Agenda Item: 63-2

PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

			4	
Meeting Date:	August 23, 2022	[]	Consent Workshop	[X] Regular [] Public Hearing
Submitted By:	Department of Airports			

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Amendment No. 3 to the General Consulting Agreement with HDR Engineering, Inc. (HDR) for Consulting/Professional Services in the amount of \$339,430.44 for the continued performance of professional planning and design services related to the approved Palm Beach County Airports Capital Improvement Program.

Summary: The Consulting Agreement with HDR for general airport planning and design was approved by the Board on August 20, 2019 (R-2019-1157) in the amount of \$960,107 in order to carry out the approved Capital Improvement Programs for the County's Airports. Amendment No. 1 was approved by the Board on August 17, 2021 (R-2021-1024), allowing the County, at its sole discretion, to exercise the first one-year renewal option for the continuation of services provided under this agreement. Amendment No. 2 was approved by the Board on June 7, 2022 (R-2022-0574), increasing the amount of the contract by \$541,180.72, and allowing the County, at its sole discretion, to exercise the second one-year renewal option for the continuation of services provided under this agreement. Approval of Amendment No. 3 will provide an additional \$339,430.44 to complete the following task: Task I Services – Palm Beach International Airport (PBI) Cargo Access Improvements Design. HDR is an Omaha, Nebraska based firm; however, the majority of the work to be completed in this agreement will be managed through their West Palm Beach, Florida office in conjunction with several Palm Beach County-based and South Florida-based sub-consultants and firms. A Disadvantaged Business Enterprise (DBE) goal of 20% was set for this contract. HDR committed to 20% in its proposal. The anticipated DBE participation based upon the approved tasks is approximately 20.99%. The current paid to date DBE participation is approximately 9.25%. The DBE participation for this Amendment is approximately 29%. Pursuant to changes to Chapter 332, Florida Statutes, effective October 1, 2020, a governing body of a commercial service airport may not approve purchases of contractual services in excess of the Category Five threshold amount of \$325,000 provided in Section 287.017, Florida Statutes, on a consent agenda. This amendment exceeds the threshold amount and must be approved on the regular agenda. Countywide (AH)

Background and Policy Issues: In order to carry out the approved Capital Improvement Program for the County, the Department of Airports requires professional planning and design engineering services. This agreement is for 2 years with 2 one (1) year renewal options. Approval of Amendment No. 3 allows for the continuation of services necessary for the development and operation of the County's airport system.

Attachments:

- 1. Amendment No. 3 with HDR Engineering, Inc. 3 Originals
- 2. DBE Goal Information

Recommended By	1: MIS Laura Bulon	7-27-22
	Department Director	Date
Approved By:	tol for	SILLS
	County Administrator	Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fisc	cal Impact:				
Fiscal Years	20 <u>22</u>	20 <u>23</u>	20 <u>24</u>	20 <u>25</u>	20 <u>26</u>
Capital Expenditures Operating Costs External Revenues (Grants) Program Income (County) In-Kind Match (County) NET FISCAL IMPACT	\$339,430 \$339,430				
# ADDITIONAL FTE POSITIONS (Cumulative)					
Is Item Included in Current Bu Does this item include the use		Yes _ nds? Yes _	<u>X</u>	No NoX	
Budget Account No: Fund <u>4</u> Reporting Category			nit <u>A363</u> O	bject <u>6504</u>	1
B. Recommended Sources of	f Funds/Sumn	nary of Fisca	al Impact:		7
Funds are available in the C. Departmental Fiscal Revie		ced account.	lwow)	V	
A. OFMB Fiscal and/or Contr		IEW COMME		ts:	
OFMBON 724-22 B. Legal Sufficiency:		Cont	ract Dev. and	Control	-]4122
Assistant County Attorney	/ <u>22</u>				
C. Other Department Review	7:				
Department Director		, ,		·	

REVISED 11/17

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

CERTIFICATE

The undersigned hereby certifies that she is the Assistant Secretary of HDR Engineering, Inc., a Nebraska corporation (the "Corporation"), and that, as such, has custody of the minute books of the Corporation, and that, by Consent and Agreement of the Board of Directors, the following resolution was unanimously adopted:

1. "RESOLVED, that effective immediately, and until termination of said individual from the Corporation, or until recision by the Corporation's Board of Directors, whichever occurs first, the following individuals are hereby granted the nondelegable authority to execute or approve on behalf of the Corporation, contracts, amendments or change orders for engineering services and architectural services incidental to engineering services to be rendered by the Corporation, . . . , or releases of claim or lien in connection with such services, such contracts, amendments, change orders or releases so executed or approved shall be binding upon the Corporation:

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... Jennifer E. Hunt – Senior Vice President ...
... Harold E. Lewis, Jr. – Senior Vice President ...
... Melanie E. Fowler – Vice President ...
... Erki Suarez – Vice President ...
... John E. Wimberly – Vice President ...
... Jeffrey B. Arms – Associate Vice President ...
... Matt D. Bell – Authorized Representative ..."
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2. "RESOLVED, that the following are elected officers of the Corporation until their successors are elected and qualified:

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... Thomas A. Donnelly – Senior Vice President ...
. . . Stephen J. Ferrell – Senior Vice President . . .
... Jennifer E. Hunt – Senior Vice President ...
. . . Chance V. Lauderdale – Senior Vice President . . .
. . . Andrew E. Lauzier – Senior Vice President . . .
... Harold E. Lewis, Jr. – Senior Vice President ...
... Kent L. McWaters – Senior Vice President ...
... Jay C. Nagle - Senior Vice President ...
. . . Guillermo J. Suero – Senior Vice President . . .
... Brenda Van Ravenswaay – Senior Vice President ...
... Brian A. Blanchard – Vice President ...
. . . Nelson E. Canjura – Vice President . . .
. . . Samuel D. Cobb – Vice President . . .
... Stephen W. Dortch - Vice President ...
. . . Katie E. Duty - Vice President . . .
... Melanie E. Fowler - Vice President ...
. . . John M. Hansen – Vice President . . .
... Lew R. Herrington – Vice President ...
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... Donald R. Holcomb - Vice President ...
... John B. Hyre – Vice President ...
... Carlos C. Lopez-Paniagua – Vice President ...
... George W. McGregor - Vice President ...
... Kristina M. Price – Vice President ...
... Thomas A. Quinn – Vice President ...
... Marlin A. Register II – Vice President ...
... Mark G. Roberts – Vice President ...
... Santanu Roy – Vice President ...
... Steven J. Schnell – Vice President ...
... Erki Suarez - Vice President ...
... John E. Wimberly – Vice President . . .
... Jeffrey B. Arms – Associate Vice President ...
... Lisa C. Bell – Associate Vice President ...
... Jonathon D. Burchfield – Associate Vice President ...
... Brad B. Collins - Associate Vice President ...
... Raphael C. Costa – Associate Vice President ...
... Ted E. Davidson – Associate Vice President ...
... Mark E. Hall – Associate Vice President ...
... Warren F. Jenik – Associate Vice President ...
... Javier Manso – Associate Vice President ...
... Daniel S. Suarez – Associate Vice President ...
. . . Leonel A. Zapata – Associate Vice President . . .
... Elizabeth C. Buell – Assistant Secretary ...
... Laurie S. Vik - Assistant Secretary ..."
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The undersigned further certifies that the foregoing resolution has been spread in full upon the minute books of the Corporation and is in full force and effect.

DATED January 17, 2022.



Elizabeth C. Buell, Assistant Secretary

STATE OF NEBRASKA COUNTY OF DOUGLAS

On this 17th day of January, 2022, before me personally appeared Elizabeth C. Buell, known to me to be the person who executed the within instrument as Assistant Secretary of and on behalf of the corporation therein named and acknowledged to me that the corporation executed it.

(NOTARY SEAL)

GENERAL NOTARY - State of Nebraska LAURIE S. VIK My Comm. Exp. March 5, 2023 Laurie S. Vik, Notary Public

AMENDMENT NO. 3 TO CONTRACT

BETWEEN

PALM BEACH COUNTY DEPARTMENT OF AIRPORTS

AND

HDR ENGINEERING, INC.

FOR

CONSULTING / PROFESSIONAL SERVICES AT PALM BEACH COUNTY AIRPORTS

WITNESSETH

WHEREAS, on August 20, 2019, the COUNTY entered into an Agreement (R-2019-1157) with the CONSULTANT for the CONSULTANT to provide Consulting / Professional Services for the Palm Beach County Department of Airports at Palm Beach County Airports (PBI, F45, LNA, & PHK); and

WHEREAS, on August 17, 2021, the County entered into an Amendment No. 1 (R-2021-1024) with the CONSULTANT to exercise the first one (1) year renewal option for the continuation of services for the Department of Airports, Palm Beach County, in accordance with Article 25 of the original Agreement; and

WHEREAS, on June 7, 2022, the County entered into an Amendment No. 2 (R-2022-0574) with the CONSULTANT to exercise the second one (1) year renewal option for the continuation of services and to provide additional professional services for the Department of Airports, Palm Beach County, in accordance with Article 25 of the original Agreement; and

WHEREAS, Article 25 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 Three Hundred Thirty-Nine Thousand, Four Hundred Thirty Dollars and 44 Cents (\$339,430.44) for the services in Amendment No. 3 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.

HDR ENGINEERING, INC. JULY 2022

AMENDMENT 3 TO R-2019-1157 CONTRACT FOR CONSULTINGSERVICES

IN WITNESS WHEREOF, the parties have caused the Third 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, HDR Engineering, Inc., has caused these presents to be signed in its corporate name by its duly authorized officer Melanie E. Fowler, 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.

JOSEPH ABRUZZO CLERK OF THE CIRCUIT COURT & COMPTROLLER	PALM BEACH COUNTY, FLORIDA BOARD OF COUNTY COMMISSIONERS:
By:	By:
Deputy Clerk	Robert Weinroth, Mayor
WITNESS: Lody farthern Tillman Date: 2022.07.26 16:02:33-04'00'	CONSULTANT: HDR Engineering, Inc.
SIGNATURE	
Cody Parham	COMPANY NAME Dystally signed by Fowler, Melanie Edwards CNL E-A Valenie, Fowler@hidinc.com. CNL F-axier, Malanie Edwards: OLU-Libere. Fowler, Melanie Edwards: OLU-Libere. UU-Tur-pa-4830 West Kennedy 8th Stulte DU-Chiese, DC-Intranet, DC-Indr Dave 2222.07.28 153305-0-4070
Name (type or print)	Signature
	Melanie Fowler
APPROVED AS TO FORM AND LEGAL SUFFICIENCY	Name (type of print)
By:	Vice President
County Attorney	Title
APPROVED AS TO TERMS AND CONDITIONS	
By: Director of Airports	

AMENDMENT NO. 3 INDEX

CERTIFICATE OF INSURANCE

EXHIBIT A: AMENDMENT NO. 3

EXHIBIT A-1 – Task I-22-PBI-H-007: Cargo Access Improvement Design

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 - DISADVANTAGED BUSINESS ENTERPRISE COMPLIANCE

CERTIFICATE OF INSURANCE

Page 1 of 1

Print Date 7/28/2022 8:00:59 AM



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
DX00000767	HDR Engineering, Inc.	Modified	Compliant with Minor/Expiring Deficiencies					DOA 18-2B	Airport Civil Consulting Services
		Ap , XV	Liberty Mutual Fire Insurance Company	AS2641444950042	6/1/2022	6/1/2023	Auto Liability		
		Ap , XV	Ohio Casualty Insurance Company	EUO2357919363	6/1/2022	6/1/2023	Excess Liability		
		Ap , XV	Liberty Mutual Fire Insurance Company	TB2641444950032	6/1/2022	6/1/2023	General Liability		
		A , XV	Lloyds Underwriters (Canada Branch)	P001412200	6/1/2022	6/1/2023	Professional Liability		
		Ar , XV	Liberty Insurance Corporation	WA764D444950012	6/1/2022	6/1/2023	Workers Comp		

Risk Profile: Standard - General Services-AOA

Required Additional Insured: Palm Beach County Board of County Commissioners

Ownership Entity:

EXHIBIT A: AMENDMENT NO. 3

This Amendment No. 3 is in accordance with the Contract for Consulting/Professional Services (Agreement R-2019-1157) between Palm Beach County (COUNTY) and HDR Engineering, Inc. (CONSULTANT) dated August 20, 2019.

CERTIFICATE OF INSURANCE

EXHIBIT A: AMENDMENT NO. 3

EXHIBIT A-1 – Task I-22-PBI-H-007: Cargo Access Improvement Design

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 - DISADVANTAGED BUSINESS ENTERPRISE COMPLIANCE

Palm Beach County Department of Airports

EXHIBIT A-1 – Task I-22-PBI-H-007: Cargo Access Improvement Design

Palm Beach County Department of Airports



Airport Civil Consulting Services

Task Authorization No. I-22-PBI-H-007

Palm Beach International Airport (PBI)

Cargo Access Improvement Design



1475 Centrepark Boulevard, Suite 230 West Palm Beach, FL 33401

July 2022



EXHIBIT 'A'

SCOPE OF SERVICES

Description of the services outlined below in Section 0.0 - General is intended to be general in nature and should not be construed to be a complete description of the services or a limitation on the Scope of Services to be provided. Refer to Sections 1 through 8 for the definition of specific scope items to be performed by CONSULTANT.

0. GENERAL

0.1 THE PROJECT

The Palm Beach County (COUNTY) Department of Airports' (DOA) Palm Beach International Airport (PBI) is designated as a medium hub primary commercial service airport and serves helicopters, reciprocating engine aircraft, and jet aircraft.

