Meeting Date: March 22, 2022

Submitted By: Department of Airports

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Amendment No. 5 to the General Consulting Agreement with RS&H, Inc. for Consulting/Professional Services in the amount of $1,325,943.87 and to exercise the second one (1) year renewal option 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 RS&H, Inc. for general airport planning and design was approved by the Board on May 7, 2019 (R-2019-061) in the amount of $2,004,570.58 in order to carry out the approved Capital Improvement Programs for the County’s Airports. Amendment No. 1 was approved by the Board on May 5, 2020 (R-2020-0414) increasing the amount of the contract by $2,304,608.30. Amendment No. 2 was approved by the Board on October 20, 2020 (R-2020-1607) increasing the amount of the contract by $3,196,990.03. Amendment No. 3 was approved by the Board on May 4, 2021 (R-2021-0576) exercising the first one (1) year renewal option for the continuation of services provided under this agreement. Amendment No. 4 was approved by the Board on June 15, 2021 (R-2021-0844) increasing the amount of the contract by $2,644,110.87. Approval of Amendment No. 5 will allow the County, at its sole discretion, to exercise the second one-year renewal option for the continuation of services provided under this agreement and will provide an additional $1,325,943.87 to complete the following tasks: Palm Beach International Airport (PBI) Switchgear Normal Power Distribution System (NPDS) Replacement Construction Administration (CA) & Resident Project Representative (RPR) Services; PBI 400Hz Ground Power Unit (GPU) Replacement CA & RPR Services; PBI Pre-Conditioned Air (PCA) and GPU Point-of-Use Design & Bidding Services (Supplemental); and Task III Services - Miscellaneous Planning and Engineering Services. Work to be completed under these Task III Services will be issued in accordance with PPM CW-F-0050, by way of a separate proposal or task authorization. RS&H, Inc. is a Jacksonville, Florida based firm; however, the majority of the work to be completed in this agreement will be managed through their Fort Lauderdale, Florida offices in conjunction with several Palm Beach County-based and South Florida-based sub-consultants and firms. A Disadvantaged Business Enterprise (DBE) goal of 18% was set for this contract. RS&H, Inc. committed to 23% DBE participation for this agreement. The anticipated DBE participation based upon the approved tasks is 33.76%. The current paid to date DBE participation is 32.05%. The DBE participation for this Amendment is 41.13%. 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. This amendment allows for the continuation of services necessary for the development and operation of the County’s airport system.

Attachments:
1. Amendment No. 5 with RS&H, Inc. – 2 Originals
2. DBE Goal Information

Recommended By: _________________________
Department Director

Approved By: _________________________
County Administrator
II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

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<td>Program Income (County)</td>
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# ADDITIONAL FTE POSITIONS (Cumulative)

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

Budget Account No: Fund 4111 Department 121 Unit A436 Object 6504
Reporting Category 121 A107 6505
                      121 A342 6504

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

Funds are available in the above referenced accounts.

C. Departmental Fiscal Review: 

III. REVIEW COMMENTS

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

OFMB Contract Dev. and Control

B. Legal Sufficiency:

Assistant County Attorney

C. Other Department Review:

Department Director

REVISED 11/17

(THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT)
CORPORATE RESOLUTION
AUTHORIZING SIGNATORY FOR
PALM BEACH COUNTY CONTRACTS

I, John J. Bottaro, the undersigned Corporate Secretary of RS&H, Inc., a Florida Corporation (the “Corporation”), hereby certify that: The Corporation is duly organized and existing under the laws of the State of Florida and the following is a true, accurate and complete transcript of a resolution contained in the minute book of the Board of Directors of said Corporation duly held on the 5th day of May, 2021, at which meeting there was present and acting throughout a quorum with full power and authority to adopt this resolution and confer the powers granted to the person hereinafter described, and that the proceedings of said meeting were in accordance with the charter and by-laws of said Corporation, and that said resolution has not been amended or revoked and is in full force and effect:

RESOLVED, that Rodney L. Bishop, Jr., Senior Vice President of the Corporation, is hereby authorized and empowered to execute in the name of the Corporation all proposals, agreements, supplements, contracts, and other documents he may deem necessary or appropriate, in connection with Palm Beach County, Florida.

IN WITNESS WHEREOF, I have executed my name as Corporate Secretary and affixed the seal of the Corporation this 13th day of May, 2021.

