans – N/A	N/A	N/A	N/A	N/A
Erosion Control Plans		P	C	F
SWPPP		P	C	F
Utility Verification (Pothole Data)		P	C	F
Signing and Marking Analysis		P	C	F
Signing and Pavement Marking Plans		P	C	F
Signalization Analysis		P	C	F
Signalization Plans		P	C	F
Lighting Analysis		P	C	F
Lighting Plans		P	C	F
Landscape/Irrigation/Hardscape Plans – N/A	N/A	N/A	N/A	N/A
Right-of-Way (R/W) Map(s)	P	P	C	F
Geometric Computation Book		P	C	F
Drainage Design Documentation		P	C	F

Quantity Computation Book & Engr's Cost Estimate		P	C	F
Special Provisions			C	F
Permits	P	P	C	F

P = Preliminary C = Complete F = Final

6. Drainage Design

The existing drainage along the Turnage Boulevard corridor consists of a mix of curb and flush shoulder conveyance systems. Most of the road is collected via curb inlets along the corridor, which are interconnected by pipes that outfall into the onsite ponds. Near the intersection with Australian Avenue the drainage patterns mainly sheet flow from the road into adjacent swales, which are collected by inlets that outfall into the various ponds. The existing drainage infrastructure appears to be functioning as intended, although we noted some spread/ponding issues just west of the intersection with Australian Avenue. Water seems to be staging along the concrete barrier wall near a low point with no inlet or barrier wall slot. The existing drainage will be evaluated, and an existing drainage inventory will be completed within the project's limits, by SCALAR, and will include size, type, materials and condition, photo log and a geographical location. SCALAR will prepare and submit Drainage Design Documentation with design notes, reports, existing inventory, and other related information required to document the drainage design.

Permitting: Due to the minor nature of the roadway work within Turnage Boulevard, which mainly involves milling and resurfacing, no additional permitting is anticipated.

7. Utility Coordination

Optional if needed.

8. Environmental Permitting

Optional if needed.

9. Signing and Pavement Marking

Signing and Pavement Marking services will be provided along all areas of pavement rehabilitation. Proposed pavement marking will be designed to replace the existing striping and be brought up to standards where required. Existing signs will be evaluated based on condition during the sign inventory generated following the field review. New signs will be proposed to replace substandard signage, and additional wayfinding signage added to better direct road users to which lanes they need to be in to get to their appropriate destination at the airport. These signs include single and multi-post signage as deemed necessary. All overhead signs and panels shall remain as is.

10. Signalization Design

Signalization design services (analysis and plans production) will include analyzing the existing signalization facilities at the intersection of Australian Avenue and the pedestrian crosswalk in the north-south direction. Per our detailed field review, we recommend replacing the existing signal heads with updated LED signal heads with backplates and the addition of pedestrian signals in the northwest corner of the intersection. Internally Illuminated Signs will also be evaluated for their brightness, legend size, and font types per sheet T-10 of the PBC signal standard mentioned previously.

11. Project Schedule

SCALAR shall perform the required services for review and approval by the DOA. SCALAR will complete the required design to rehabilitate James L. Turnage Boulevard within 9 months of receiving the Notice to Proceed.

12. DELIVERABLES:

SCALAR shall prepare construction plans using Microstation (version SS10 or later) and Geopak software. Plans will be on 11" x 17" sheets, using County Standards, and submitted electronically for each phase submittal (Master, 35%, 65%, 96%, 100% and Final Design Plans). All CADD files, pdf files, a final cost estimate (PDF and excel spreadsheet), a final Drainage Report (PDF), a final Design Notebook (PDF), and final quantity computations (i.e., Comp Book) (PDF), and shall be submitted electronically at the completion of the design phase.

13. The DOA shall furnish the following:

All information in the DOA records available to assist with the design efforts, including aerials of the project limits, as-built plans, and inspection reports for structures.

Services to be completed by others (Scope to be verified)

14. Design Survey and Right-of-Way

Horizontal Project Control (HPC): Establish or recover HPC, for the purpose of establishing horizontal control on the Florida State Plane Coordinate System or datum; may include primary or secondary control points. Includes analysis and processing of all field collected data, and preparation of forms.

Vertical Project Control (VPC): Establish or recover VPC, for the purpose of establishing vertical control on datum; may include primary or secondary vertical control points. Includes analysis and processing of all field collected data, and preparation of forms.

Alignment and/or Existing Right-of-Way (R/W) Lines: Establish, recover or re-establish project alignment. Also includes analysis and processing of all field collected data, existing maps, and/or reports for identifying mainline, ramp, offset, or secondary alignments. Depict alignment and/or existing R/W lines (in required format) per PBC R/W Maps, platted or dedicated rights of way.

Aerial Targets: Place, locate, and maintain required aerial targets and/or photo identifiable points. Includes analysis and processing of all field collected data, existing maps, and/or reports. Placement of the targets will be at the discretion of the aerial firm.

Topography/Digital Terrain Model (DTM) (3D): Locate all above ground features and improvements for the limits of the project out to the lesser of the R/W line or bottom of roadway front slope by collecting the required data for the purpose of creating a DTM with sufficient density. Shoot all break lines, high and low points. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

Planimetric (2D): Locate all above ground features and improvements. Deliver in appropriate electronic format. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

Drainage Survey: Locate underground data (XYZ, pipe size, type, condition and flow line) that relates to above ground data. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports. Based on the Final Condition Review and Design Recommendations, the drainage infrastructure shall be video-inspected.