A Master Plan Update (MPU) was developed for PBI in 2018 with the purpose of evaluating the capability of the airport's facilities to accommodate anticipated changes in demand. Air cargo facilities, located in the central-eastern area of the PBI property, were analyzed as part of the MPU. A deficiency was identified in the existing roadway network serving the air cargo facilities. The roadway network provides sub-optimal access for truck ingress and egress to and from the air cargo campus. CONSULTANT conducted a feasibility study in April 2020 to determine the viability of implementing egress/ingress improvements to the roads providing access to the air cargo facility.

No new ingress alternatives providing a direct connection from I-95 into the air cargo facilities were identified. However, ingress improvements consisting of widening of the turnout and intersection return pavement area was recommended to accommodate large turning trucks as well as the provision of a new direct right turn access connection from Australian Avenue southbound onto Perimeter Road westbound.

Three new egress alternatives were developed by the feasibility study that consisted of Alternative 1 providing direct connection from the air cargo facility onto James L. Turnage Boulevard, Alternative 2 providing new loop on-ramp connection with extended merge lane, and Alternative 3 providing new loop on-ramp connection with reconfiguration of the lanes along James L. Turnage Boulevard. All alternatives recommend ingress improvements along Perimeter Road east of the air cargo facility.

Alternatives 2 and 3 recommend the reconstruction of the on-ramp from Perimeter Road on to James L. Turnage Boulevard. Allowing the access of the on-ramp for Perimeter Road westbound traffic eliminates the need for trucks to use the PBI car rental loop and eliminates U-turn movements at the Perimeter Road T-intersection located just west of the on-ramp. The extended merge length provided under Alternative 2 along James L. Turnage Boulevard improves the existing conditions which currently has a short merging distance; however, it still requires a vehicle using the new on-ramp to first merge into traffic and then cross over two lanes to be able to continue along Australian Avenue. The lane reconfiguration being proposed under Alternative 3 is anticipated to provide the least amount of traffic impact, eliminating the merging condition and only requiring one lane cross over to continue along Australian Avenue. However, traffic counts and destination travel analysis will need to be conducted to validate that proposed improvements do not disrupt the existing and future traffic operations of the facility.

DOA staff advised CONSULTANT that alternative 3 is preferred, with no improvements to the connection between Australian Ave and Perimeter Rd. The COUNTY wishes for HDR Engineering, Inc ('Consultant') to proceed with design and production of construction documents for the improvements.



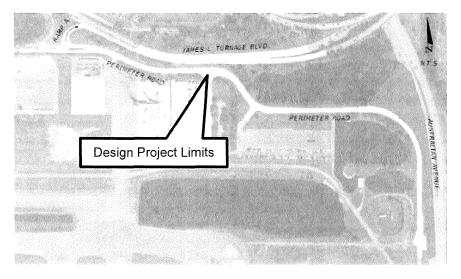


Figure 1 - Alternative 3 Preferred Access Improvement Layout

PROJECT DESCRIPTION AND GENERAL SCOPE

Consultant will perform programming, design, and bid phase services for the PBI Air Cargo Facility Access improvements task under its Professional Services Agreement (PSA) with the COUNTY. The desired task outcome will be the creation of design documents to support a COUNTY bid solicitation for construction of the project. Specific project components are:

- Traffic analysis and origin/destination study along James L. Turnage Boulevard comparing existing and proposed conditions.
- New Topographic Survey, Subsurface Utility Engineering, and Geotechnical Investigation throughout the project limits
- New loop on-ramp connection with reconfiguration of the lanes along James L. Turnage Boulevard
 - o Reconstruction and reconfiguration of the on-ramp connection.
 - o Perimeter Road Median Opening reconstruction
 - James L. Turnage Boulevard widening on the south side
 - James L. Turnage Milling & Resurfacing and new pavement markings to reconfigure lanes
 - New grading and stormwater management to accommodate the additional impervious area
 - o Associated signage and lighting
- Perimeter Road improvements
 - Widening of existing roadway asphalt footprint to accommodate turning at the Cargo Facility turnout access.
 - o Provision of 2' paved shoulder consistently along Perimeter Road
 - o New pavement markings
 - o Grading of existing swales to accommodate the additional impervious area



1. Phase 1: Planning and Programming

- 1.1. Kickoff meeting. Consultant shall schedule and lead a project kickoff meeting with the DOA and design team. The CONSULTANT will provide written minutes from the meeting.
 - 1.1.1.Confirm proposed design schedule and milestone review dates
 - 1.1.2. Confirm construction budget and milestone dates for grant compliance.
 - 1.1.3. Define communication and quality procedures for the Project Management Plan.
 - 1.1.4. Discuss design, construction, and stakeholder communication constraints.
- 1.2. Conduct Scope Meeting to discuss design criteria, typical section, drainage issues, survey, geotech, and utilities.
- 1.3. Records review
 - 1.3.1.CONSULTANT shall coordinate access to the DOA hard-copy records room and perform a search of information relevant to the project area. Relevant information shall be photocopied by the CONSULTANT. Original records will not be allowed to leave the records room.
- 1.4. Consultant shall prepare requirements for:
 - 1.4.1.Topographic Survey
 - 1.4.2. Subsurface Utility Engineering
 - 1.4.3. Geotechnical Investigation
 - 1.4.4.Tree Survey
- 1.5. Progress and Phase Review Meetings. CONSULTANT will conduct five (5) progress meetings and with DOA staff. Progress Meetings will address safety, coordination, operational impacts, and project schedule/budget.
- 1.6. Topographic Survey. Consultant shall perform a topographic survey and subsurface utility engineering of the work area through its subconsultant, Brown & Phillips. See attached Brown & Phillips, Inc. task order for detailed scope.
- 1.7. Geotechnical Investigation. Consultant shall perform a geotechnical investigation of the project area through its subconsultant, Tierra SF. See attached Tierra SF, Inc. task order for detailed scope.
- 1.8. Consultant shall gather and review South Florida Water Management District (SFWMD) Individual Statewide Environmental Resource Permit (ERP) conditions to identify water quality and attenuation requirements for the proposed additional impervious area and changes in site storage through its subconsultant, Chen Moore and Associates (CMA). See attached CMA task order for detailed scope.
- 1.9. Tree Survey. Consultant shall perform field assessment and a tree survey through its subconsultant, CMA. See attached CMA task order for detailed scope. Consultant shall determine the condition of the existing trees to evaluate if they can be relocated. Trees found diseased or with serious structural defects should not be moved. If the trees cannot be relocated, new trees should be planted elsewhere on site.
- 1.10. Site Observation. Upon receipt of the topographic survey, the CONSULTANT shall visit the project site to observe the condition of items in the work area and verify the completeness and accuracy of the survey.
- 1.11. Traffic analysis and origin/destination study. Consultant shall perform a traffic analysis of the project area through its subconsultant, Marlin. See attached Marlin Engineering, Inc. task order for detailed scope.
- 1.12. Submit phase deliverables. CONSULTANT will submit the phase deliverables from Table 2 for review comments and approval by the DOA.
- 1.13. Design Project Quality Program. CONSULTANT shall develop and execute a quality program for the project, defined by a Quality Management Plan (QMP) specifying quality assurance and quality control procedures, schedules, reviewers, and resources.
- 1.14. Project Management. CONSULTANT will provide project management which will consist of the development of a Project Management Plan (PMP) specifying scope monitoring, budget maintenance, client coordination, subconsultant coordination, project status/schedule updates, invoicing per COUNTY requirements, payment of subconsultants, DBE participation monitoring, and general project documentation.



2. Phase 2A: 30% Construction Documents

Following Phase 1 Planning and Programming approval and upon receipt of the DOA Representative's written authorization to initiate Phase 2, CONSULTANT will prepare construction documents.

- 2.1. Preparation of plans as shown in Table 1.
- 2.2. Preparation of schematic design and construction schedule
- 2.3. Preparation of schematic opinion of probable construction cost (OPC)
- 2.4. Stormwater permitting
 - 2.4.1.Draft drainage report
 - 2.4.1.1. Summary of existing permit conditions, anticipated affected basins
 - 2.4.1.2. Estimated footprint of new stormwater management area
 - 2.4.2.Coordinate and attend 1 pre-application meeting with the SFWMD in anticipation of submittal of an application for modification to the airport conceptual ERP in a later phase of this task.
- 2.5. Design Team Coordination Meetings. CONSULTANT will conduct 3 design team coordination meetings during this phase to coordinate among the disciplines and subconsultant team members.
- 2.6. Submit phase deliverables. CONSULTANT will submit the phase deliverables from Table 2 for review comments and approval by the DOA.
- 2.7. Submittal review meeting. CONSULTANT shall coordinate and attend one (1) meeting at the DOA to review the submittal. The CONSULTANT will provide written minutes from the meeting.

3. Phase 2B: 60% Construction Documents

- 3.1. Preparation of plans as shown in Table 1.
- 3.2. Update of design and construction schedules
- 3.3. Preparation of design development OPC
- 3.4. Prepare draft technical specifications
- 3.5. Prepare draft Engineer's Report
- 3.6. Airspace obstruction evaluation
 - 3.6.1.CONSULTANT shall submit notices to the FAA's OE/AAA portal for proposed construction required by 14 CRF Part 77.9.
- 3.7. Stormwater permitting
 - 3.7.1.Prepare calculations and models
 - 3.7.2. Update drainage report per the 60% design
 - 3.7.3. Prepare and submit applications for a modification to the conceptual ERP to SFWMD
- 3.8. Right-of-Way permitting
 - 3.8.1.Prepare and submit applications for roadway widening at the Perimeter Road and Australian Avenue intersection to Palm Beach County.
- 3.9. Building permitting (electrical)
 - 3.9.1.Prepare and submit applications for electrical work under lighting and signing improvements to Palm Beach County.
- 3.10. Design Team Coordination Meetings. CONSULTANT will conduct 3 design team coordination meetings during this phase to coordinate among the disciplines and subconsultant team members.
- 3.11. Submit phase deliverables. CONSULTANT will submit the phase deliverables from Table 2 for review comments and approval by the DOA.
- 3.12. Submittal review meeting. CONSULTANT shall coordinate and attend one (1) meeting at the DOA to review the submittal. The CONSULTANT will provide written minutes from the meeting.

4. Phase 2C: 90% Construction Documents

- 4.1. Preparation of plans as shown in Table 1.
- 4.2. Update of design and construction schedules
- 4.3. Preparation of design development OPC
- 4.4. Prepare draft technical specifications



- 4.5. Consultant shall review Front End specifications provided by the DOA for alignment with the design documents and advise of potential conflicts between them.
- 4.6. Prepare draft Engineer's Report
- 4.7. Stormwater permitting
 - 4.7.1.Revise calculations, models, and drainage report per ERP application review comments received from SFWMD.
 - 4.7.2. Respond to ERP application review comments received from SFWMD
- 4.8. Design Team Coordination Meetings. CONSULTANT will conduct 3 design team coordination meetings during this phase to coordinate among the disciplines and subconsultant team members.
- 4.9. Submit phase deliverables. CONSULTANT will submit the phase deliverables from Table 2 for review comments and approval by the DOA.
- 4.10. Submittal review meeting. CONSULTANT shall coordinate and attend one (1) meeting at the DOA to review the submittal. The CONSULTANT will provide written minutes from the meeting.

5. Phase 2D: 100% Construction Documents

- 5.1. Preparation of plans as shown in Table 1.
- 5.2. Prepare final construction schedule
- 5.3. Preparation of final OPC
- 5.4. Prepare final technical specifications
- 5.5. Consultant shall insert project-specific information into the Front End specifications provided by the DOA.
- 5.6. Prepare final Engineer's Report
- 5.7. Design Team Coordination Meetings. CONSULTANT will conduct 3 design team coordination meetings during this phase to coordinate among the disciplines and subconsultant team members.
- 5.8. Submit phase deliverables. CONSULTANT will submit the phase deliverables from Table 2 for review comments and approval by the DOA.
- 5.9. Submittal review meeting. CONSULTANT shall coordinate and attend one (1) meeting at the DOA to review the submittal. The CONSULTANT will provide written minutes from the meeting.



Table 1 - Plan Submittal Schedule

TITLE	30%	60%	90%	100%
Key Sheet	Preliminary	Updated	Final	Final
Typical Section	Preliminary	Updated	Final	Final
Typical Section Details	Preliminary	Updated	Final	Final
General Notes/Pay Item Notes	Preliminary	Updated	Final	Final
Optional Materials Tabulation	Preliminary	Updated	Final	Final
Project Layout	Preliminary	Updated	Final	Final
Roadway Plan	Preliminary	Updated	Final	Final
Roadway Profile	Preliminary	Updated	Final	Final
Ramp Terminal Details	Preliminary	Updated	Final	Final
Intersection Layout/Detail	Preliminary	Updated	Final	Final
Drainage Structures	Preliminary	Updated	Final	Final
Cross Section Pattern Sheets	Preliminary	Updated	Final	Final
Cross Sections	Preliminary	Updated	Final	Final
Stormwater Pollution Prevention Plan	Preliminary	Updated	Final	Final
Temporary Traffic Control Plans	Preliminary	Updated	Final	Final
Tree Disposition Plans	Preliminary	Updated	Final	Final
Signing and Pavement Marking Key Sheet		Preliminary	Updated	Final
Signing and Pavement Marking General Notes/Pay Item Notes		Preliminary	Updated	Final
Signing and Pavement Marking Project Layout		Preliminary	Updated	Final
Signing and Pavement Marking Plans		Preliminary	Updated	Final
Miscellaneous Structures Plans		Preliminary	Updated	Final
Lighting Key Sheet		Preliminary	Updated	Final
Lighting General Notes/Pay Item Notes		Preliminary	Updated	Final
Lighting Plans		Preliminary	Updated	Final
Landscape/Irrigation Key Sheet		Preliminary	Updated	Final
Landscape/Irrigation General Notes/Pay Item Notes		Preliminary	Updated	Final
Landscape/Irrigation Plans		Preliminary	Updated	Final
Landscape/Irrigation Details		Preliminary	Updated	Final
Project Control	Preliminary	Updated	Final	Final
Roadway Soil Survey	Preliminary	Updated	Final	Final

6. Phase 3: Bidding and Award of Contract

- 6.1. CONSULTANT will assist the COUNTY in conducting one pre-bid conference for the prime contract to share pertinent bidding and technical information and requirements with prospective bidders. Consultant will attend one site visit with prospective bidders.
- 6.2. CONSULTANT will issue up to 3 addenda to interpret, clarify or expand the Bidding Documents.
- 6.3. CONSULTANT will prepare bid tabulation sheets and assist COUNTY in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment, and services.
- 6.4. CONSULTANT will issue a conformed set of plans and the project manual.