[Signature]
John J. Bottaro
Corporate Secretary
AMENDMENT NO. 5 TO CONTRACT
BETWEEN
PALM BEACH COUNTY DEPARTMENT OF AIRPORTS
AND
RS&H, INC.
FOR
FOR CONSULTING / PROFESSIONAL SERVICES
AT
PALM BEACH COUNTY AIRPORTS

This Amendment No. 5 to the Contract is made as of the _____ day of ____________, 2022, by and between Palm Beach County, a Political Subdivision of the State of Florida, by and through its Board of Commissioners, hereinafter referred to as the COUNTY, and RS&H, Inc., [ ] an individual, [ ] partnership, [X] a corporation authorized to do business in the State of Florida, hereinafter referred to as the CONSULTANT, whose Federal Tax I.D. number is 59-2986466.

WITNESSETH

WHEREAS, on May 7, 2019, the COUNTY entered into an Agreement (R2019-0612) 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 May 5, 2020, the COUNTY entered into an Amendment No. 1 (R-2020-0414) with the CONSULTANT to provide additional professional services for the Department of Airports, Palm Beach County, in accordance with Article 26 of the original Agreement; and

WHEREAS, on October 20, 2020, the COUNTY entered into an Amendment No. 2 (R-2020-1607) with the CONSULTANT to provide additional professional services for the Department of Airports, Palm Beach County, in accordance with Article 26 of the original Agreement; and

WHEREAS, on May 4, 2021, the COUNTY entered into an Amendment No. 3 (R-2021-0576) with the CONSULTANT to exercise the first one (1) year renewal option for the continuation of services; and

WHEREAS, on July 1, 2021, the COUNTY entered into an Amendment No. 4 (R-2021-0844) with the CONSULTANT to provide additional professional services for the Department of Airports, Palm Beach County, in accordance with Article 26 of the original Agreement; and

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

WHEREAS, Article 2 of the Contract defines the performance period of the contract as two (2) years, with two (2) one (1) year renewal options, the exercise of which are within the COUNTY’S sole control and discretion, and

RS&H, INC. 1  AMENDMENT 5 TO R2019-0612
JANUARY 2022 1  CONTRACT FOR CONSULTING/PROFESSIONAL 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 second one (1) year renewal option for the continuation of services provided by the CONSULTANT under this Contract.

2. The parties hereby agree to amend the Contract to include the Scope of Services and Fees as outlined in Exhibit A. The total amount to be paid by the COUNTY to the CONSULTANT for professional services, including any out of pocket expenses, shall not exceed One Million, Three-Hundred Twenty-Five Thousand, Nine Hundred Forty-Three Dollars and Eighty-Seven Cents ($1,325,943.87) for the services in Amendment No. 5 to the original Contract.

3. The parties hereby agreed to amend the Contract Article 1 Services. The CONSULTANT’S representative/liaison during the performance of this Contract shall be Mr. Pat Hargrove, telephone no. 904-256-2437.

4. The parties hereby agreed to amend the Contract Article 27 Notice. The CONSULTANT’S notices shall be addressed to:

   Mr. Pat Hargrove, AIA NCARB
   RS&H, Inc.
   10748 Deerwood Park Blvd S
   Jacksonville, FL 32256

5. Except as specifically amended herein, all other terms and conditions of the Contract shall remain in full force and effect.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
IN WITNESS WHEREOF, the parties have caused the Fifth 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, RS&H, Inc., has caused these presents to be signed in its corporate name by its duly authorized officer (Name) Rodney L. Bishop, (Title) Senior Vice President, Aviation, 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.

ATTEST:

JOSEPH ABRUZZO
CLERK OF THE COUNTY COURT
AND COMPTROLLER

By: [Signature]
Deputy Clerk

WITNESS:

[Signature]
Holly Harper
Name (type or print)

CONSULTANT:

RS&H, Inc.
COMPANY NAME

By: [Signature]
Rodney L. Bishop
Name (type or print)

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY

BY: [Signature]
County Attorney

(Corporate Seal)

APPROVED AS TO TERMS
AND CONDITIONS

By: [Signature]
Department Director
AMENDMENT NO 5 INDEX

CERTIFICATE OF INSURANCE

EXHIBIT A: AMENDMENT NO. 5

EXHIBIT A-1 — Task I-22-PBI-R-024: Switchgear NPDS Replacement Construction Administration & RPR Services

EXHIBIT A-2 — Task I-22-PBI-R-025: 400Hz GPU Replacement Construction Administration & RPR Services