15. Soils Exploration

Geotechnical services and soil exploration have been obtained as part of the Final Condition Review and Design Recommendations Study. These will be utilized for the pavement milling and resurfacing recommendations as well as widening. An additional geotechnical recommendation for proposed multi-post sign structures will be required. See figure below:

Foundation Design			
<i>Soil Properties, Shaft Properties and Phi Factor for Overturning</i>			
SoilType := 1 <i>(0 for clay, 1 for sand)</i>	$\gamma_{soil} := 42.6 \text{ pcf}$	$\phi_{soil} := 30 \text{ deg}$ <i>(for sand)</i>	$c_{soil} := 0.45 \text{ ksf}$ <i>(for clay)</i>
Dia _{fdn} := 2.33 ft	Offset := 0.5 ft	$\phi_{ot} := 0.8$	

16. Underground Utilities

Designation includes 2-dimensional collection of existing utilities and selected 3-dimensional verification as needed for designation. Location includes non-destructive excavation to determine size, type and location of existing utility, as necessary for final 3-dimensional

8/22/2023

verification. Survey includes collection of data on points as needed for designates and locates. Includes analysis and processing of all field collected data, and delivery of all appropriate electronic files. Utility designates will be needed throughout the project limits to the R/W. Subsurface Utility Exploration (SUE) will be needed at all locations of proposed multi-post signs, pedestrian signal poles and drainage structures to confirm no conflicts.

ROADWAY PAVEMENT REHABILITATION LIMITS
(SURVEY LIMITS SIMILAR, BUT OUT TO LESSER OF RW LINE OR ROAD FRONT SLOPE LIMIT)



■ MILLING AND RESURFACING

■ RECONSTRUCTION

Estimate of Work Effort and Cost

Name of Project:		James L. Turnage Boulevard Rehabilitation				Consultant Name: AECOM/SCALAR				
PBC Project Number:		DOA 22-13				Consultant Number:				
						Date: 8/3/2023				
Task Description	Total Staff Hours	Staff Categories						Staff Hours By Activity	Salary Cost By Activity	Average Rate Per Task
		Senior Engineer	Project Engineer	Engineer Intern	Designer					
BASIC SERVICES										
1 General Tasks	92	22	32	19	19	0	0	0	\$15,951.18	\$ 173.38
2 Roadway Analysis	726	182	254	145	145	0	0	0	\$127,526.52	\$ 175.66
3 Roadway Plans	231	58	81	46	46	0	0	0	\$40,611.87	\$ 175.81
4 Drainage Analysis	150	38	53	30	29	0	0	0	\$26,474.28	\$ 176.50
5 Drainage Plans	88	22	31	18	17	0	0	0	\$15,469.74	\$ 175.79
6 Signing & Pavement Marking Analysis	538	135	188	108	107	0	0	0	\$94,503.12	\$ 175.66
7 Signing & Pavement Marking Plans	262	66	92	52	52	0	0	0	\$46,114.14	\$ 176.01
8 Signalization Analysis	134	34	47	27	26	0	0	0	\$23,623.62	\$ 176.30
Total Staff Hours (Basic Services)	2221	557	778	445	441	0	0	0.0	\$390,274.47	\$ 175.72
Total Staff Cost (Basic Services)		\$151,843.77	\$154,860.90	\$42,226.05	\$41,343.75	\$0.00	\$0.00	\$0.00		
OPTIONAL SERVICES										
1	0								\$0.00	#DIV/0!
2	0								\$0.00	#DIV/0!
3	0								\$0.00	#DIV/0!
4	0								\$0.00	#DIV/0!
Total Staff Hours (Optional Services)	0	0	0	0	0	0	0	0.0	\$0.00	#DIV/0!
Total Staff Cost (Optional Services)		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	#DIV/0!
Grand Total Estimated Fees:									\$390,274.47	

Project Activity 1: General Tasks							
Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments	
1.1	Public Involvement	LS	1	0	0	N/A	
1.2	Renderings and Fly Throughs	EA	0	0	0	N/A	
1.3	PowerPoint Presentation	EA	0	0	0	N/A	
1.4	Public Meeting Preparations	EA	0	0	0	N/A	
1.5	Public Meeting Attendance/Followup	EA	0	0	0	N/A	
1.6	Value Engineering Review	LS	1	0	0	N/A	
1.7	Post Design Services	LS	1	0	0	Optional Services	
1.8	Railroad, Transit, and/or Airport Coordination	LS	1	8	8	FAA notice criteria tool online (construction equipment and overhead signs)	
1.9	Project Manager Coordination Meetings	EA	1	84	84	PBC DOA (1), PBC Roadway (2), Temp. Traffic Control (1), Contract Maint. (80hrs)	
1. General Tasks Total					92		