7. Project Design Schedule

Phase	Duration
1 – Planning and Programming	18 weeks
2A – 30% Construction Documents	12 weeks
2B – 60% Construction Documents	10 weeks
2C – 90% Construction Documents	8 weeks
2D – 100% Construction Documents	4 weeks
3 – Bid and Award	Concurrent with County Bidding Schedule



Table 2. Deliverables by Phase

•	
Task Phase 1 – Planning and Programming •	Geotechnical investigation report Engineer's site observation notes
Phase 2A – 30% Submittal	All submittals in PDF format unless noted Plans (PDF, 1 hard copy 11x17 if requested) Design and construction schedules Opinion of probable construction cost Drainage report Pre-Application Meeting Minutes with SFWMD
Phase 2B – 60% Submittal	All submittals in PDF format unless noted Plans (PDF, 1 hard copy 11x17 if requested) Design and construction schedules Opinion of probable construction cost SFWMD ERP Application PBC ROW Permit Application
Phase 2C – 90% Submittal	FAA OE/AAA obstruction evaluation determinations Submittal review meeting minutes All submittals in PDF format unless noted Plans (PDF, 1 hard copy 11x17 if requested) Design and construction schedules Opinion of probable construction cost Technical specifications Front end specification review comments Engineer's report SFWMD ERP application comment responses
Phase 2D – 100% Submittal	All submittals in PDF format unless noted
Bidding and Award of Contract	 Pre-bid meeting slides (PowerPoint) Bid tabulation (Excel) Award recommendation (PDF) Conformed plans and project manual (1 hard copy 11x17 if requested, PDF, Word, AutoCAD.dwg)

Task I-22-PBI-H-007

Exhibit A

Revision 0.0



Team Roles

Film	Description
HDR	Project management
	 Roadway, Signing, and Pavement Marking design
	Misc. Structural design
Chen Moore and Associates	Stormwater design and permitting
	 Tree Survey/Disposition Plan and tree mitigation permitting
	 Landscape architecture
	 Irrigation design
Quantum Electrical Engineering*	Electrical design serving lighting and signage
Brown & Phillips*	Topographic survey and SUE
Tierra South Florida*	Geotechnical investigation
Marlin Engineering*	 Traffic analysis and origin/destination study
*DBE Firm	

ASSUMPTIONS

- Proposed improvements along James L. Turnage Boulevard and Perimeter Road are based on the preferred alternative 3.
- Opinions of probable project cost or probable construction cost provided by CONSULTANT are
 made on the basis of information available to CONSULTANT and on the basis of
 CONSULTANT's experience and qualifications and represents its judgment as an experienced
 and qualified professional engineer. However, since CONSULTANT has no control over the cost
 of labor, materials, equipment or services furnished by others, or over the construction
 contractor(s') methods of determining prices, or over competitive bidding or market conditions,
 CONSULTANT does not guarantee that proposals, bids or actual project or construction cost will
 not vary from opinions of probable cost CONSULTANT prepares.
- Consultant shall pay application fees for the permits listed herein. Tree mitigation fees shall be paid directly by the County.
- The project will follow the design standards of the COUNTY Engineering and Public Works
 Department Roadway Production Division. Where COUNTY standards are silent, FDOT
 standards shall be followed.
- The project will not follow the COUNTY Engineering and Public Works Department CADD Standards for Roadway Work. The project will use AutoCAD drafting software, per DOA guidance.
- Meetings with the COUNTY Engineering and Public Works Department will occur within the DOA review meetings

EXCLUSIONS

- Design of access improvements between Australian Avenue to Perimeter Road and improvements along Australian Avenue are not part of this work.
- Based on the Feasibility Study, an Environmental (Species) Survey is not anticipated to be required.
- Relocation of buried utilities, such as potable water, sewer, and natural gas, is not part of this work.
- Dewatering
- USACE Section 404 permitting

Palm Beach County Department of Airports Airport Civil Consulting Services

F)S

HDR Engineering, Inc. PROJECT PROPOSAL - PBI CARGO ACCESS IMPROVEMENT DESIGN

Task Authoriza	ation No. I-22-PBI-H-007 - Cargo Access Improvement D									· -
	Contract Rate	\$232.50	\$188.46	\$173.96	\$238.65	\$136.27	\$129.24	\$114.89	\$101.48	_
	Scope / Task Title	Sr. PM	PM	Civil Engineer	Sr. Structural Engineer	Jr. Civil Engineer	Engineering Intern	Accountant	Sr. Admin Assistant	Total
Phase 1 - Plann	ning and Programming (Lump Sum)									
1,1 K	Kickoff meeting		2	2			2			6
1.2	Scope Meeting		2	4			4			10
1.3 F	Records Review			4			4			8
1.4 F	Field services coordination		2	4			4			10
1.5 P	Progress Meetings		10	2			4			16
1.6 - 1.9 F	Field services		2	2			2			6
1.10	Site observation			4			4			8
1.11	Submit phase deliverables			4			4			8
1.12	Quality program		2	4						6
1.13 F	Project management		2	4		L		16		22
	Phase 1 - Subtotal Hours	0	22	34	0	0	28	16	0	100
	Phase 1 - Subtotal Direct Labor Cost	\$0.00	\$4,146,12	\$5.914.64	\$0.00	\$0.00	\$3,618,72	\$1,838.24	\$0.00	\$15,517,72
	Construction Documents (Lump Sum)								T	
	plans		2	60			200			262
	schedule		2	4			4			10
	OPC		2	4			4			10
	Stormwater permitting									
	Design team coordination		2	4		ļ	2	ļ	ļ	
	Submit deliverables		2	4			2			8
2.7	Submittal review meeting		2	2			2			6
								<u> </u>		
	Phase 2A - Subtotal Hours	0	12	78	0	0	214	0	0	304
	Phase 2A - Subtotal Direct Labor Cost	\$0.00	\$2,261,52	\$13,568.88	\$0.00	\$0.00	\$27.657.36	\$0.00	\$0,00	\$43,487,76
	6 Construction Documents (Lump Sum)								,	
	plans		2	40	20		80			142
	schedule		2	4			2			
3.3	OPC		2	4			4			10
3.4	specifications		2	4			4			10
3.5	engineer's report		2	4			4			10
3.6	Airspace Obstruction Evaluation		2	8			16			26
3.7	stormwater permitting			1		1	Ì	1	<u> </u>	(
3.8	Right-of-Way permitting		2				12			14
3.9	Building permitting (electrical)		2				6		ļ	
3.10	Design team coordination		2	2						4
3.11	Submit deliverables		2	2			2			
3.12	Submittal review meeting		2	2			2			
	Phase 2B - Subtotal Hours	0	22	70	20	0	132	0	0	244
	Phase 2B - Subtotal Direct Labor Cost	\$0.00	\$4,146,12	\$12,177.20	\$4,773.00	\$0.00	\$17,059,68	\$0.00	\$0.00	\$38,156.00
Phase 2C - 90%	% Construction Documents (Lump Sum)									
4.1	plans		2	20	8		40			70
4.2	schedule		2	4			2			
4.3	OPC		2	4			4			11
4.4	specifications		2	4			4			11
4.5	review front ends		2	4			4			11
4.6	engineer's report		2	4			4			11
4.7	Stormwater permitting							T		
4.8	Design team coordination		2	2						
4.9	Submit deliverables		2	2			2	T		
4.10	Submittal review meeting		2	2			2			
									1	
	Phase 2C - Subtotal Hours	0	18	46	8	0	62	0	0	13
	Phase 2C - Subtotal Direct Labor Cost	\$0.00	\$3,392.28	\$8,002.16	\$1,909.20	\$0.00	\$5,012.88	\$0.00	\$0.00	\$21,316.5
Phase 2D - 100	0% Construction Documents (Lump Sum)				***************************************					
5.1	plans		2	10	4		20			3
	schedule		2	4			2			
	OPC	1.0000000000000000000000000000000000000	2	4			2			
	I		2	4			2		1	
	project manual			+	 		2		1	
5.4 / 5.5	project manual engineer's report		2	4	ì	1	1 -	I	1	j.
5.4 / 5.5 5.6	engineer's report			2	 	 	2			
5.4 / 5.5 5.6 5.7			2 2 2						-	
5.4 / 5.5 5.6 5.7 5.8	engineer's report Design team coordination Submit deliverables		2 2	2			2			
5.4 / 5.5 5.6 5.7 5.8	engineer's report Design team coordination		2	2 2			2 2			
5.4 / 5.5 5.6 5.7 5.8	engineer's report Design team coordination Submit deliverables	0	2 2	2 2	4	0	2 2	0	0	



HDR Engineering, Inc. PROJECT PROPOSAL - PBI CARGO ACCESS IMPROVEMENT DESIGN

	.48	\$101.48	\$114.89	\$129.24	\$136.27	\$238.65	173.96	188.46	\$232.50	thorization No. I-22-PBI-H-007 - Cargo Access Improvement D Contract Rate
l		Sr. Admi	Accountant	Engineering	Jr. Civil	r. Structural	I Engineer	PM	Sr. PM	Scope / Task Title
	tant	Assistan		Intern	Engineer	Engineer				- Bidding and Award of Contract (Lump Sum)
	- {			8			8	2		prebid conference
				20			16	2		issue addenda
				4			2	2		bid tabulation
				4			2	2		conformed documents
		-								
	-+	0	0	36	0	0	28	8	0	Phase 3 - Subtotal Hours
\$11,03		\$0,00	50.00	\$4,652.64	\$0.00	\$0.00	4,870.88	507.68	\$0.00	Phase 3 - Subtotal Direct Labor Cost
		0	16	505	0	32	288	98	0	Total HDR Labor Hours
	,	0.0	0.4	12.7	0.0	8.0	7.2	2.5	0	Total HDR Labor Weeks
\$143,44	,	\$0	\$1,838	\$65,395	\$0	\$7,637	550,100	18,469	50	Total HDR Labor Cost
AMOUNT		DBE	DBE %							sultants (Lump Sum)
\$16,21		1	5%							
\$11,45		1	3%							Electrical Engineering
\$42,27 \$89,77		1	12% 0%				+			Phillips ore
\$29,66		1	9%							gineering
		<u> </u>								
\$189,386	p Sum)	ants (Lump S	Subconsult							
	PATION	PARTICIPAT	DBE							
								_		rsables (Not to Exceed)
							ts	es	Drawings #	ion
									,	
								0.20	1.00	
								0.20	1,00	
_							-			Phase 1A - Planning and Programming
5									50	Phase 2A - 30% Construction Documents
7									70	Phase 2B - 60% Construction Documents
7		 					1		70	Phase 2C - 90% Construction Documents
11		ļ					1	200	70	Phase 2D - 100% Construction Documents
11							1	200		Phase 3 - Bidding and Award of Contract
41										Total Reproduction
								ages	Packages I	Delivery
									9	
								-	-	
								0	0	
										Total Postage/Delivery
		1						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		rmitting
2,20		1								SFWMD Individual Permit Application Fee
		 	l							
1,00		 								PBC Tree Mitigation Permit Application Fee
3,00		-	 							PBC Building Individual Permit Application Fee
		Parking	1				re @			
	20.00	\$ 2	\$ 40.00	s <u>-</u>	75,00	\$		s		
									-	
		s	\$ -	\$ -	-	s				Task 1.8 Environmental Survey
		1	L							
\$6,61	exceed)	s (Not to Exc	Reimbursable							
										nmary
\$15,5	np Sum)	mming (Lump	anning and Program	Phase 1 - Pk						
\$43,4			Construction Docu							
\$38,1			Construction Docu							
\$21,3			Construction Docu							
\$13,9										AND THE STATE OF T
\$13,9	1		Construction Docu							
				Phace 3 - Riddin						
\$11,0				Thase o Biggin						
	np Sum)	ultants (Lump ultants (Lump oles (Not to Ex	Subconsi	That o block						

End of Exhibit B



Subconsultant Contract

Quantum Electrical Engineering

Electrical Design



April 22, 2022

HDR, Inc. Mr. Emilio Corrales, P.E. 1475 Centrepark Boulevard – Suite 230 West Palm Beach, FL 33401-7412

Subject: Electrical Engineering Services Fee Proposal for the Palm Beach International

Airport Cargo Access Road Improvements.

Dear Emilio:

Quantum Electrical Engineering, Inc. (QUANTUM) is pleased to provide HDR Inc. (HDR) an electrical engineering services fee proposal for the proposed Palm Beach International Airport Access Road Improvements. Scope has been based upon the Draft Feasibility Study Exhibits.