EXHIBIT A-3 — Task I-22-PBI-R-026: PCA and GPU Point of Use Design & Bidding Services (Supplemental)

EXHIBIT A-4 — Task III Services

EXHIBIT B: DETAILED FEES, EXPENSE 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
# Palm Beach County
## Compliance Summary Report

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<th>Policy #</th>
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</tr>
</tbody>
</table>

**Risk Profile:** Standard - Professional Services

**Required Additional Insured:** Palm Beach County Board of County Commissioners

**Ownership Entity:**
EXHIBIT A: AMENDMENT NO. 5

This Amendment No 5 is in accordance with the Contract for Consulting/Professional Services (Agreement R-2019-0612) between Palm Beach County (COUNTY) and RS&H, Inc. (CONSULTANT) dated May 7, 2019.

CERTIFICATE OF INSURANCE

EXHIBIT A: AMENDMENT NO. 5

EXHIBIT A-1 – Task I-22-PBI-R-024: Switchgear NPDS Replacement Construction Administration & RPR Services

EXHIBIT A-2 – Task I-22-PBI-R-025: 400Hz GPU Replacement Construction Administration & RPR Services

EXHIBIT A-3 – Task I-22-PBI-R-026: PCA and GPU Point of Use Design & Bidding Services (Supplemental)

EXHIBIT A-4 – Task III Services

EXHIBIT B: DETAILED FEES, EXPENSES AND PAYMENTS

EXHIBIT B-I: Summary of Fees

EXHIBIT B-II: Schedule of Payments

EXHIBIT C – PROPOSED SCHEDULES

EXHIBIT D – DISADVANTAGED BUISNESS ENTERPRISE COMPLIANCE
EXHIBIT A-1 – Task I-22-PBI-R-024: Switchgear NPDS Replacement Construction Administration & RPR Services
Switchgear NPDS Replacement
Construction Administration
& RPR Services

Version 3.0
January 26, 2022
Palm Beach County (PBC) Department of Airports (DOA)
West Palm Beach, FL

Task Authorization No. I-22-PBI-R-024
RS&H Project No. 206-3101-024

Prepared by RS&H, Inc. at the direction of PBC DOA.
I PROJECT DESCRIPTION

The Airport has requested that RS&H (Consultant) under the Agreement with RS&H for Airport Facilities and System Consulting Services for Palm Beach County Department of Airports Project No. DOA 18-2A provide a scope and fee for Construction Administration (CA) Services for the NPDS Switchgear Replacement Project at Palm Beach International Airport (Project).

The following professional disciplines/services/specialties are expected to play a significant role in the development of the Project:

- Project Management
- Structural Engineering CA
- Electrical Engineering CA
  - Lighting
  - Power
  - Updating Short Circuit Device Coordination and Arc Flash Study
- Low Voltage Systems CA
- Civil Engineering CA
- Mechanical Engineering CA
- Partial Resident Project Representative (RPR) Services

The Consultant design team is made up of the following professionals:

<table>
<thead>
<tr>
<th>Consultant/Subconsultant</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS&amp;H</td>
<td>PM, Civil Engineering CA, Structural Engineering CA, Mechanical Engineering CA, Low Voltage System CA</td>
</tr>
<tr>
<td>Quantum Electrical Engineering, Inc.</td>
<td>Electrical Engineering CA including warranty inspection, Partial RPR Services</td>
</tr>
</tbody>
</table>

This proposal is to provide construction administration and partial RPR services to support the construction phase of the Switchgear NPDA replacement project. The project includes the replacement of primary electrical components that provide electrical service to the Terminal Complex at Palm Beach International Airport (PBI). As part of this project, the main substation, Switchgear "NPDS" and Substation B & Substation C and electrical distribution systems.
Project Estimate – The Project’s total construction cost is estimated to be $12,578,174.00 based on the GMP dated October 22, 2021 provided by Turner Construction Company (CMAR).

Project Duration – The Project’s schedule is defined in the accompanying Project Schedule which has been developed by the CMAR. The Project time is approximately (27) twenty-seven months from Notice to Proceed (NTP) to Substantial Completion (SC). The estimated construction time is approximately (20) twenty months. The actual construction schedule may vary as the Construction progresses. Changes to the construction schedule may require changes in the Consultant’s efforts and require adjustments to the compensation indicated in this proposal. Proposal includes an additional month after substantial completion for project closeout.