Project Activity 2: Roadway Analysis						
Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
2.1	Typical Section Package	LS	1	90	90	18 hrs 1st (mainline) typical, data sheet, location map + 9 Ramps @ 8 hrs ea
2.2	Horizontal /Vertical Master Design Files	LS	1	460	460	Lower Range; 200 hrs for 1st mi + 120 hrs/mi x 1.5 mi +Level I TTCP (80 hrs)
2.3	Roundabout Design Analysis	LS	1	0	0	N/A
2.4	Design Report	EA	1	24	24	Design Documentation/RRR Report
2.5	Computation Book & Quantities	EA	1	108	108	Quantities at 96% (80 hrs), 100% plans (20 hrs) and final plans submittal (8 hrs)
2.6	Cost Estimate	EA	1	24	24	65% (12 hrs), 96% submittal (6 hrs) and final plans submittal (6 hrs).
2.7	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	Optional Services
2.8	ROW Impact Analysis	LS	1	0	0	N/A
2.9	Other Roadway Analyses	LS	1	0	0	N/A
2.10	Monitor Existing Structures	LS	1	0	0	N/A
2.11	Field Review	EA	2	8	16	1 Initial Field Review + 1 Final Design Field Review @ 2 people x 4 hrs/EA
2.12	Technical Meetings	EA	4	1	4	PBC DOA (1), PBC Roadway (2), Temporary Traffic Control (1)
2. Roadway Analysis Total					726	

Project Activity 3: Roadway Plans

Task No.	Task	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
3.1	Key Sheet	Sheet	1	8	8	Includes updates to BOCC names before interim submittals, when necessary
3.2	Typical Sections	EA	10	6	60	10 Typical x 6hrs ea
3.3	Typical Section Details	EA	1	10	10	1 reconstruction detail for U-turn area near Australian Ave
3.4	General Notes/Pay Item Notes/Summary of Quantities	Sheet	1	12	12	1 Sheet, 35 (+/-) notes anticipated
3.5	Project Control Sheet – Survey Plans	Sheet	0	0	0	N/A
3.6	Master Plan	Sheet	0	0	0	N/A
3.7	Plan/Profile Sheet	Sheet	0	0	0	N/A
3.8	Profile Sheet	Sheet	0	0	0	N/A
3.9	Plan Sheet	Sheet	24	5	120	24 sheets at 1"=40' scale to cover M&R
3.10	Driveway Profiles	EA	0	3	0	N/A
3.11	Special Profiles	Sheet	1	10	10	1 for U-turn area
3.12	Back-of-Sidewalk Profile Sheet	Sheet	0	0	0	N/A
3.13	Intersection Layout Details	Sheet	1	10	10	1 for U-turn area
3.14	Plateau Intersection Detail	Sheet	0	0	0	N/A
3.15	Miscellaneous Details	EA	0	0	0	N/A
3.16	Right-of-Way Acquisition Exhibit	Sheet	0	0	0	N/A
3.17	Roadway Soil Survey Sheets	Sheet	1	1	1	Review & Insert Soil Survey Sheet(s) Into Plan Set
3.18	Railroad Detail Sheets	Sheet	0	0	0	N/A
3.19	Cross Sections	EA	0	3	0	N/A
3. Roadway Plans Total					231	

Project Activity 4: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Drainage Map Hydrology	LF	0	0	0	N/A
4.2	Determine Base Clearance Water Elevation	EA	0	0	0	N/A
4.3	Pond Siting Analysis and Report	EA	0	0	0	N/A
4.4	Design of Cross Drains	EA	0	0	0	N/A
4.5	Design of Roadside Ditches	LF	0	0	0	N/A
4.6	Design of Storm Drains	EA	35	2	70	Evaluation of existing drainage + Addressing ponding adjacent to barrier wall
4.7	French Drain Systems	LF	0	0	0	N/A
4.8	Drainage Design Report	LS	1	80	80	Drainage Design Report - Includes drainage inventory within project limits
4.9	Bridge Hydraulic Report	EA	0	0	0	N/A
4.10	Technical Special Provisions / Modified Special Provisions	LS	1	0	0	Optional Services
4. Drainage Analysis Total					150	

Project Activity 5: Drainage Plans							
Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Drainage Area Map		Sheet	0	0	0	N/A
5.2	Box Culvert Detail Sheet		Sheet	0	0	0	N/A
5.3	Drainage Structure		EA	10	3	30	Evaluation of existing drainage + Addressing ponding adjacent to barrier wall
5.4	Miscellaneous Drainage Detail Sheets		Sheet	1	10	10	1 drainage detail sheet
5.5	Lateral Ditch Plan/Profile		LF	0	0	0	N/A
5.6	Lateral Ditch Cross Sections		EA	0	0	0	N/A
5.7	Retention/Retention Ponds Detail Sheets		Sheet	0	0	0	N/A
5.8	Retention Pond Cross Sections		EA	0	0	0	N/A
5.9	SWPPP Sheets		Sheet	24	2	48	Includes Erosion Control Sheets
5. Drainage Plans Total						88	

Project Activity 8: Signing & Marking Analysis						
Task No.	Task	Units	No. of Units	Hours/Units	Total Hours	Comments
8.1	Master Design Files	LS	1	310	310	Middle range: 45 hrs setup + 90 hrs/mi x 2.5 mi + Sign inventory (field review and document; 40hrs)
8.2	Quantities	EA	1	54	54	Quantities at 96% (40 hrs), 100% plans (10 hrs) and final plans submittal (4 hrs)
8.3	Cost Estimate	EA	1	12	12	65% (6 hrs), 96% submittal (3 hrs) and final plans submittal (3 hrs)
8.4	Other Signing and Pavement Marking	LS	1	162	162	53 guidesign designs @ 2hrs ea + Multi-post sign support calcs (28 x 2hrs ea)
8. Signing and Pavement Marking Analysis Total					538	