The following design tasks are included in our scope:

- Includes design coordination meetings with the DOA, PBC Planning & Zoning and HDR Design Team.
- Includes on-site verifications and discovery of existing lighting systems and analysis of existing photometric calculations within the project limits.
- Includes on site verification of existing overhead roadway signage electrical services.
- Includes design of roadway lighting systems with point-by-point lighting calculations and electrical design for proposed roadway geometry that impacts the existing lighting system.
 New lighting will utilize FDOT Greenbook 2018 photometric values as design guidelines.
- Design electrical systems that meet current County, NEC, NFPA and DOA Standards.

Assumptions and Exclusions

- The existing lighting along Cargo Road, impacted by the new roadway alignment will be replaced in kind. The existing cobra style roadway light fixtures will not be upgraded to LED lighting.
- Existing highmast lighting will remain in place and not retrofitted to LED.
- Does not include site wide photometric calculations of existing lighting system.
- Does not include relocation of existing utilities (FPL, Comcast, ATT, DOA Fiber ductbanks and etc.)
- Does not include the replacement of existing lighting circuit conductors beyond the project limits or replacement of the existing service points.
- Does not include windload calculations for lighting or signage systems.
- HDR shall provide base plan sheets and base files in AUTOCAD 2021 or higher for all areas included by this project.
- QUANTUM shall provide all electrical specifications in Microsoft Word and PDF format per submittal.
- QUANTUM shall include construction cost estimates per submittal.

Palm Beach County 2755 Vista Parkway, Suite I-9 West Palm Beach, FL 33411 561.210.9224 Broward County 5571 N. University Drive, Suite 101 Coral Springs, FL 33067 954.369.5810 Page 2 Mr. Emilio Corrales, P.E. Electrical Engineering Services Fee Proposal for the Palm Beach International Airport Cargo Access Road Improvements.

- QUANTUM shall provide one electronic set for 30%, 60%, 90%, 100% Bid/Permit set of plans and specifications to HDR.
- HDR shall provide all printing of plans & specifications to the County for all reviews, permitting, bidding and construction phases.
- Includes Bid & Award Services.

Our proposed Lump Sum fee is: (See Attachment for Breakdown)

\$11,451.86

Sincerely,

Amy Champagne-Baker, PE

President

PALM BEACH COUNTY DEPARTMENT OF AIRPORTS - PBI CARGO ACCESS ROAD IMPROVEMENTS QUANTUM ELECTRICAL ENGINEERING, INC. SCOPE FEE SUMMARY FEE PROPOSAL ELECTRICAL DESIGN to HDR 4/22/22

FEE PROPOSAL ELECTRICAL DESIGN to HDR 4/22/2	\$161,54	\$144,23	\$138,46	\$80,77	\$132.69	\$46.15		
Nate	Proj. Mgr.	Prof. Eng	Proj. Eng	CADD/Tech	Field Eng.	Clerical	Total	TOTAL
PHASE OF WORK	Hours	Hours	Hours	Hours	Hours	Hours	Hours	TASK COST
30% Design Documents	110013	Hours	110013	Hours	110013	riours	110013	1701(0001
Kickoff Meeting annd Design Coordination Mtgs with DOA & HDR		4					4	\$576.92
Record Drawing Review and Field Investigation		4		 		·	4	\$576.92
Lighting and Electrical Design Drawings		2	4	16			22	\$2,134,62
Engineering Report/Assessment & Cost Estimate		2	4	10		4	10	\$1,026,90
QA/QC & Comment Incorporation		1		1			2	\$225.00
Subtotal	0	13	8	17	0	4	42	\$4,540.36
60% Design Documents, Bid/Permit								7 .,
Design Review Mtgs with DOA & HDR		2					2	\$288.46
Lighting and Electrical Design Drawings		4	4	8			16	\$1,776,92
Specifications & Cost Estimate		2				2	4	\$380.76
QA/QC & Comment Incorporation	·	1	1	2			4	\$444.23
Subtotal	0	9	5	10	0	2	26	\$2,890,37
90% Design Documents								
Design Review Mtgs with DOA & HDR		1	<u> </u>				1	\$144.23
Lighting and Electrical Design Drawings		2	4	4			10	\$1,165.38
Specifications & Cost Estimate		1				2	3	\$236.53
QA/QC & Comment Incorporation		2		2			4	\$450.00
Subtotal	0	6	4	6	0	2	18	\$1,996.14
100% Design Documents, Bid Documents and Permit								
Design Review Mtgs with DOA & HDR		1					1	\$144.23
Lighting and Electrical Design Drawings		2	2	2			6	\$726.92
Specifications & Cost Estimate		1				1	2	\$190.38
Permit Responses		1		1			2	\$225.00
Subtotal	0	5	2	3	0	1	11	\$1,286.53
Bid & Award								
Pre-Bid Meeting		1				W		\$144.23
Review of Bid Results & Recommendation		1						\$144.23
RFI Responses		2		2		-		\$450,00
Subtotal	0	4	0	2	0	0	0	\$738.46
Grand Total Hours	0	15	6	11	0	3	29	\$11,451.86
Grand Total Labor Cost	\$0.00	\$2,163.45	\$830.76	\$888.47	\$0.00	\$138.45		
Grand Total Labor Cost	\$0.00	ΨZ, 103,45	1 3030.78	\$000.41	\$0.00	\$130,43		L



Subconsultant Contract

Chen Moore & Associates

Stormwater and Landscape Design and Permitting

MASTER SUBCONSULTANT AGREEMENT ATTACHMENT B

TASK ORDER

This Task Order dated _______, 20___, pertains to an Agreement by and between Chen Moore and Associates, ("Subconsultant"), and HDR Engineering, Inc. ("HDR"), dated November 18, 2021, ("Agreement"). Subconsultant shall perform Services on the Project described below as provided herein and in the Agreement. This Task Order shall not be binding until it has been properly signed by both parties. Upon execution, this Task Order shall supplement the Agreement as it pertains to the Project described below.

TASK ORDER NUMBER: 2

PROJECT NAME: PBI Cargo Access Improvement Design

PART 1.0 PROJECT DESCRIPTION:

The Palm Beach County (COUNTY) Department of Airports' (DOA) Palm Beach International Airport (PBI) is designated as a medium hub primary commercial service airport and serves helicopters, reciprocating engine aircraft, and jet aircraft.

A Master Plan Update (MPU) was developed for PBI in 2018 with the purpose of evaluating the capability of the airport's facilities to accommodate anticipated changes in demand. Air cargo facilities, located in the central-eastern area of the PBI property, were analyzed as part of the MPU. A deficiency was identified in the existing roadway network serving the air cargo facilities. The roadway network provides sub-optimal access for truck ingress and egress to and from the air cargo campus. HDR conducted a feasibility study in April 2020 to determine the viability of implementing egress/ingress improvements to the roads providing access to the air cargo facility.

DOA staff advised HDR that alternative 3 is preferred, with no improvements to the connection between Australian Ave and Perimeter Rd. The COUNTY wishes for HDR to proceed with design and production of construction documents for the improvements.

Consultant will perform programming, design, and bid phase services for the PBI Air Cargo Facility Access improvements task under its Professional Services Agreement (PSA) with the COUNTY. The desired task outcome will be the creation of design documents to support a COUNTY bid solicitation for construction of the project. Specific project components are:

- Traffic analysis and origin/destination study along James L. Turnage Boulevard comparing existing and proposed conditions.
- New Topographic Survey, Subsurface Utility Engineering, and Geotechnical Investigation throughout the project limits
- New loop on-ramp connection with reconfiguration of the lanes along James L. Turnage Boulevard
 - o Reconstruction and reconfiguration of the on-ramp connection.
 - o Perimeter Road Median Opening reconstruction
 - o James L. Turnage Boulevard widening on the south side
 - o James L. Turnage Milling & Resurfacing and new pavement markings to reconfigure lanes
 - New grading and stormwater management to accommodate the additional impervious area
 - O Associated tree mitigation and landscape planting plan
 - o Associated signage and lighting
- Perimeter Road improvements
 - Widening of existing roadway asphalt footprint to accommodate turning at the Cargo Facility turnout access.
 - o Provision of 2' paved shoulder consistently along Perimeter Road
 - New pavement markings
 - o Grading of existing swales to accommodate the additional impervious area

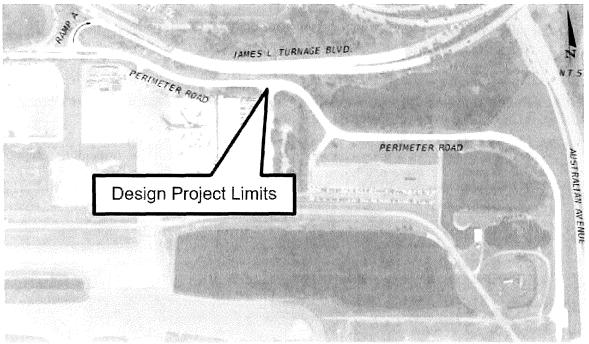


Figure 1 - General Scope Depiction

Subconsultant shall support HDR in developing contract documents by providing the following services:

- Design and permitting of stormwater conveyance and management associated with the proposed roadway improvements
- Ancillary landscape architecture and irrigation design
- Tree mitigation design and permitting
- Opinion of probable cost (OPC) and construction schedule development support for subconsultant's design components

PART 2.0 SCOPE OF BASIC SERVICES TO BE PERFORMED BY SUBCONSULTANT ON THE PROJECT:

1. Meetings:

- a. Site visit verification of survey
- b. Kickoff meeting via conference call
- c. 4 design progress meetings
- d. Virtual meetings with the DOA after each progress submittal
- 2. Construction Schedule Subconsultant will review HDR's proposed construction schedule at each milestone and advise of any revisions needed due to the Subconsultant's scope of work.
- 3. Opinion of Probable Cost (OPC) Subconsultant will provide quantities and unit costs of work items shown in Subconsultant's design documents.

- 4. Technical Specifications Subconsultant will provide technical specifications relevant to its scope of work and coordinate with HDR to align any shared specifications, e.g. structural concrete for drainage structures.
- 5. Engineer's Report Subconsultant will provide relevant information to Subconsultant's portion of the Engineer's Report.
- 6. Design Plans Subconsultant will provide the following items related to the scope of work:
 - a. Storm water system demolition and installation notes
 - b. Storm water drainage demolition and stormwater pollution prevention plans
 - c. Storm water drainage layout plans
 - d. Storm water drainage profiles
 - e. Storm water drainage details to support the proposed design, including oil/grease skimmers, pollution retardant baffles, and other BMPs where applicable.
 - f. Advise HDR of the stormwater drainage system constructability within the proposed construction phasing for each progress submittal. Subconsultant shall advise HDR of lead times and predecessors for submittal approval, materials shipping, and civil-related construction critical path items.
 - g. Tree disposition plan and related notes
 - h. Landscape planting plan and related notes
 - i. Landscape details to support tree protection and planting techniques for the Contractor to observe during construction

7. Surface Water Permits

- a. Subconsultant will obtain, review, assemble, and complete permit application packages.
- b. The subconsultant will prepare backup documentation required with the permit application packages, which may include drainage calculations and any map exhibits.
- c. HDR will provide the relevant paving, grading, and drainage plans to be included within the permit application packages.
- d. Subconsultant will be responsible for coordination with all regulatory agencies during the permitting process.
- e. Subconsultant will send the completed permit applications to the DOA (via HDR) for review and signature along with a check request for all required permit application fees.
- f. HDR will be responsible for providing all required permit application fees.
- g. The regulatory agencies typically complete their review within 30 calendar days after the permit application submittal. Subconsultant will be available to attend reviews meetings with the regulatory agencies to discuss any review comments on the permit submittal.
- h. Upon obtaining review comments from the regulatory agencies, subconsultant will revise permit application package as per any comments from these regulatory agencies and re-submit to the regulatory agencies for permit approval. All required permit approvals must be obtained from the regulatory agencies prior to submitting the final construction documents to the DOA.
- 8. Landscape architecture, irrigation, tree mitigation design and permitting
 - a. Subconsultant will obtain, review, assemble, and complete permit application packages.