II PROJECT TASKS
Construction Administration tasks will include support services to confirm the project construction is in compliance with the contract documents. These services include, submittal/shop drawing review, Response to Requests for Information, Attendance of regular construction progress meetings, periodic site visits, partial RPR services, substantial completion and final punch list sites visits, and project closeout. These tasks are further described below.

Task 1 CONSTRUCTION ADMINISTRATION & PARTIAL RPR SERVICES
The scope (and fee) proposed under this task is based upon an estimated total construction duration noted above. The scope and fee may need to be modified should the construction duration exceed this time. Specific task breakdowns are as follows:
Task 1.1 Pre-Construction Conference
The Consultant shall attend one (1) pre-construction conference meeting at the Airport. The CMAR will prepare the Pre-Construction Meeting agenda and meeting minutes, and distribute the minutes to appropriate parties.

The following disciplines/individuals will be present from the Consultant team:

- Project Manager
- Electrical Engineer

Task 1.2 RFI/Substitutions/Submittal Review
The Consultant shall review and respond to Request for Information (RFI’s), substitution requests, shop drawings, samples, and other submissions furnished by the CMAR and submitted to the Consultant. The Consultant shall review and approve as required. The Consultant will utilize Newforma for tracking, reviewing, and responding to RFIs and submittals.

Submittal review will be limited to the initial review and a single resubmittal. Any submittal reviews beyond two is excluded.

Task 1.3 Witnessing Factory Testing
The Consultant shall participate as a witness in the factory testing required by Specifications 261126, 261319 and 261326 for Substations B & C, MSC-1 & 2 and SWGR NPDS. Each test is anticipated to be (4) four hours.

- Electrical Engineer will participate in up to (16) sixteen hours of factory testing via ZOOM or another virtual program.

Task 1.4 Construction Progress Meetings
Members of the Consultant Team shall participate in bi-weekly construction coordination meetings until the Contractor has mobilized, approximately (7) seven months. Once the Contractor has mobilized and is on-site, members of the Consultant Team shall participate in weekly construction coordination meetings, approximately (20) twenty months. Each meeting is anticipated to be (1) one hour.

- Pre-Mobilization: (14) meetings total
  - (14) Meetings - The Consultant will participate via ZOOM or another virtual program.
  - The following individuals will be present from the Consultant team at each construction meeting (remote or on-site as noted above):
    - Project Manager
    - Electrical Engineer

- Post-Mobilization: (80) eighty meetings total
(20) Meetings - The Consultant will be on-site. On-site participation in construction meetings will be coupled with regularly scheduled monthly site visits of Task 1.5
- The following disciplines/individuals will be present from the Consultant team at each construction meeting (remote or on-site as noted above):
  - Project Manager
  - Electrical Engineer
  - Resident Project Representative (included in Task 3.1)

(60) Meetings - The Consultant will participate via ZOOM or another virtual program throughout the duration of construction.
- The following disciplines/individuals will be present from the Consultant team at each construction meeting (remote or on-site as noted above):
  - Project Manager
  - Electrical Engineer
  - Resident Project Representative (included in Task 3.1)

Post-Mobilization: Meeting total varies
- The Consultant will participate via ZOOM or another virtual program.
- The following disciplines/individuals from the Consultant team can be available as necessary for the number indicated:
  - Civil Engineer: Up to (4) four construction meetings
  - Mechanical Engineer: Up to (4) four construction meetings
  - Low Voltage Systems: Up to (4) four construction meetings

The CMAR shall conduct the meetings, prepare agendas and provide the meeting minutes.

Task 1.5 Construction Progress Site Visits
The Consultant will conduct construction progress site visits as follows and a written observation report, documenting the findings of the site visit will be provided for each site visit:

- Project Manager will conduct monthly construction progress site visits, (20) twenty visits averaging (1) one site visit per month
- Electrical Engineer will conduct weekly construction progress site visits, averaging (4) four hours per week while the Contractor is on-site (20 months)
- Civil Engineer will visit site as necessary for up to (5) five site visits
- Mechanical Engineer will visit site as necessary for up to (5) five site visits
- Low Voltage Systems will visit site as necessary for up to (5) five site visits
- Unassigned Site Visits: An additional (10) ten site visits to be used as necessary.

Switchgear NPDS Replacement Construction Administration - (Version 3.0)
Task 1.6 FPL Utility Coordination Meetings
The Consultant will participate in coordination meetings with FPL and provide a meeting minutes. Consultant anticipates (4) four meetings with each meeting anticipated to be (3) three hours.