Project Activity 9: Signing & Marking Plans

Task No.	Task	Units	No of Units	Hours/ Unit or Sheet	Total Hours	Comments
9.1	Key Sheet	Sheet	1	2	2	keysheet w/o keymap
9.2	General Notes/Pay Item Notes/Summary of Quantities	Sheet	5	4	20	4 TOQ sheets + 1 General Notes @ 4hrs ea
9.3	Typical Details	EA	28	6	168	Cross Sections; 28 multi-post
9.4	Plan Sheet	Sheet	24	3	72	24 sheets at 1"=40' scale
9. Signing and Pavement Marking Plans Total					262	

Project Activity 10: Signalization Analysis

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
10.1	Traffic Data Collection	LS	1	10	10	Requesting existing signal plans from PBC Traffic
10.2	Traffic Data Analysis	PI	0	0	0	N/A
10.3	Signal Warrant Study	LS	1	0	0	N/A
10.4	System Timings	LS	1	0	0	N/A
10.5	Reference and Master Signalization Design File	PI	1	60	60	Signal facilities evaluation at Turnage Blvd. & Australian Ave.
10.6	Reference and Master Interconnect Communication Design File	LS	1	0	0	N/A
10.7	Overhead Street Name Sign Design	EA	0	0	0	N/A
10.8	Pole Elevation Analysis	LS	1	0	0	N/A
10.9	Traffic Signal Operation Report	LS	1	0	0	N/A
10.10	Quantities	EA	1	12	12	Quantities at 96%, 100% plans and final plans submittal
10.11	Cost Estimate	EA	1	10	10	65%, 96% submittal and final plans submittal
10.12	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	N/A
10.13	Other Signalization Analysis	LS	1	30	30	Addition of pedestrian signals at northwest corner of Turnage Blvd. & Australian Ave.
10.14	Field Reviews	EA	1	8	8	1 review - 2 people - 4 hours
10.15	Technical Meetings	EA	1	4	4	One meeting with PBC Traffic (Includes meeting minutes) and follow up coordination
10. Signalization Analysis Total					134	

EXHIBIT A-5

PALM BEACH DOA GENERAL CONSULTING SERVICES

EXHIBIT A-5

Miscellaneous Architectural, Planning, Engineering and Construction Services

**Palm Beach County Department of Airports (DOA)
Task I-23-PBI-A-014 PBI Terminal Wall Repairs**

OVERVIEW

The Palm Beach Department of Airports (DOA) has requested AECOM Technical Services, Inc. (AECOM) to develop this Task I-23-PBI-A-014 PBI Terminal Wall Repairs Project (Project).

PROJECT TEAM

Firm Name (CONSULTANT / SUBCONTRACTOR)	Type of Services
AECOM Technical Services, Inc. (CONSULTANT)	Project Management and Structural
Colome & Associates (CA) (SUBCONSULTANT)	Architectural

PROJECT OBJECTIVE AND APPROACH

For this task, AECOM will support the Palm Beach County Department of Airports (DOA) in the development of construction documents to repair existing Concourse B and C exterior precast wall panels replacement or repairs, and exterior wall stucco repairs at Concourse C; and the existing exterior stucco walls damaged by various stucco cracks at the existing Delta Lounge located on the PBI Concourse B and C, 2nd Level exterior wall areas.

PROJECT SCHEDULE

The construction documents will be developed for bid within 45 calendar days.

PROJECT DELIVERABLES

- PBI Terminal Wall Repair Plans
- Project Cost Estimate

Exhibit B

Labor/Fee Estimate Summary - CONSULTANT (AECOM) - Task 1-23-FBI-014 PBI Terminal Wall Repairs

Bill Rate:	\$ 270.00	\$ 236.00	\$ 201.00	\$ 128.00	\$ 96.00	\$ -	\$ -
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Task Description	Labor Estimate (Hours)							Fee Estimate (\$)	
	Senior Project Manager	OC Reviewer	Design Manager	Project Engineer	Clerical	Total	Labor	Expenses	
Task 1-23-FBI-014 PBI Terminal Wall Repairs									
1.0 Kick Off Meeting	14	12	49	81	12	168	\$27,981.00	\$0.00	\$27,981.00
Field Work	1		2	8	2	5	\$864.00		\$864.00
Structural Design	1	4	6	8	4	21	\$2,286.00		\$2,286.00
Prebid Drawings	1	4	12	48	2	67	\$7,182.00		\$7,182.00
Specifications	1	2	5	6	2	16	\$1,728.00		\$1,728.00
Cost Estimating	1	2	5	5	4	19	\$3,243.00		\$3,243.00
DOA Review/Coordination Meetings	2	2	4	4	4	7	\$1,546.00		\$1,546.00
Incorporate DOA/CAH Review Comments	1	1	4	4	4	4	\$942.00		\$942.00
Permit Documents	1	1	4	4	4	4	\$1,586.00		\$1,586.00
Task Management	4	4	4	2	2	10	\$1,696.00		\$1,696.00
Total Fee - AECOM	14	12	49	81	12	168	27,981	0	27,981

Lump Sum	\$64,829.13
TM	
Expenses	\$64,829.13

Subcontractant Fees	
1. Total Subcontractant Fee - Colome & Associates (LS)	\$ - 36,649.13

GRAND TOTAL FEE - BASIC ENGINEERING SERVICES \$64,829

August 8, 2023

Mr. Andy Kacer, P.E.
AECOM
2090 Palm Beach Lakes Blvd., Suite 600
West Palm Beach, Florida 33409

Re: PBI Concourse B and Concourse C Exterior Pre-Cast Panel Replacement & Wall Repairs:
Palm Beach International Airport
West Palm Beach, Florida

Dear Mr. Kacer:

This Firm - Colomé' & Associates, Inc. (Architect) – would like to thank you for the opportunity to provide AECOM with this proposal for professional architectural services for the evaluation of the existing Concourse B and C exterior precast wall panels replacement or repairs, and exterior wall stucco repairs at Concourse C; the existing exterior stucco walls damaged by various stucco cracks at the existing Delta Lounge located on the Palm Beach International Airport Concourse B and C 2nd Level exterior wall areas.