- b. The subconsultant will prepare backup documentation required with the permit application packages, which may include a tree disposition table and any map exhibits.
- c. HDR will provide the relevant paving, grading, and drainage plans to be included within the permit application packages.
- d. Subconsultant will be responsible for coordination with all regulatory agencies (Palm Beach County Environmental Resources Management) during the permitting process.
- e. Subconsultant will attend pre-application meetings with the necessary regulatory agencies to discuss proposed improvements under this project and confirm the permit requirements.
- f. Subconsultant will send the completed permit applications to the DOA (via HDR) for review and signature along with a check request for all required permit application fees.
- g. HDR will be responsible for providing all required permit application fees. Fees are anticipated to be \$1,000, potential mitigation costs will be subject to discussion with the regulatory agency.
- h. The regulatory agencies typically complete their review within 30 calendar days after the permit application submittal. Subconsultant will be available to attend reviews meetings with the regulatory agencies to discuss any review comments on the permit submittal.
- 9. Upon obtaining review comments from the regulatory agencies, subconsultant will revise permit application package as per any comments from these regulatory agencies and resubmit to the regulatory agencies for permit approval. All required permit approvals must be obtained from the regulatory agencies prior to submitting the final construction documents to the DOA.Bid Phase:
 - a. The Subconsultant shall attend the pre-bid meeting. The Subconsultant shall respond to questions from prospective bidders.
 - b. The Subconsultant shall provide supplemental information to prospective bidders as required during the bidding process through the issuance of addenda
 - c. The Subconsultant shall review all bids to determine the most responsible and responsive bidder and provide the DOA with a recommendation for award of the construction contract.
- 10. Subconsultant will utilize ProjectWise software to share common files and information. The purpose of ProjectWise is to reduce the opportunity for error when HDR incorporates Subconsultant's deliverables into the project documents. The following is an incomplete list of files that are expected to be shared between HDR and the Subconsultant.
 - a. AutoCAD sheet set manager
 - b. Opinion of Probable Cost Excel file
 - c. Plan sheet quantity table Excel file
 - d. Technical specifications Word file
 - e. Engineer's Report Word file

Table 1 - Plan Submittal Schedule

TITLE	30%	60%	90%	100%
Drainage Plan	Preliminary	Updated	Final	Final
Drainage Details/Schedules	Preliminary	Updated	Final	Final
Landscape/Irrigation Key Sheet		Preliminary	Updated	Final
Landscape/Irrigation General Notes/Pay Item Notes		Preliminary	Updated	Final
Landscape/Irrigation Plans		Preliminary	Updated	Final
Landscape/Irrigation Details		Preliminary	Updated	Final

Subconsultant's Project Design Schedule:

Phase	Duration	
1 – Planning and Programming	18 weeks	
2A – 30% Construction Documents	12 weeks	
2B – 60% Construction Documents	10 weeks	
2C – 90% Construction Documents	8 weeks	
2D – 100% Construction Documents	4 weeks	
3 – Bid and Award	Concurrent with County Bidding Schedule	

The following deliverables will be provided:

- Plans
 - PDF unsigned 11x17 and 24x36 at schematic/60/90/100 percent
 - o PDF digitally signed/sealed 11x17 and 24x36 at conformed documents.
 - o CADD files in AutoCAD 2020 format at schematic/60/90/100/bid conformed percent complete
 - o All plans are to be developed in accordance with HDR CADD Standards
- Specifications in Word format at 60/90/100/bid conformed percent
- Storm water bid line items and cost estimates in excel format at 30/60/90/100 percent
- Engineer's Report sections in Word format at 30/60/90/100 percent
- Signing and sealing HDR supplied plans at HDR Office for bid phase, if requested.

PART 3.0 ADDITIONAL SERVICES, NOT PART OF BASIC SERVICES:

If authorized in writing by HDR as an amendment to this Task order.

• The CONSULTANT assumes no modeling or design will be required to modify detention facilities or control structures outside the limits of the proposed project limits.

PART 4.0 HDR'S RESPONSIBILITIES:

- Contract administration.
- HDR will provide any available stormwater record drawings to Subconsultant.
- HDR will provide any available Stormwater Master Plan documents to Subconsultant.
- HDR will provide any existing stormwater modeling files, if available.
- HDR will provide the geotechnical report
- HDR will provide signed and sealed plans for the Project, which will be required for the permit application packages.

- HDR will assist in obtaining any signatures and fees required with the permit application packages from the DOA.
- HDR will provide plan sheet border template, sheet naming, and numbering policy

PART 5.0 PERIODS OF SERVICE:

Subconsultant will provide services concurrent with the schedule stated in HDR's task order with the DOA.

PART 6.0 SUBCONSULTANT'S COMPENSATION FOR SERVICES:

- Lump Sum: HDR shall pay Subconsultant for all authorized and properly performed services at the rates attached hereto with a lump sum amount of \$89,774.445. Subconsultant acknowledges that the amount is not a guarantee of minimum work or payment. Subconsultant shall notify HDR when it has reached 90% of the amount.
- Reimbursable Expenses: Included in the lump sum amount

PART 7.0 EXECUTED TASK ORDERS BETWEEN OWNER AND HDR ATTACHED HERETO AS REFERENCE.

Agreement provided in Exhibit B

PART 8.0 OTHER:

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

"Subconsultant"	HDR ENGINEERING, INC. "HDR"
BY:	BY:
NAME:	NAME:
TITLE:	TITLE:
ADDRESS:	ADDRESS:

Exhibit A Work Breakdown Fee Schedule

EXHIBIT A - FEE PROPOSAL Palm Beach County Department of Airports - HDR PBI Airport Access Road Improvements

Chen Moore and Associates Project # P22.065-007

	Principal	Senior Project Manager	Project Manager Engineering	Senior Engineer	Project Engineer	CMA Staff Engineer		Senior Designer	Designer Landscape Arch	Clerical	Total
Hourly Rate	\$282,12	\$197.48	\$183.38	\$155,17	\$126,96	\$98,75	\$183,38	\$126,96	\$98,75	\$65,00	
TASK 1 Project Kickoff, Data Collection, Review and Progress Meetings 1.1 Kickoff Meeting 1.2 Site Visit 1.3 Review As-Builts and Available Records 1.4 Team Coordination and Progress & Deliverable Review Meetings (6) Task 1 Total	\$0	1 4 1 8 \$2,765	\$0	2 4 8 16 \$4,655	16 \$2,031	\$0	2 4 1 8 \$2,751	2 4 2 4 \$1.524	2 2 \$395	\$0	\$1,128.50 \$2,651,96 \$4,105.00 \$6 234,94 \$14,120.40
TASK 2 30% Conceptual Drainage Plan and Tree Mitigation Memo 2.3 Plan Sheet - Stormwater Layout Plan (4 sheets) 2.9 Tree Mitigation Technical Memorandum 2.10 Preliminary OPC and Review of Projected Construction Schedule	\$0	2 2 1 \$987	\$0	4 4 \$1,241	8 2 \$1,270	16 \$1,580	2 1 \$550	16 4 52 539	\$0	\$0	\$3,611.32 \$2,793.08 \$1,763.30 \$8,167.70
TASK 3 60% Construction Documents 3.1 Plan Sheet - Stormwater Notes and Legend 3.2 Plan Sheet - Stormwater Demolition & SWPP Plan (4 sheets) 3.3 Plan Sheet - Stormwater Layout Plan (4 sheets) 3.4 Plan Sheet - Stormwater Porfiles (1 sheet) 3.5 Detail Sheet - Stormwater Details and Typical Sections (1 sheet) 3.6 Plan Sheet - Tree Disposition Plan (4 sheets) 3.7 Plan Sheet - Tree Protection and Planting Details (2 sheets) 3.8 Detail Sheet - Tree Protection and Planting Details (2 sheets) 3.9 60% Engineer's Report (Drainage Section Writeup Only) 3.10 60% OPC and Review of Projected Construction Schedule 3.11 Draft Technical Specifications Task 3 Total	so	1 1 1 1 1 1 2 51,580	S 0	2 4 4 2 2 8 4 12 \$5,207	4 6 6 6 4 4 2 \$4.063	4 16 16 8 8 8	1 1 1 1 1 5 5917	4 16 2 4 4 53,809	16 32 8 4 \$5,925	\$0	\$1,213.18 \$3,159.92 \$2,369.92 \$2,369.92 \$1,805.66 \$2,271.22 \$5,374.74 \$1,227.30 \$1,946.68 \$2,158.30 \$2,948.22 \$27,635.06
TASK 4 90% Construction Documents 4. Plan Sheet - Stormwater Notes and Legend 4.2 Plan Sheet - Stormwater Demolition & SWPP Plan (4 sheets) 4.3 Plan Sheet - Stormwater Demolition & SWPP Plan (4 sheets) 4.4 Plan Sheet - Stormwater Potellise (1 sheet) 4.5 Detail Sheet - Stormwater Details (1 sheet) 4.5 Detail Sheet - Stormwater Details and Typical Sections (1 sheet) 4.6 Plan Sheet - Tree Disposition Plan (4 sheets) 4.7 Plan Sheet - Planting Plan (4 sheets) 4.8 Detail Sheet - Tree Protection and Planting Details (2 sheets) 4.9 90% Engineer's Report (Drainage Section Writeup Only) 4.19 90% OPC and Review of Projected Construction Schedule 4.11 Revised Technical Specifications Task 4 Total	So	1 1 1 5790	\$0	1 2 2 2 1 1 4 1 8 \$3259	2 4 4 4 2 2 2 2 52,539	4 8 8 6 4	1 1 1 1 1 5917	4 8 2 2 2 52 285	12 24 6 2	50	\$804.09 \$1,805.66 \$1,805.66 \$1,410.68 \$804.09 \$1,876.22 \$3,569.06 \$1,029.80 \$874.60 \$1,241.37 \$1 876.14
Task 5 Permitting	30	3/30	30	30,203	32,333	32,300	9311	32,203		- 30	\$17,037,0
13sk 5	\$0	4 2 \$1,185	\$ 0	12 4 \$2_483	4 \$508	\$ 0	2 \$367	8 2 \$1,270	8 4 \$1,185	\$0	\$3,159.80 \$1,015.64 \$2,172.44 \$648.92 \$6,996.80
TASK 6 100% Construction Documents 6.1 Plan Sheet - Stormwater Notes and Legend 6.2 Plan Sheet - Stormwater Demolition & SWPP Plan (4 sheets) 6.3 Plan Sheet - Stormwater Layout Plan (4 sheets) 6.4 Plan Sheet - Stormwater Profiles (1 sheet) 6.5 Detail Sheet - Stormwater Profiles (1 sheet) 6.6 Plan Sheet - Tree Disposition Plan (4 sheets) 6.7 Plan Sheet - Tree Disposition Plan (4 sheets) 6.7 Plan Sheet - Trea Disposition Plan (4 sheets)		1		1 2 2 1	1 2 2 2 1	2 8 8 3 6	1	2	4 12		\$479.6: \$1,551.74 \$1,551.74 \$705.34 \$719.46 \$832.30 \$1,876.2:
O. Prian Sheet - Prianting Plan (4 sheets) 6.8 Detail Sheet - Tree Protection and Planting Details (2 sheets) 6.9 100% Engineer's Report (Drainage Section Writeup Only) 6.10 100% OPC and Review of Projected Construction Schedule 6.11 Final Technical Specifications Task 6 Total	50	1 1 1 \$987	\$0	2 1 4 52,017	\$1,016	\$2,666	1 1 \$734	1 2 \$1.143	2 S1,975	\$0	\$1,875.22 \$324.46 \$507.82 \$987.45 \$1,001.54 \$10,537.70
Task 7 Bid and Award 7.1 Attend Pre-Bid Meeting 7.2 Respond to Bidder Questions / Addenda 7.3 Review Bids for Stormwater and Landscape and Provide Award Recommendation 7.4 Prepare Conformed Documents Task 7 Total	\$0	1 1 1 5592	50	1 2 1 2 \$931	4 4 \$1,016	4 \$395	So	2 8 8	SO SO	\$0	\$606,57 \$1,833,86 \$1,368,33 \$1,410,66 \$5,219,4
TOTAL FEE	\$0.00			\$20,792.78							\$89,774.45

Exhibit B HDR Prime Agreement with Client



Subconsultant Contract

Brown & Phillips

Topographic Survey and SUE

Task I-22-PBI-H-007 Exhibit A Revision 0.0



April 28, 2022

Mr. Emilio Corrales, P.E. HDR 8333 NW 53rd Street, Suite 302 Doral, FL 33166

Re: Palm Beach International Airport, James L. Turnage and Perimeter Road Access Road Improvements - Roadway Design Survey

Dear Emilio:

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

We will perform a specific purpose/topographic survey under this project and the survey work will be performed in accordance with the current Standards of Practice. All survey work done will result in a signed and sealed survey drawing in accordance with all applicable requirements, codes, rules and Statutes governing Surveying and Mapping.

I. HORIZONTAL PROJECT NETWORK CONTROL

A traverse will be run through the route and the survey will be oriented to Palm Beach County horizontal control (NAD 83/11 Adjustment). We will obtain the sectional and geodetic control information from the Palm Beach County Survey Department.

The limits of the survey are along James L. Turnage Boulevard from west of car rental center up to Australian Avenue and FDOT Bridges that lead to I-95. Limits along Perimeter Road from the stop sign at the intersection that leads to Economy Parking all the way east up to Australian Avenue intersection. Also included is the area between James L. Turnage Boulevard and Perimeter Road as well as the area between Australian Avenue and Perimeter Road (approximate limits outlined in orange on Attachment 'B').

II. VERTICAL PROJECT NETWORK CONTROL

A level run will be performed along the route using the existing Palm Beach County benchmarks (NAVD 1988). Benchmarks will be set along the route, not exceeding 600 feet apart.

III. TOPOGRAPHY

A topographic survey will be performed along the route. This survey will tie in all visible features such as, but not limited to, signs, light poles, guardrails, utilities, walks, edge of pavement, curbing, drainage structures, striping, etc. These locations will show all features within the corridor (approximate limits outlined in orange on Attachment 'B').

IV. CROSS SECTIONS and TIN CREATION (DTM)

Cross sections will be done along the route at 50-foot intervals. These cross sections will cover the roadway and will extend to 25 feet beyond the edge of pavement. In addition, we will prepare a TIN file and all the corresponding break lines for the design of the roadway.

V. AS-BUILTS

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.

VI. UNDERGROUND UTLITY LOCATIONS

We will coordinate and designate the underground utilities that service the site and add them to the survey. No test holes are proposed.

VII. TREE LOCATIONS

We will locate the native trees (4" and larger measured at breast height) and shrubs/hedges within the project limits (not tag). These will be shown on the CADD file with types and caliper sizes. Not a tree survey.