The following disciplines/individuals will be present from the Consultant team at each coordination meeting:

- Project Manager: Virtual
- Electrical Engineer: On-Site or Virtual

Task 1.7 Shutdown Coordination Effort
The Consultant will participate in construction shutdown coordination site visits and meetings. These meetings are anticipated to be required beyond the weekly progress meetings. The Contractor shall conduct the meetings, prepare agendas and provide the meeting minutes. The Consultant anticipates (2) two hours each week during construction.

The following disciplines/individuals will be present from the Consultant team at each coordination meeting:

- Project Manager: Virtual
- Electrical Engineer: On-Site or Virtual

Task 1.8 Change Directives and Change Notices
The Consultant will prepare documentation to issue Change Directives and Change Notices with the approval of the Airport.

Owner directed changes that require additional design and documentation effort from the Consultant will be handled through an amendment to the contract. No changes will be executed, and no work progressed associated with those changes without prior approval from the Airport.

Task 1.9 Substantial Completion Observation and Punchlist
The Consultant shall perform, together with the Airport’s authorized representative(s), a substantial completion observation of the project at each phase of the Project. The Consultant shall prepare a punchlist of items that must be completed or that are deficient. The CMAR shall submit phase punchlist to the Consultant prior to observation. There are (4) four phases to the project.

The following disciplines/individuals will be present from the Consultant team at each Substantial Completion Observation:
SCOPE OF WORK

- Project Manager
- Electrical Engineer
- Mechanical Engineer

Task 1.10 Final Observation
The Consultant shall perform a final observation at each phase to determine if the project has been completed in accordance with the contract documents, completion of punchlist of Task 1.9, and if the CMAR has fulfilled all of its obligations thereunder so that the Consultant may recommend approval (form Airport) if applicable, in writing, the issuance of a Certificate of Substantial Completion for each phase (Certificate of Substantial Completion) and final payment to the CMAR. There are (4) four phases to the project.

The following disciplines/individuals will be present from the Consultant team at each Final Observation:

- Project Manager
- Electrical Engineer

Task 1.11 Short Circuit, Device Coordination & Arc Flash Analysis
Consultant's Electrical Engineer will update the existing Short Circuit, Device Coordination & Arc Flash Study pertaining to the electrical equipment added, removed and/or modified as part of the PBI 400Hz GPU Replacement Project. The scope shall include:

- Updating the existing power system model in SKM Power Tools for Windows
- Re-run the Short Circuit, Device Coordination and Arc Flash Calculations
- Updating one-lines, written report and tabular data
- Develop arc flash labels on new/modified equipment

Task 1.12 Project Management
Consultant will oversee scheduling, resource allocation, monitoring, oversight, direction, and control for all aspects of the Consultant team's efforts including assembly and coordination of all documentation.

The Consultant will issue monthly progress reports with each invoice to the Airport project manager during this portion of the project.

TASK 2: PROJECT CLOSEOUT
Project closeout includes the preparation of the record documents, final BIM models, and final invoicing.
Task 2.1 Record Documents
The Consultant shall obtain red-line as-built drawings from Construction Contractor and prepare "Record Drawings", which shall become the property of the Airport corrected to show significant changes made in the work during the construction of the project. Such corrections shall be the "as-built" prints, drawings, field sketches and other data furnished to the Consultant by the Airport and the contractor, and any amendments issued during construction.

   Electronic updated drawings (.pdf)
   Electronic updated specifications (.pdf)
   Electronic updated drawings (CAD)

Task 2.2 Electrical Equipment Warranty Period Inspection
The Consultant shall conduct an on-site observation of the Project prior to the expiration of any electrical equipment warranty period and advise the Owner of recommended action, if any, to be taken under the terms of any warranty. The project will include an (11) eleven-month electrical equipment warranty inspection for each phase of the project. There are (4) four phases to the project.

The following disciplines/individuals will be present from the Consultant team to complete the warranty inspections:

   Electrical Engineer

Task 2.3 Project Management and Discipline Coordination
Consultant will oversee scheduling, resource allocation, monitoring, oversight, direction, and control for all aspects of the team’s efforts including assembly and coordination of all documentation.

The Consultant will issue monthly progress reports with each invoice to the Airport project manager during this portion of the project.