The work will consist of working with AECOM, Inc., to provide field analysis, design solutions, cost estimating, construction documents for the proposed exterior precast wall panels and stucco repairs and re-painting of building wall areas at the proposed PBI Concourse B and C as described above and per the DOA Maintenance Email dated August 3, 2023.

- Upon receipt of your written authorization, this firm will proceed with this project based on a stipulated lump sum of thirty-six thousand eight hundred forty-eight dollars and thirteen (\$36,848.13) cents.

Total Fee = \$36,848.13 including expenses.

- Additional Services as requested by the Owner shall be on the Architectural Hourly Basis as set forth in the executed AECOM Contract Architectural Service or stipulated lump sum.

If you should have any questions, please do not hesitate to contact me. Furthermore, please let us know if you are in agreement with this proposal by signing one copy and returning it to our office.

G24. FS558.0035. – PURSUANT TO FLORIDA STATUTE 558.0035, AN INDIVIDUAL EMPLOYEE OR AGENT MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

Sincerely,

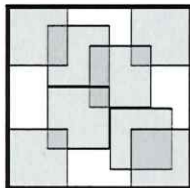
COLOME' & ASSOCIATES, INC.

ELIZABETH A. G. COLOME'

APPROVED AND ACCEPTED THIS

DAY OF _____, 2023

BY: _____



Colomé & Associates, Inc.

Florida Registration AA0003439

Architecture □ Planning □ Interiors

530 24th Street □ West Palm Beach, Florida 33407 □ Telephone: (561) 833-9147 □ Facsimile: (561) 833-9356 □ E-mail: colome@colome-arch.net



Exhibit B
Labor/Fee Estimate Summary - CONSULTANT (Colome & Associates, Inc.) - Task 1-23-PBI-014 PBI Terminal Wall Repairs

Billing Rate: \$ 169.04 | \$ 169.04 | \$ 138.65 | \$ 85.96 | \$ 43.68 | \$ -

Task Description	Labor Estimate (hours)							Fee Estimate (\$)	
	Principal	Architect	Senior Project Manager	Draft Person	Clinical	Total	Labor	Expenses	Total
1.0 Task 1-23-PBI-015 PBI Terminal Wall Repairs									
Architect	0	7	12	10	6	35	\$3,968.76	\$0.00	\$3,968.76
Kick Off Meeting		2	2		2	6	\$702.74		\$702.74
Field Work		4	8	8	4	24	\$2,647.76		\$2,647.76
Design Coordination		1		2		5	\$618.26		\$618.26
1.0 Architectural Drawings									
Architect	8	33	55	196	6	298	\$31,666.63	\$0.00	\$31,666.63
Specifications	4	16	26	182	2	230	\$22,717.78		\$22,717.78
Cost Estimating	2	4	8		4	18	\$2,289.18		\$2,289.18
DOA Review/Coordination Meetings		4	10			14	\$1,533.38		\$1,533.38
Prepare DOA/CI Review Comments		2	2	4		8	\$1,266.91		\$1,266.91
Prepare PBC/CI Review Comments	1	2	2	8		13	\$1,472.10		\$1,472.10
Incorporate PBC Comments		2	4	2		8	\$1,233.64		\$1,233.64
1.0 Bid RFI Review / Response									
Architect	0	4	2	2	2	10	\$1,212.74	\$0.00	\$1,212.74
Bid RFI Review / Response		4	2	2	2	10	\$1,212.74		\$1,212.74
Total Fee - Colome & Associates	8	44	69	208	14	343	\$36,648	0	\$36,648.13
GRAND TOTAL FEE - BASIC ENGINEERING SERVICES	\$36,648.13								

EXHIBIT A-6

PALM BEACH DOA GENERAL CONSULTING SERVICES

EXHIBIT A-6

Miscellaneous Planning, Engineering and Construction Services

**Palm Beach International Airport (PBI A)
North Palm Beach County General Aviation Airport (F45)
Palm Beach County Park Airport (LNA)
Palm Beach County Glades Airport (PHK)
Task I-23-DOA-A-015: Miscellaneous Planning & Engineering Services**

OVERVIEW

The Palm Beach Department of Airports (DOA) has requested that AECOM Technical Services, Inc. (AECOM or CONSULTANT) provide professional services for the Task I-23-DOA-A-015: Miscellaneous Planning & Engineering Services Project (Project).