VIII. CLOSURE

A drawing will be produced which will show all the features located. We propose to provide HDR with hard copies, a digitally signed PDF file, and an AutoCAD file in the version requested. We will perform the scope of services for a **lump sum fee of \$42,271.55** (see Attachment 'A' for an hourly breakdown). Any additional work will be done on an hourly basis as approved by you. 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.	This Proposal accepted this day of, 2022
John E. Phillips III, P.L.S. Rrincipal	By:
Attachment	Print Name:
JEP/mb	Title:



ATTACHMENT 'A'

Palm Beach International Airport Access Road Improvements

Type of Survey: Roadway Design

Size: 4,400'± Date: April 28, 2022

TASK	SURVEY	CADD	SURVEY	PROFESSIONAL	COMMENTS
	CREW	TECHNICIAN	TECHNICIAN	LAND	
	(3 PERSON)			SURVEYOR	
Meetings and Coordination				3	
Horizontal Project Network Control	8		2	1	Establish control
Vertical Project Network Control	12		2		Set benchmarks along corridor
Section Ties	4		1		Tie in PBCo. Airport control
Topography and Cross Sections	68		12	2	Locate all above ground features 50' cross sections, TIN file
As-builts	8		2		As-built storm structures
Underground Utilities and/or soil borings	8		2	1	Locate soil borings and marked utilities
Tree Locations	12		2		Locate planted trees in R/W (4" or greater)
Specific Purpose Survey		40	8	6	Prepare drawing of Specific Purpose Survey
Total Hours:	120	40	31	13	
Rate/Hour	\$172.80	\$84.54	\$84.54	\$137.17	
Subtotal:	\$20,736.00	\$3,381.60	\$2,620.74	\$1,783.21	

Other Direct Costs: SUE - Utility Locations quantity 1 <u>unit</u> LS cost/unit \$13,750.00

<u>total</u> \$13,750.00

Total Other Direct Costs:

\$13,750.00

TOTAL PRICE

\$42,271.55





Subconsultant Contract

Tierra SF

Geotechnical Investigation



April 22, 2022, Rev 1 5/13/22

HDR 8333 NW 53rd Street, Suite 302 Doral, FL 33166

Phone D (305)728-7428 Cel 1(954)258-4845

Attn: Mr. Emilio Corrales, PE email: emilio.corrales@hdrinc.com

Re: Proposal for Airport Testing Services

PBCDOA PBIA Airport Access Road Improvements

West Palm Beach, Florida TSF Proposal No. 2204-252

Dear Emilio:

TIERRA SOUTH FLORIDA, Inc. (TSFGeo) is pleased to submit this proposal for providing a preliminary subsurface exploration at the site of the subject project. Project is located at the airport, parallel to Runway 10R-28L. This proposal includes a summary of our understanding of the project, an outline of our proposed scope of work, an estimate of the total job cost, and our anticipated schedule for completion of the work.

PROJECT INFORMATION

Improvements to Airport Access Roadways.

PROPOSED SCOPE OF WORK

To perform the study of the proposed construction, we propose to explore the subsurface conditions as noted in Table 1 below. Some adjustments in the boring depths may be necessary depending upon the subsurface conditions encountered.

Table 1 – Proposed Field Testing					
Location Proposed Services					
Asphalt Cores	Six (6) Each (Each with a 2 ft SPT)				
Borings	Three (3) Each to a depth of 10 Feet				
Permeability Tests	Three (3) Each				

Within the borings, penetration resistance testing will be performed in general accordance with the requirements of ASTM designations D 1586. Borings will be approximately located in the field by our drilling personnel by measuring distances with a tape from known reference points. Elevations at boring locations can be interpreted from a topographic plan if furnished by others. GPS coordinates will be obtained for the testing locations. Asphalt core data will be summarized

and include photos of field locations and cores in the laboratory. Soil profiles will be provided, and a roadway report will be provided. Drainage parameters related to tests will be provided.

Prior to drilling at the project site, TSF will obtain a permit from the County, if required, and 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 utilities. Our proposal assumes that private utility lines will be located in the field by others prior to mobilization of the drill rig. TSF will recommend a utility line locating service upon request.

Upon completion of the field exploration, visual classifications will be performed and some laboratory testing, if necessary, will be performed on select samples.

A geotechnical engineer will evaluate the results of all drilling and laboratory testing. A report will be issued that contains the exploration data, a discussion of the site and subsurface conditions, preliminary geotechnical recommendations for foundation, and a discussion of some construction considerations.

UNIT FEE ESTIMATE

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, it is estimated that the total fee will be approximately as noted below.

Tierra South Florida Inc. Fee Schedule Palm Beach County Airfield Design and Engineering Services TSF Proposal No. 2204-252.Palm Beach International Airport Access Road Improvements (HDR)

CATEGORY	HOURLY RATE	UNIT	QUANTITY	FEES
	y y	en e	· *	7
PRINCIPAL ENGINEER	\$175.00	HOUR	6	\$1,050.00
SENIOR ENGINEER	\$150.00	HOUR	12	\$1,800.00
PROJECT ENGINEER	\$125.00	HOUR	30	\$3,750.00
SENIOR TECHNICIAN	\$75.00	HOUR	16	\$1,200.00
TECHNICIAN	\$65.00	HOUR	24	\$1,560.00
CADD	\$85.00	HOUR	10	\$850.00
SOIL TESTS				
F ATTERBERG LIMITS TEST	\$75.00	EACH	2	\$150.00
H ORGANIC CONTENT TEST	\$35.00	EACH	2	\$70.00
M GRAIN-SIZE ANALYSIS - FULL GRADATION	\$65.00	EACH	6	\$390.00
CONCRETE & MASONRY MATERIALS				
AGGREGATE TESTING				
ASPHALT TESTING				
B ASPHALT CORES (OBTAINING CORE SAMPLES)	\$225.00	EACH	6	\$1,350.00
F CORING MACHINE PLUS GENERATOR RENTAL	\$400.00	TRIP	1	\$400.00
FIELD EXPLORATION				
C 1 A STANDARD PENETRATION TESTS - TRUCK 0' TO 50'	\$13.00	FEET (DAY)	32	\$416.00
D 1 A GROUT - TRUCK 0' TO 50'	\$6.00	FEET (DAY)	20	\$120.00
E 1 A CASING - TRUCK 0' TO 50'	\$7.00	FEET (DAY)	16	\$112.00
I MOBILIZATION OF DRILLING EQUIPMENT TO PROJECT (MIN. CHARG	iE) \$350.00	LUMP SUM	3	\$1,050.00
J SUPPORT VEHICLE	\$150.00	DAY	3	\$450.00
K DOUBLE RING INFILTRATION TEST	\$500.00	TEST	3	\$1,500.00
			TOTAL	\$16,218.00

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 a function 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.

Borings are completed with truck-mounted equipment, and the boring locations will likely be in grassed areas. TSF will endeavor to minimize impacts to grass or landscape from the truck tires. However, our fees does not include a fee to restore the grass or landscape.

SCHEDULE AND AUTHORIZATION

TSF will proceed with the work after receipt of a signed copy of this proposal. With our present drilling schedule, we can commence work within two weeks of project approval (weather

permitting) and fieldwork will take approximately 3 days to complete. The written report can be submitted about two weeks after completion of the field exploration, depending on the extent of the laboratory-testing program. Verbal preliminary recommendations can be made to appropriate parties prior to submittal of the written report.

We 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.

Harmon C. Bennett, P.E. Principal Engineer

Ramakumar Vedula, P.E. Principal Engineer

Attachment:

- 1.) TSF General Conditions
- 2.) Fee Schedule (Complete)
- 3.) Boring Location Plan
- 4.) Preliminary Testing Location List

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

Tierra South Florida Inc., Fee Schedule Palm Beach County Airfield Design and Engineering Services TSF Proposal No. 2204-252. Palm Beach International Airport Access Road Improvements (HDR)

CATTERNY			OHANTING.	
CATEGORY <u>LABOR RATES</u>	HOURLY RATE	UNIT	QUANTITY	FEES
PROJECT MANAGER	\$175.00	HOUR		/
PRINCIPAL ENGINEER	\$175.00	HOUR	6	\$1,050.00
SENIOR ENGINEER	\$150.00	HOUR	12	\$1,800.00
PROJECT ENGINEER	\$125.00	HOUR	30	\$3,750.00
SENIOR TECHNICIAN	\$75.00	HOUR	16	\$1,200.00
ASPHALT PLANT INSPECTOR	\$75.00	HOUR		
ASPHALT FIELD INSPECTOR	\$75.00	HOUR		
THRESHOLD INSPECTOR	\$75.00	HOUR		
SENIOR TECHNICIAN	\$65.00	HOUR		
TECHNICIAN	\$65.00	HOUR	24	\$1,560.00
CADD SOIL TESTS	\$85.00	HOUR	10	\$850.00
A 1 a. MOISTURE-DENSITY RELATIONSHIP (STANDARD)	\$105.00	EACH		
A 1 b. MOISTURE-DENSITY RELATIONSHIP (MODIFIED)	\$125.00	EACH		
B NUCLEAR DENSITY TEST (UP TO 5 TESTS PER TRIP)	\$125.00	TRIP		
B1 ADDITIONAL DENSITY TESTS - NUCLEAR	\$25.00	EACH		
C SAND CONE DENWITHY TESTS (UP TO 3 TESTS PER TRIP)	\$150.00	TRIP		
C1 ADDITIONAL DENSITY TESTS - SAND CONE	\$50.00	EACH		
D FLORIDA BEARING VALUE	\$45.00	EACH		
E LIMEROCK BEARING RATION (LBR) TEST	\$300.00	EACH		
F ATTERBERG LIMITS TEST	\$75.00	EACH	2	\$150.00
F1 ATTERBERG LIMITS - LIQUID LIMIT TEST (ONLY)	\$52.00	EACH		
F2 ATTERBERG LIMITS - PLASITC LIMIT TEST (ONLY)	\$33.50	EACH		
G CARBONATE CONTENT TEST	\$185.00	EACH		
H ORGANIC CONTENT TEST	\$35.00	EACH	2	\$70.00
I DOT CORROSIVITY (SERIES)	\$185.00	EACH		
J SOIL OBSERVATION (ON-SITE)	\$55.00	HOUR		
K NATURAL MOISTURE CONTENT TESTS	\$10.00	EACH		
L UNIT WEGIHT AND MOISTURE CONTENT (UNDISTURBED SAMPLE)	\$50.00	EACH		
M GRAIN-SIZE ANALYSIS - FULL GRADATION	\$65.00	EACH	6	\$390.00
N GRAIN-SIZE ANALYSIS -SINGLE SIEVE	\$35.00	EACH		
O LABORATORY CBR + SAMPLING	\$500.00	EACH		
P - GRAIN-ZE ANALYSIS WITH HYDROMETER	\$115.00	EACH		
CONCRETE & MASONRY MATERIALS	\$140.00	SET		
A CONCRETE COMPRESSION TEST (MIN FOUR (4) CYL) - NOTE 1	•	EACH		
B ADDITIONAL CONCRETE CYLINDERS C CONCRETE COMPRESSION TEST ONLY (DELIVER TO LAB)	\$18.00 \$18.00	EACH		
D SLUMP TEST	\$10.00	EACH		
E AIR CONTENT TEST	\$15.00	EACH		
F STAND-BY TIME	\$55.00	HOUR		
G GROUT PRISM (SIX (6) PER SET) - NOTE 2	\$80.00	SET		
H 2"X2" MORTAR BUES (SIX (6) PER SET - NOTE 3	\$80.00	SET		
I ADDITIONAL MORTAR CUBES	\$18.00	EACH		
J 1 MASONRY UNITS - COMPRESSIVE STRENGTH	\$80.00	UNIT		
J 2 MASONRY UNITE - ABSORPTION	\$50.00	UNIT		
K 1 CONCRETE CORES (MIN 3) SECURE, TRIM & TEST	\$80.00	CORE		
K 2 CONCRETE CORES (MIN 3) TESTING OF CORE - NOTE 4	\$50.00	CORE		
L SWISS HAMMER TESTING	\$55.00	HOUR		
M WINDSOR PROBE TEST (MIN. 3 SHOTS)	\$150.00	TEST		
N ADDITIONAL WINDWOR PROBE TESTS	\$100.00	TEST		
AGGREGATE TESTING				
A1 GRAIN-SIZE DETERMINATION (FULL GRAIN SIZE - 8 SIEVES)	\$75.00	TEST		
A2 GRAIN-SIZE DETERMINATION (WASH THROUGH - #200)	\$45.00	TEST		
B SIEVE ANALYSIS - COARSE AGGREGATE	\$45.00	TEST		
C SPECIFY GRAVITY & ABSORPTION OF FINE OR COARSE AGGREGAT	E \$70.00	TEST		
ASPHALT TESTING	4000.00			
A ASPHALT PLANT FACILITY INSPECTION B ASPHALT CORES (OBTAINING CORE SAMPLES)	\$900.00	DAY EACH	6	¢1 350 00
	\$225.00		ь	\$1,350.00
C ASPHALT EXTRACTION & GRADATION D ASPHALT DENSITY & THICKNESS	\$150.00 \$25.00	TEST		
E MARSHALL STABILITY - NOTE 5	\$150.00	TEST		
F CORING MACHINE PLUS GENERATOR RENTAL	\$400.00	TRIP	1	\$400.00
FIELD EXPLORATION	\$ 100.00		•	5.00
A POWER AUGER BORINGS	\$10.00	FEET		
B HAND AUGERS	\$110.00	HOUR		
C 1 A STANDARD PENETRATION TESTS - TRUCK 0' TO 50'	\$13.00	FEET (DAY)	32	\$416.00
C 1 B STANDARD PENETRATION TESTS - TRUCK 0' TO 50'	\$18.00	FEET (NIGHT)		
C 2 A STANDARD PENETRATION TESTS - TRUCK 50' TO 100'	\$15.00	FEET (DAY)		
C 2 B STANDARD PENETRATION TESTS - TRUCK 50' TO 100'	\$21.00	FEET (NIGHT)		
D 1 A GROUT - TRUCK 0' TO 50'	\$6.00	FEET (DAY)	20	\$120.00
D 1 B GROUT - TRUCK 0' TO 50'		FEET (NIGHT)		
D 2 A GROUT - TRUCK 50' TO 100'	\$7.00			
D 2 B GROUT - TRUCK 50' TO 100'		FEET (NIGHT)		
E 1 A CASING - TRUCK O' TO 50'	\$7.00	FEET (DAY)	16	\$112.00
E 1 B CASING - TRUCK O' TO 50'		FEET (NIGHT)		
E 2 A CASING - TRUCK 50' TO 100'	\$9.00	FEET (DAY)		
E 2 B CASING - TRUCK 50' TO 100'		FEET (NIGHT)		
F VISUAL EXAMINATION/STRATIFY	\$100.00	HOUR		
G PERCOLATION TEST H MUCK PROBING (4 HOUR MIN)	\$300.00	TEST		
H MUCK PROBING (4 HOUR MIN.) I MOBILIZATION OF DRILLING EQUIPMENT TO PROJECT (MIN. CHAR	\$110.00 (GE) \$350.00	HOUR LUMP SUM	3	\$1,050.00
J SUPPORT VEHICLE	\$150.00 \$150.00	DAY	3	\$450.00
K DOUBLE RING INFILTRATION TEST	\$500.00	TEST	3	\$1,500.00
L FIELD PERMEABILITY		TEST (DAY)	-	, -, - 30.00
M FIELD PERMEABILITY	\$400.00	TEST (NIGHT)		
N FIELD CBR (KESSLYER METHOND)	\$300.00	EACH		
•			TOTAL	\$16,218.00
-				