PROJECT TEAM

Firm Name (CONSULTANT / SUBCONTRACTOR)	Type of Services
AECOM Technical Services, Inc. (CONSULTANT)	Miscellaneous As-Needed Support

AECOM will assist the DOA with general aviation planning support tasks, for the four (4) DOA airports, that are frequently requested and typically require only a few hours/days of effort and are required in a short timeframe. The specific tasks expected to be developed are described below:

SCOPE OF WORK

- 01: The DOA periodically requests the CONSULTANT to conduct Independent Fee Estimates (IFE) on various projects varying in size and scope of work. AECOM will submit an initial Independent Fee Estimate (Cover Letter plus Spreadsheet) for each of these tasks, followed up by clarifications of our reasoning for developing our associated fees.
- 02: AECOM will assist the DOA with miscellaneous planning, programming, and engineering support services for various tasks at the DOA airports and

associated properties. These tasks typically include updating planning maps and sketches, evaluating and providing recommendations for miscellaneous small assignments, preparing preliminary cost estimates, and other miscellaneous tasks.

- 03: This task also includes developing general project scopes of work and rough order of magnitude budget estimates for DOA use in the planning, engineering, and programming of upcoming design and construction projects.

PROJECT SCHEDULE

The schedule for each of these tasks will vary.

Exhibit B-1

Labor/Fee Estimate Summary - CONSULTANT (AECOM Technical Services, Inc.) - Task 1:23-DOA-A-015: Miscellaneous Planning & Engineering Services

Billing Rate:	\$	340	\$	236	\$	270	\$	255	\$	128	\$	128	\$	108	\$	98
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Task Description	Labor Estimate (Hours)										Total	Labor	Expenses	Fee Estimate (\$)		
	Principal	GC Resident	Senior Project Manager	Senior Planner	Project Engineer	Planner	Engineer	Clerical								
Task 1:23-DOA-A-015: Miscellaneous Planning & Engineering Services																
01 Independent Fee Estimates (IFE)			75	35	80	80	25	75								
02 Miscellaneous Programming and Engineering			20	20	25	30	30	100								
03 Programming for Upcoming Tasks			30	15	30	20	20	95								
Total Fee - AECOM Technical Services, Inc.			75	35	80	80	80	270								

Subconsultant Fees Task 1.0

Task 1.0 (Lump Sum)	\$49,735
Task 2.0 (Time & Material)	\$0
Expenses	\$9
Total	\$49,735

GRAND TOTAL FEE - BASIC ENGINEERING SERVICES

EXHIBIT B:

DETAILED FEES, EXPENSES AND PAYMENTS

EXHIBIT B-I Summary of Fees

EXHIBIT B-II Schedule of Payments

EXHIBIT B-I SUMMARY OF FEES

Project	Lump Sum	T&M	Reimbursable Expenses	Total
TASK I SERVICES				
Task I-23-F45-A-010 F45 Stormwater Master Plan	\$220,770.00			\$220,770.00
Task I-23-LNA-A-011 LNA Stormwater Master Plan	\$163,284.00			\$163,284.00
Task I-23-PHK-A-012 PHK Stormwater Master Plan	\$115,739.00			\$115,739.00
Task I-23-PBI-A-013 PBI Turnage Boulevard Rehabilitation	\$501,238.47	\$80,949.44		\$582,187.91
Task I-23-PBI-A-014 PBI Terminal Wall Repairs	\$64,829.13			\$64,829.13
Task I-23-DOA-A-015 Miscellaneous Planning & Engineering Services	\$49,735.00			\$49,735.00
TASK III SERVICES				
Task III: Deliverable(s) As required in accordance with specific Task Authorizations				\$200,000.00
TOTAL				\$1,396,545.04

EXHIBIT B-II SCHEDULE OF PAYMENTS

The Scope of Work to be completed by CONSULTANT as defined in Exhibit "A" consists of specific completion phases which shall be clearly identified upon submission to the COUNTY of certain "deliverables" as expressly indicated below. Compensation for the work tasks stated herein shall be in accordance with the following Schedule of Payments:

Tasks to Be Completed:

Project	Duration	Total
TASK I SERVICES		
Task I-23-F45-A-010 F45 Stormwater Master Plan	180 Days	\$220,770.00
Task I-23-LNA-A-011 LNA Stormwater Master Plan	180 Days	\$163,284.00
Task I-23-PHK-A-012 PHK Stormwater Master Plan	180 Days	\$115,739.00
Task I-23-PBI-A-013 PBI Turnage Boulevard Rehabilitation	270 Days	\$582,187.91
Task I-23-PBI-A-014 PBI Terminal Wall Repairs	45 Days	\$64,829.13
Task I-23-DOA-A-015: Miscellaneous Planning & Engineering Services	TBD	\$49,735.00
TASK III SERVICES		
Task III: Deliverable(s) As required in accordance with specific Task Authorizations	TBD	\$ 200,000.00
TOTAL		\$1,396,545.04

EXHIBIT C

PROPOSED SCHEDULES

Project	Duration
TASK I SERVICES	
Task I-23-F45-A-010 F45 Stormwater Master Plan	180 Days
Task I-23-LNA-A-011 LNA Stormwater Master Plan	180 Days
Task I-23-PHK-A-012 PHK Stormwater Master Plan	180 Days
Task I-23-PBI-A-013 PBI Turnage Boulevard Rehabilitation	270 Days
Task I-23-PBI-A-014 PBI Terminal Wall Repairs	45 Days
Task I-23-DOA-A-015: Miscellaneous Planning & Engineering Services	TBD
TASK III SERVICES	
Task III: Deliverable(s) As required in accordance with specific Task Authorizations	TBD

EXHIBIT D

DBE

**SCHEDULE 1(A)
LIST OF PROPOSED DBE FIRMS
(Professional Services)**

LOI/SOQ Project Description: Airport General Consulting Change Order/Task/Amendment No. (if applicable): Amendment 1
 Name of Respondent: AECOM Technical Services, Inc. E-mail Address: Andy.Kacer@aecom.com
 Contact Person: Andrew Kacer
 Address: 7650 West Courtney Campbell Causeway, Tampa, FL 33607
 Phone No.: (O) 813.636.2425 (C) 352.634.4363 Fax No.: 813.287.8591

Name, Address & Phone No. of DBE Firm	Description of Type of Work	Classification (Check applicable box)	Dollar Amount			
			Black	Hispanic	Women	Other (Please Specify)
Quantum Electrical Engineering, Inc. 2755 Vista Parkway, Suite I-9 West Palm Beach, FL 33411 (561) 210-9224	Electrical Services	<input type="checkbox"/> Prime Consultant <input checked="" type="checkbox"/> Subcontractor <input type="checkbox"/> Supplier <input type="checkbox"/> Manufacturer	_____%	_____%	_____ <u>2.07</u> _%	_____%
Tierra South Florida 2765 Vista Parkway, Suite 10 West Palm Beach, FL 33411 (561) 687-8536	Geotechnical Services	<input type="checkbox"/> Prime Consultant <input checked="" type="checkbox"/> Subcontractor <input type="checkbox"/> Supplier <input type="checkbox"/> Manufacturer	_____%	_____%	_____%	Asian Pacific _____ <u>1.06</u> _%
Brown & Phillips. 1800 Old Okeechobee Road Suite 509, West Palm Beach, FL (561) 615-3988	Surveying	<input type="checkbox"/> Prime Consultant <input checked="" type="checkbox"/> Subcontractor <input type="checkbox"/> Supplier <input type="checkbox"/> Manufacturer	<u>4.73</u> _%	_____%	_____%	_____%
Colome & Associates, Inc. 5320 24th St. West Palm Beach, FL 33407 (561) 833-9147	Architectural	<input type="checkbox"/> Prime Consultant <input checked="" type="checkbox"/> Subcontractor <input type="checkbox"/> Supplier <input type="checkbox"/> Manufacturer	_____%	_____%	<u>2.64</u> _%	_____%
SCALAR Consulting Group Inc. 5713 Corporate Way, Suite 200 West Palm Beach, FL 33407 Ph: (561) 429-5065	Roadway Design	<input type="checkbox"/> Prime Consultant <input checked="" type="checkbox"/> Subcontractor <input type="checkbox"/> Supplier <input type="checkbox"/> Manufacturer	_____%	_____%	_____%	Asian _____ <u>27.95</u> _%

Total Percentage of DBE Participation: 38.45 %

Notes:

- The percentages listed on this form for each DBE Firm must be supported by the percentages included on Schedule 2(A), "Letter of Intent to Perform as a Disadvantaged Business Enterprise", in order to be counted toward attainment of the DBE goal.
- Firms identified on this form must be certified as a DBE by the State of Florida's Unified Certification Program. Certification status can be verified on the Florida Department of Transportation's Biznet website at <https://www3.dot.state.fl.us/EqualOpportunityOffice/biznet/mainmenu.asp>.
- If materials or supplies are proposed to be purchased from a DBE regular dealer, the undersigned acknowledges that only sixty percent (60%) of the proposed expenditure will be counted toward attainment of the DBE goal.

By signing this form the undersigned Respondent is committing to utilize the above referenced DBE Firms on the Project and that the Respondent will monitor the DBE Firms to ensure that the work is actually performed by the by the DBE Firms.

Andrew Kacer

By: _____ Date: 09/8/2023

Signature
Andrew Kacer - Vice President
 Print Name/Title of Person Executing on Behalf of the Respondent

SCHEDULE 2(A)
LETTER OF INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE
(Professional Services)

LOI/SOQ Project Description: Airport General Consulting

Change Order/Task /Amendment No. (if applicable): Amendment No. 1

Name of Prime Respondent: AECOM Technical Services, Inc

Name of DBE Firm: Quantum Electrical Engineering, Inc.

The undersigned is certified as a Disadvantaged Business Enterprise by the State of Florida's Unified Certification Program. Check one or more classifications as applicable:

- Black Hispanic Women Other (Please Specify)
 Prime Consultant Subcontractor Manufacturer Supplier

The undersigned is prepared to perform the following described work in connection with the above-referenced project (specify in detail the particular work and/or parts thereof to be performed):

Electrical Services

(Additional Sheets may be used as necessary.)

Total Percentage of Participation by DBE Firm for this Project: 2.07 %

and will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If the undersigned intends to subcontract any portion of the work described above to another subcontractor, please complete the following:

<hr style="border: none; border-top: 1px solid black;"/>	%	<input type="checkbox"/> DBE Certified
(Name of Subcontractor)	Percentage of work to be subcontracted)	<input type="checkbox"/> Non-DBE

The undersigned affirms that it has the resources necessary to perform the work described above without subcontracting the work to another subcontractor, except as noted above.

Quantum Electrical Engineering, Inc.

Printed Name of DBE Subcontractor

By: 
Signature

Date: 9-7-2023

SCHEDULE 2(A)
LETTER OF INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE
(Professional Services)

LOI/SOQ Project Description: Airport General Consulting

Change Order/Task /Amendment No. (if applicable): Amendment 1

Name of Prime Respondent: AECOM Technical Services, Inc

Name of DBE Firm: Tierra South Florida, Inc.