Name	Latitude	Longitude
PC-01	26.686486	-80.079021
PC-02	26.686497	-80.076659
PC-03	26.686374	-80.076352
PC-04	26.686226	-80.078750
PC-05	26.685284	-80.074753
PC-06	26.682927	-80.074080
B-1	26,686993	-80.081384
B-2	26.686632	-80.079624
B-3	26.686379	-80.078111
BHP-2	26.686309	-80.079048
BHP-1	26.686917	-80.081050
BHP-3	26.683172	-80.073965



Subconsultant Contract

Marlin Engineering

Traffic Analysis



TO: Emilio Corrales, PE

HDR, Inc.

8333 NW 53rd Street, Suite 302

Doral, FL 33166

FROM: Myra E. Patino, PE, PMP

MARLIN Engineering, Inc.

3363 W. Commercial Blvd., Suite 115

Fort Lauderdale, FL 33309

SUBJECT: PBI Cargo Access Improvement Design Task Order

DATE: May 13, 2022

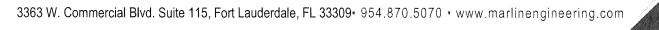
Dear Mr. Corrales,

As requested by HDR, Inc., Marlin Engineering, Inc. (MEI) has prepared the following proposal to perform a traffic analysis for the alternative as presented in the Palm Beach International Airport (PBI) Air Cargo Facility Access Feasibility Study Report (draft dated April 2020) for the next design phase of the project.

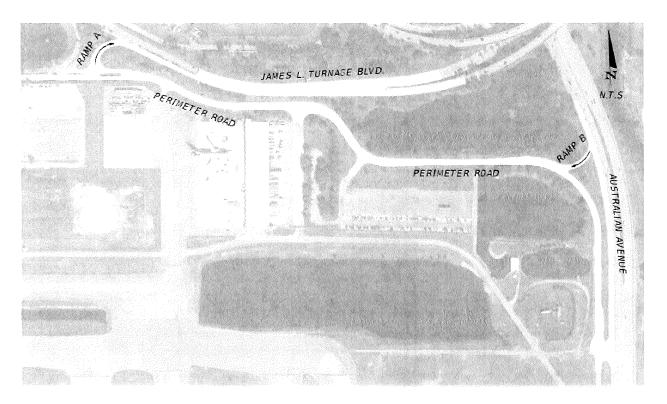
I. DESCRIPTION OF SERVICES

A Master Plan was previously developed for the Palm Beach International Airport (PBI) with the purpose of evaluating the capability of the airport's facilities to accommodate anticipated changes in demand. Air Cargo facilities were analyzed as part of the PBI Master Plan, and a deficiency was identified in the ingress/egress of vehicles to the Air Cargo building. The Feasibility Study report determined the viability of implementing egress/ingress improvements to the Air Cargo building facility access roads with the intent of improving the cargo facility vehicle operation. Several alternatives were evaluated to eliminate the use of the PBI car rental loop left side on-ramp to James L. Turnage Boulevard. This operation currently depicts safety concerns with the short merge distance, non-traditional left side on-ramp, proximity to the right side on-ramp, and need for vehicles to cross over one lane to access the I-95 on-ramps.

The proposed "Alternative 3" (as depicted in the Feasiblity Study and shown below) recommended the reconstruction of the on-ramp from Perimeter Road on to James L. Turnage Boulevard. Allowing the access of the on-ramp for Perimeter Road westbound traffic eliminates the need for trucks to use the PBI car rental loop and also conducting U-turn movements at the Perimeter Road T-intersection located just west of the on-ramp. The lane reconfiguration being proposed under Alternative 3 is not anticipated to impact existing traffic; however, traffic counts and destination travel analysis will need to be verified during the design phase to ensure that it does not disrupt the existing and future traffic operations of the facility.







Alternative 3

The following tasks will be conducted in order to prepare the necessary document for submittal by HDR, Inc. to the respective reviewing agencies for this project.

Task A - Project Methodolgy

Pertinent documents were reiewed in order to properly develop the traffic mehtodolgoy for the project. A review the draft Feasibility Study along with preliminary plans of Alternative 3 provided by HDR were made and the following tasks were definied for the study.

Task B - Define Study Area

A review of the study area will be made in order to determine the best locations to deploy equipment to conduct the data collection effort for the project. A map will be prepared to clearly identify the proposed locations noted in the next task. Per the scope coordination with HDR, it was noted that Perimeter Road will not be included in the analysis.

Task C - Data Collection

In order to ascertain the overall volume distribution in the study area, the following data collection is proposed for the analysis.

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- 7-day Average Daily Traffic (ADT) counts at 2 locations
- Turning Movement Counts (TMCs) at 5 locations
- Bluetooth Origin-Destination (O-D) Data at 4 Locations

The 7-day ADT counts will be analyzed to determine the peak periods of traffic along the study roadways. An O-D study will provide the data necessary to determine how many vehicles coming from Perimeter Road and currently using the left on-ramp to James Turnage Blvd. will be using the new Ramp A. The TMCs will be used to re-route traffic with the alternative improvements.

The locations of the proposed data collection are shown below.



In addition, the following traffic data will be collected for the project:

- Peak season conversion factor to seasonally adjust the raw existing volumes
- FDOT historical AADT volumes for use in the trends analysis

Task D – Peak Hour Volume Development

The raw turning movement volumes will be balanced and adjusted for any seasonal operations.

The opening and design years are 2024 and 2044.

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Task E - Level of Service Analysis

A traffic analysis will be conducted during the weekend and weekday peak hours for the following scenarios:

- Existing Conditions
- Future Conditions without Project for Opening/Design years
- Future Conditions with Alternative 3 for Opening/Design years

The levels of service for the freeway segment and ramps within the study area will be determined for the following using Highway Capacity Software as appropriate:

- Merge/Diverge Operations: Merging and diverging freeway segments occur primarily near or at interchanges in the presence of an on- and off-ramp. A merging analysis is considered when two or more streams of traffic combine to form a single stream of traffic, while a diverging analysis is considered when a single stream of traffic divides into two or more streams of traffic. This type of analysis examines the functionality of a merge or diverge area in terms of specific MOEs including speed, flow, or density.
- Weaving Segment Operations: Weaving sections are formed when traffic streams traveling in the same direction are forced to change lanes and cross paths over a significant length of freeway. This type of analysis examines the functionality of the weaving segment in terms of specific MOEs including speed, flow, or density.

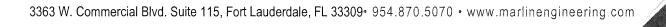
TASK F – Documentation

MEI shall produce a traffic report documenting the above tasks including appendices or figures (as appropriate). MEI will submit a draft report to HDR for submittal to the appropriate reviewing agencies. Review comments will be addressed by MEI with any modifications to be made to the final report for submittal and acceptance.

Project Administration and Coordination

MEI shall attend up to one (2) remote meetings to discuss the findings of the report with HDR and/or reviewing agencies as necessary. Additional coordination/meetings will be negotiated separately if required.

MEI will submit monthly invoices on work completed to date and provide status updates on the schedule in a timely manner.







II. SCHEDULE

The data collection schedule is proposed for the week of May 15 – May 21, with a deployment date of Monday, May 16th at the earliest.

The draft traffic report in pdf format will be submitted to HDR within 8 weeks from Notice to Proceed (NTP). A response to comments document will be submitted to HDR one week after receipt of said comments. Once accepted by the reviewing agency, any revisions stemming from the review comments will be incorporated into the final traffic report, which will be submitted 2 weeks afterwards in pdf format. If the requested changes require a significant amount of re-analysis, a revised project schedule will be submitted at that time.

III. BUDGET

For the services performed, HDR will pay MEI the lump sum fee of \$29,664.54. Any additional meetings, coordination, data collection or analysis not included in this scope, but that may be requested by the reviewing agency, will be negotiated separately as needed. This Work Order is a Lump Sum Work Order, and shall be billed monthly as a percentage of completion.

IV. ACCEPTANCE

The return of an executed copy of this propos	al would constitute our Notice to Proceed
---	---

Sincerely,

MARLIN ENGINEERING, INC.

Myra Patino, PE, PMP Traffic Engineering Manager

ACCEPTED BY:	 DATE:
ENTITY:	
TITI E:	

MARLIN ENGINEERING, INC.

PBI Cargo Access Improvement Design Task Order

MARLIN

TRAFFIC ANALYSIS

STAFF HOUR ESTIMATE

5/13/2022

Task	Activity	Project Manager	Senior Traffic Engineer	Project Engineer	Senior Planner	Traffic Engineer	Engineering Technician	CADD Technician	Clerical	TOTAL
	Rates	\$ 223.57	\$ 199.24	\$ 195.30	\$171.37	\$ 126.51	\$ 93.00	\$ 89.40	\$ 80.60	
A	Project Methodology	44.4	1,25 mag	(i or the citie)			4.49 3-61		a, Ashriy	g <u>44 a</u>
	Review traffic documents	1.0					1.0			3.0
	Research area		2.0				1.0			3.0
	Prepare methodology scope	2.0								2.0
	Sub-total Hours	3.0	3.0	-	-		2.0	-	-	8.0
	Sub-total Salary Cost	\$ 670.71	\$ 597.72	\$ -	\$ -	<u>s</u> -	\$ 186.00	S -	S -	\$ 1,454.43
В	Define Study Area			- 1915 J.A	Maria -	4694455	EST Strongs and A	Marks and April		<u> </u>
	Define Study Limits	1.0	1.0				1.0			3.0
	Prepare study area maps for report and data collection tasks						1.0			2.0
	Sub-total Hours	1.0	1.0	-	-	-	2.0	1.0		5.0
	Sub-total Salary Cost	\$ 223.57	\$ 199.24	\$ -	S -	\$ -	\$ 186.00	\$ 89.40	<u>s</u> -	\$ 698.21
С	Data Collection	r		100			De exteri agrica c			
4	Determine peak hour periods for weekday/weekend		1.0			ļ	2.0			3.0
	Analyze O-D data	1.0	1.0	ļ				16.0		18.0
	Obtain seasonal factors		ļ			-	1.0			1.0
	Collect historical AADT					<u> </u>	1.0			1.0
	Sub-total Hours	1.0	2.0	-	-	-	4.0			23.0
	Sub-total Salary Cost	\$ 223.57	\$ 398.48	\$ -	<u> </u>	<u> \$ -</u>	\$ 372.00	\$ 1,430.40	\$ -	\$ 2,424.45
D	Peak Hour Volume Development			1955	<u> </u>			1458 / 3854		
	Balance/Adjust raw volumes (weekday & weekend peak hour)	1.0				2.0				7.0
	Conduct Growth rate analysis	1.0	1.0			, ,	1.0			2.0
	Forecast Traffic for Opening & Design years without Project (Weekday & weekend pk hr)	1.0				1.0				4.0
	Forecast Traffic for Opening & Design years with Project (Weekday & weekend pk hr)	1.0	2.0			2.0	2.0			7.0
	Sub-total Hours	3.0	6.0	_	_	5.0	6.0	_	-	20.0
	Sub-total Salary Cost	\$ 670.71	\$ 1.195.44	\$ -	\$ -	\$ 632.55	\$ 558.00	\$ -	\$ -	\$ 3,056.70
E	Level of Service Analysis									
	Existing LOS Analysis (freeway & ramps, weekday & weekend pk)	1.0	2.0			4.0	2.0			9.0
	2024 No-Build LOS Analysis (freeway & ramps, weekday & weekend pk)	1.0	1.0			2.0	1.0			5.0
	2044 No-Build LOS Analysis (freeway & ramps, weekday & weekend pk)	1.0	1.0			2.0	1.0			5.0
	2024 Build LOS Analysis (freeway & ramps, weekday & weekend pk)	1.0	2.0			4.0	1.0			8.0
•	2044 Build LOS Analysis (freeway & ramps, weekday & weekend pk)	1.0	1.0			2.0	1.0			5.0
ŀ	Sub-total Hours	5.0	7.0	_	-	14.0	6.0	-	-	32.0
	Sub-total Salary Cost	\$ 1,117.85	\$ 1,394.68	\$ -	s -	\$ 1,771.14	\$ 558.00	\$ -	\$ -	\$ 4,841.67
F	Documentation									
	Prepare Draft Report	1.0	8.0			10.0		1.0		20.0
	Respond to Review Comments	1.0	2.0			4.0				7.0
	Final Report	1.0	4.0			5.0		1.0	1.0	12.0
l	QA/QC	1.0								1.0
1	Sub-total Hours	4.0	14.0	-	-	19.0	-	2.0	1.0	40.0
	Sub-total Salary Cost	\$ 894.28	\$ 2,789.36	\$ -	\$ -	\$ 2,403.69	s -	\$ 178.80	\$ 80.60	\$ 6,346.73
	Project Management									
	Project administration	2.0							1.0	3.0
1	Meetings (2)	2.0	0.0							2.0
	Sub-total Hours	4.0				_	_	_	1.0	5.0
1	Sub-total Salary Cost	\$ 894.28				s -	s -	s -	\$ 80.60	\$ 974.88
	Marlin Engineering Total Hours	21.0	33.0	-	-	38.0	20.0	19.0	2.0	133.0
	Marlin Engineering Salary Cost	\$ 4,694.97	\$ 6,574.92	s -	S -	\$ 4,807.38	S 1,860.00	\$ 1,698.60	S 161.20	\$ 19,797.07
Palm	7-day Traffic Count (ATR Volume Counts)						2			\$ 1,989.02
ı								1 0 00 5 55		0 4 (30.05
Beach	4-hour TMC (Video Dectection Count)						5		Per location	
Beach	4-hour TMC (Video Dectection Count) 7-day Origin-Destination Data						4	\$ 812.40	Per location	