The undersigned is certified as a Disadvantaged Business Enterprise by the State of Florida's Unified Certification Program. Check one or more classifications as applicable:

- Black Hispanic Women Other (Please Specify) (Asian Pacific)
 Prime Consultant Subcontractor Manufacturer Supplier

The undersigned is prepared to perform the following described work in connection with the above-referenced project (specify in detail the particular work and/or parts thereof to be performed):

Geotechnical/Material Testing Services

(Additional Sheets may be used as necessary.)

Total Percentage of Participation by DBE Firm for this Project: 1.06 %

and will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If the undersigned intends to subcontract any portion of the work described above to another subcontractor, please complete the following:

_____ % DBE Certified
(Name of Subcontractor) (Percentage of work to be subcontracted) Non-DBE

The undersigned affirms that it has the resources necessary to perform the work described above without subcontracting the work to another subcontractor, except as noted above.

Tierra South Florida, Inc.
Printed Name of DBE Subcontractor

By: _____
Signature

Date: 9-8-2023

SCHEDULE 2(A)
LETTER OF INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE
(Professional Services)

LOI/SOQ Project Description: Airport General Consulting

Change Order/Task /Amendment No. (if applicable): Amendment 1

Name of Prime Respondent: AECOM Technical Services, Inc

Name of DBE Firm: Brown & Phillips, Inc.

The undersigned is certified as a Disadvantaged Business Enterprise by the State of Florida's Unified Certification Program. Check one or more classifications as applicable:

- Black Hispanic Women Other (Please Specify)
 Prime Consultant Subcontractor Manufacturer Supplier

The undersigned is prepared to perform the following described work in connection with the above-referenced project (specify in detail the particular work and/or parts thereof to be performed):

Survey

(Additional Sheets may be used as necessary.)

Total Percentage of Participation by DBE Firm for this Project: 4.73 %

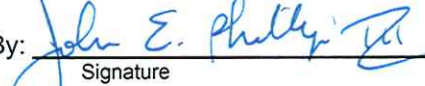
and will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If the undersigned intends to subcontract any portion of the work described above to another subcontractor, please complete the following:

_____ % DBE Certified
(Name of Subcontractor) (Percentage of work to be subcontracted) Non-DBE

The undersigned affirms that it has the resources necessary to perform the work described above without subcontracting the work to another subcontractor, except as noted above.

Brown & Phillips, Inc.
Printed Name of DBE Subcontractor

By: 
Signature

Date: 9-8-2023

SCHEDULE 2(A)
LETTER OF INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE
(Professional Services)

LOI/SOQ Project Description: Airport General Consulting

Change Order/Task /Amendment No. (if applicable): Amendment 1

Name of Prime Respondent: AECOM Technical Services, Inc

Name of DBE Firm: Colome and Associates, Inc.

The undersigned is certified as a Disadvantaged Business Enterprise by the State of Florida's Unified Certification Program. Check one or more classifications as applicable:

- Black Hispanic Women Other (Please Specify)
 Prime Consultant Subcontractor Manufacturer Supplier

The undersigned is prepared to perform the following described work in connection with the above-referenced project (specify in detail the particular work and/or parts thereof to be performed):

Architectural Services

(Additional Sheets may be used as necessary.)

Total Percentage of Participation by DBE Firm for this Project: 2.64 %

and will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If the undersigned intends to subcontract any portion of the work described above to another subcontractor, please complete the following:

<hr style="border: none; border-top: 1px solid black;"/>	<hr style="border: none; border-top: 1px solid black;"/> %	<input type="checkbox"/> DBE Certified
(Name of Subcontractor)	(Percentage of work to be subcontracted)	<input type="checkbox"/> Non-DBE

The undersigned affirms that it has the resources necessary to perform the work described above without subcontracting the work to another subcontractor, except as noted above.

Colome and Associates, Inc.
Printed Name of DBE Subcontractor

By: _____
Signature

Date: 9-8-2023

**SCHEDULE 2(A)
LETTER OF INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE
(Professional Services)**

LOI/SOQ Project Description: Airport General Consulting

Change Order/Task /Amendment No. (if applicable): Amendment 1

Name of Prime Respondent: AECOM Technical Services, Inc

Name of DBE Firm: Scalar Consulting Group, Inc.

The undersigned is certified as a Disadvantaged Business Enterprise by the State of Florida's Unified Certification Program. Check one or more classifications as applicable:

- Black Hispanic Women Other (Please Specify) **(Asian)**
 Prime Consultant Subcontractor Manufacturer Supplier

The undersigned is prepared to perform the following described work in connection with the above-referenced project (specify in detail the particular work and/or parts thereof to be performed):

Roadway Design Services

(Additional Sheets may be used as necessary.)

Total Percentage of Participation by DBE Firm for this Project: 27.95 %

and will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If the undersigned intends to subcontract any portion of the work described above to another subcontractor, please complete the following:

_____ % DBE Certified
(Name of Subcontractor) (Percentage of work to be subcontracted) Non-DBE

The undersigned affirms that it has the resources necessary to perform the work described above without subcontracting the work to another subcontractor, except as noted above.

Scalar Consulting Group, Inc.
Printed Name of DBE Subcontractor

By: 
Signature

Date: 9-7-2023