END OF EXHIBIT A

Task I-22-PBI-H-007 Exhibit A Revision 0.0

EXHIBIT B: DETAILED FEES, EXPENSES AND PAYMENTS

EXHIBIT B-I: Summary of Fees

This Amendment No. 3 as described herein, consists of 1 task. As summarized below, these initial efforts have an overall budget of \$3339,430.44.

LEVEL I TASKS:

TASK LEVEL / NO.	DESCRIPTION	LUMP SUM	REIMBURSABLE EXPENSES	TOTAL
I-22-PBI-H-007	Cargo Access Improvements Design	\$332,820.44	\$6,610.00	\$339,430.44

GRAND TOTAL (AMENDMENT NO. 3)	\$339,430.44
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EXHIBIT B-II: Schedule of Payments

The Scope of Work to be completed by CONSULTANT as defined in Exhibit "A" consist of specific completion phases which shall be clearly identified on phase-by-phase basis 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 payment.

The following is a list of projects in the Work Program No.1: Amendment No. 3:

LEVEL I TASKS:

Duration: 260 Working Days (~365 Calendar Days)

Compensation: \$339,430.44

TOTAL = \$339,430.44

¹ "Deliverables" shall be defined as progress reports, prepared maps, bid documents, completed drawings, specific reports, work plans, documentation of meetings attended, assessment study reports, analysis reports, summary reports, recommendation reports and related draft reports and verifiable deliverables.

Palm Beach County Department of Airports

EXHIBIT C: PROPOSED SCHEDULES

Task I-22-PBI-H-007 Cargo Access Improvement Design
Duration: 260 Working Days (~365 Calendar Days)

EXHIBIT D – DISADVANTAGED BUSINESS ENTERPRISE COMPLIANCE

Table D-1 summarizes the estimated fee for each of our team members that are certified DBE firms for Amendment 3.

Firm	Amendment 3 Totals	% of Amendment 3
Tierra SF	\$16,218.00	5%
Quantum Electrical Engineering	\$11,451.86	3%
Brown & Phillips	\$42,271.55	12%
Marlin Engineering, Inc.	\$29,664.54	9%
TOTALS	\$99,605.95	29%

Table D-1: DBE Firms, Scheduled Payments, Scheduled % of Fee

THE REST OF THIS PAGE IS INTENTIONALLY LEFT BLANK.

Table D-2 summarizes the estimated fee for each of our team members that are certified DBE firms for the Total Contract.

Firm	Base (R2019-1157) Totals	Amendment 1 (R-2021-1024) Totals	Amendment 2 (R-2022-0574) Totals	Amendment 3 Totals	Total Fees	% of Total Contract
Tierra SF	\$51,397.33	\$0.00	\$32,455.00	\$16,218.00	\$100,070.33	6%
Brown & Phillips	\$87,727.23	\$0.00	\$67,295.83	\$42,271.55	\$197,294.61	12%
Quantum Electrical Engineering	\$0.00	\$0.00	\$42,322.64	\$11,451.86	\$53,774.50	3%
Marlin Engineering	\$0.00	\$0.00	\$0.00	\$29,664.54	\$29,664.54	2%
TOTALS	\$139,124.56	\$0.00	\$142,073.47	\$99,605.95	\$380,803.98	23%

Table D-2 DBE Firms, Scheduled Payments, Scheduled % of Total Fee

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

LOI/SOQ Project Descripti	ion: Airport Civil Consulting Ser	rvices for Palm Beach Cou	unty Departm	ent of Airports			
Name of Respondent: HDI	R Engineering, Inc.		Change C	order/Task/Ame	endment No. (if ap	plicable): Amend	ment 3
Contact Person: Cody Parha	am		E-mail Ad	dress: cody.part	nam@hdrinc.com		
Address: 1475 Centrepark B	lvd, Suite 230, West Palm Beach	, FL 33401	Phone No	.: <u>(561) 209-6641</u>	Fax No	o: <u>(561) 209-6606</u>	
		T			Percentage of	DBE Participati	on 12.55 a 1.55 a
Name, Address & Phone No. of DBE Firm	Description of Type of Work	Classification (Check applicable b		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 engineering design services	☐ Prime Consultant ✓ Subcontractor ☐ Supplier ☐ Manufacturer	-	%	%	3_%	%
Tierra South Florida Inc. 2765 Vista Parkway, Suite 10 West Palm Beach, FL 33411 561-687-8536	Geotechnical investigation services	□ Prime Consultant Subcontractor Supplier Manufacturer	_	%	%	%	5 (asian)%
Brown & Phillips, Inc. 1860 Old Okeechobee Road, Suite 509 West Palm Beach, FL 33409 (561) 615-3988	Topographic survey services	□ Prime Consultant ☑ Subcontractor □ Supplier □ Manufacturer	_	12_%	%	%	%
Marlin Engineering, Inc. 3363 W. Commercial Blvd, Suite 115 Fort Lauderdale, FL 33309 (954) 870-5070	Traffic engineering services	☐ Prime Consultant ■ Subcontractor ☐ Supplier ☐ Manufacturer	_	%	9_%	%	%
				Total Pe	ercentage of DBE	Participation:	29_%
order to be counted toward 2. Firms identified on this form Biznet website at https://ww	attainment of the DBE goal. n must be certified as a DBE by t w3.dot.state.fl.us/EqualOpportur	the State of Florida's Unif	fied Certificati	ion Program. Cert	ification status can be	verified on the Flori	dvantaged Business Enterprise", da Department of Transportation expenditure will be counted towa
By signing this form the ur the DBE Firms to ensure the					3E Firms on the F	Project and that t	he Respondent will monito
By: Melan	e suf	****	Date:_Jul	y 20, 2022			
Signaturé / Melanie E. Fowler, Vice P	resident, HDR Engineering	g, Inc.					

Print Name/Title of Person Executing on Behalf of the Respondent

LOI/SOQ Project Description: Airport Civ	il Consulting Services for	Palm Beach County Department of Airports	_
Change Order/Task /Amendment No. (if applicable): Amendr	ment 3	
Name of Prime Respondent: HDR Engine	eering, Inc.		•
Name of DBE Firm: Brown & Phillips, Inc.			
The undersigned is certified as a Disac Program. Check one or more classifica		Enterprise by the State of Florida's Unified Certificati	on
🗶 Black 🏻 🗈 Hispanic	□Women	□Other (Please Specify)	
□ Prime Consultant 💢 Subcontractor	□ Manufacturer	□ Supplier	
The undersigned is prepared to perform project (specify in detail the particular was a second control of the particular was a second co		escribed work in connection with the above-reference reof to be performed):	ed
Topographic Survey Services			_
(Additional Sheets may be used as necessary.)			
Total Percentage of Participa	tion by DBE Firm fo	or this Project:12 %	
and will enter into a formal agreement Beach County.	for work with you co	onditioned upon your execution of a contract with Pa	lm
If the undersigned intends to suspended to suspending to subcontractor, please complete the		ortion of the work described above to anoth	ier
N/A		N/A % a DBE Certified	
(Name of Subcontractor)	(Percentage	e of work to be subcontracted) Non-DBE	
The undersigned affirms that it has subcontracting the work to another s		essary to perform the work described above withous ept as noted above.	ut
	Anthony Printed Name	Phillips, Inc. Brown, CEO e of DBE Subcontractor www	
	Date: Ma	y 18, 2022	

I Consulting Services for Pa	m Beach County Department of A	Airports
f applicable): Amendmer	nt 3	
ering, Inc.		
	nterprise by the State of Fl	orida's Unified Certification
□Women	□Other (Please Specify)
□ Manufacturer	□ Supplier	
		with the above-referenced
		0.04
tion by DBE Firm for	this Project:	9 %
		9 % on of a contract with Palm
for work with you con	ditioned upon your executi	
for work with you con	ditioned upon your executi	on of a contract with Palm
for work with you con bcontract any port following:	ditioned upon your executi	on of a contract with Palm
for work with you con Specific contract any port	ditioned upon your execution of the work described M/A % f work to be subcontracted)	on of a contract with Palm ribed above to another
for work with you con bcontract any port following: (Percentage of the resources necesses abcontractor, exceptions)	ion of the work described work to be subcontracted) sary to perform the work tas noted above.	on of a contract with Palm ribed above to another □ DBE Certified □ Non-DBE
for work with you consider the resources necesses abcontractor, exceptions of the resources necesses and contractor, exceptions of the resources of the	ion of the work described work to be subcontracted) sary to perform the work that as noted above.	on of a contract with Palm ribed above to another DBE Certified Non-DBE described above without
for work with you consider the resources necesses abcontractor, exceptions of the resources necesses and contractor, exceptions of the resources of the	ditioned upon your execution of the work described work to be subcontracted) sary to perform the work that as noted above.	on of a contract with Palm ribed above to another DBE Certified Non-DBE described above without
	f applicable): Amendmer ering, Inc. Ivantaged Business Er tions as applicable: Women Manufacturer rm the following desc	Ivantaged Business Enterprise by the State of Fletions as applicable:

LOI/SOQ Project Description: Airport Civ	il Consulting Services for P	Palm Beach County Department of	Airports	
Change Order/Task /Amendment No. (if applicable): Amendm	ent 3		
Name of Prime Respondent: HDR Engine	eering, Inc.			
Name of DBE Firm: Tierra South Florida, In	ıc.			
The undersigned is certified as a Disac Program. Check one or more classifica	dvantaged Business E ations as applicable:	Enterprise by the State of F	londa's Unified Certification)
□ Black □ Hispanic	□Women	XOther (Please Specify	/) Asian	
□ Prime Consultant 💢 Subcontractor	□ Manufacturer	□ Supplier		
The undersigned is prepared to perfo project (specify in detail the particular v			with the above-referenced	i
Geotechnical Investigation Services				
(Additional Sheets may be used as necessary.)				
Total Percentage of Participa	ation by DBE Firm fo	or this Project:	<u> </u>	
and will enter into a formal agreement Beach County.	for work with you co	enditioned upon your execut	tion of a contract with Paln	1
If the undersigned intends to se subcontractor, please complete the		rtion of the work desc	ribed above to anothe	r
N/A		N/A %	□ DBE Certified	
(Name of Subcontractor)	(Percentage	of work to be subcontracted)	□ Non-DBE	
The undersigned affirms that it has subcontracting the work to another			described above withou	t
	Raj Krishna	asamy, P.E.		
	Printed Name	of DBE Subcontractor		
	By:	7/10		
		nature // 20, 2022		
	Date:	,		

Attachment No. 2

Airport General Consulting					
Professional Services - 2018					
RFP #: DOA-18-2B - Civil					
Date: November 29, 2017		4 - 3 - 3 - 3 - 3 - 3			
Marketplace: BC, PBC, MDC				MARK 177	
DBE Project Goal: 20% - adjusted for past participation					
NAICS Description	NAICS Code	Estimated Percentage of	Available DBE	Total Available	Weighted Percentage
Engineering Services	541330	70.00%	149	1286	8.11%
Architectural Services	541310	0.00%	40	667	0.00%
Construction Management	236220	15.00%	239	815	4.40%
Testing Services	541380	2.50%	12	92	0.33%
Land Surveying & Mapping	541370	2.50%	24	144	0.42%
Planning Services	541320	10.00%	15	166	0.90%
Other Consulting Services	541690	0.00%	64	571	0.00%
Total		100.00%			14.16%

General Consulting Services Contracts	DBE Participation (to date)
R2006-2418	21%
R2009-1643	31%
R2011-1333	29%
R2014-0031	13%
Median Participation	25%
Adjustment for Past Participation	20%
DBE Project Goal	Percentage
	20%