Task 3.1 Partial RPR Services
The Consultant shall provide part-time RPR services for the project that will consist of on-site presence and observation for (10) ten hours per week. The RPR will observe the on-site construction to confirm the work is in compliance with the contract documents and is progressing according to the construction schedule. The RPR will provide a weekly observation report identifying the progress of the construction and any deficiencies or discrepancies observed. The RPR will attend the construction progress meetings noted above as well as
coordinate with other discipline team members for support during site visits. RPR will be provided by Quantum Electrical Engineering, Inc.

III MEETINGS AND PRESENTATIONS

The following meetings and presentations will be attended as part of this proposal:

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IV DELIVERABLES

The following deliverables will be submitted as part of this proposal:

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<td>2.1</td>
<td>Record Documents (Drawings and Specifications)</td>
<td>.pdf &amp; CAD</td>
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<tr>
<td>2.3</td>
<td>Monthly Project Status Reports</td>
<td>.pdf</td>
</tr>
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</table>

V PROPOSED PROJECT CONSTRUCTION SCHEDULE

See Schedule Attachment. Schedule is provided by CMAR.

VI ASSUMPTIONS AND EXCLUSIONS

The following assumptions have been made for this Scope of Work:

- CMAR will provide punchlist to Consultant at each phase prior to Substantial Completion site visit
- The CMAR shall conduct the meetings, prepare agendas and provide the meeting minutes.

The following items are excluded from this Scope of Work unless otherwise noted:
Fees associated with permitting
Submittal reviews beyond two

Construction Progress Site Visits other than listed herein RS&H will only perform services/work related in any way to PFAS chemicals or substances possibly containing PFAS chemicals (including but not limited to sampling, handling and remediating) to the extent the Palm Beach County Department of Airports specifically directs, in writing, RS&H to perform such services/work, and RS&H shall not be liable for the nonperformance of such services/work.

VII PROFESSIONAL SERVICES FEE AND FEE TYPE

RS&H will provide for a Fixed Lump Sum Fee as shown below. See Attachment for a breakdown of costs.

RS&H (Task 1 & 2) = $233,577.08
Quantum (Task 1 & 2) = $163,883.27
Total = $397,560.35

RS&H will provide for a Maximum Fee, utilizing agreed to billing rates, Not-To-Exceed as shown below. See Attachment for a breakdown of costs.

Quantum (Task 3) = $120,459.20

RS&H will provide the above referenced services for a Maximum Not-to-Exceed Fee as shown below. See Attachment for a breakdown of costs.

RS&H (Expenses) = $8,880.00

Total Fee as follows:

Lump Sum Fee (Task 1 & 2) = $397,560.35
Maximum Fee, Not-to-Exceed (Task 3) = $120,459.20
Cost-Plus, Not-to-Exceed (Expenses) = $8,880.00

Total Project Fee (Not-To-Exceed) = $526,899.55

Should scope items/activities/efforts/durations be modified at the request of the Airport or need to be adjusted based on construction scheduling, the Consultant Team will need to modify the fee to accommodate the changes. Such changes will be compensated through an amendment (through Additional Services requested by the Consultant) to the Task Order or similar vehicle. Effort, fee, and schedule adjustments resulting from a change in scope will be assessed and approved by the Airport prior to the execution of the change.
# PALM BEACH COUNTY DEPARTMENT OF AIRPORTS

Airport Facilities & Systems Planning, Design, Engineering and Construction Management Professional Services

RS&H, INC.
Switchgear NPDS Replacement Construction Administration & RPR Services
Task Authorization No. T22-PBH-R-024

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Hours</th>
<th>Fee</th>
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<tbody>
<tr>
<td>Task 1</td>
<td>Construction Administration Services (Lump Sum)</td>
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<td>Task 2</td>
<td>Project Closeout (Lump Sum)</td>
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<td>$9,564.20</td>
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<td>Task 3</td>
<td>Partial RPR Services (Maximum Fee, Not-To-Exceed)</td>
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Subtotal RS&H Labor Hours 854
Subtotal RS&H Labor Fee $233,577.08

Subconsultants

<table>
<thead>
<tr>
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<th>Fee</th>
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<tr>
<td>Quantum Electrical Engineering, Inc. (Lump Sum)</td>
<td>$163,983.27</td>
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<tr>
<td>Quantum Electrical Engineering, Inc. (Maximum Fee, Not-To-Exceed)</td>
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Subtotal Subconsultant Fee $284,452.47

Expenses

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Subtotal Expenses $8,880.00

Total Project Fee $526,899.55
## Switchgear NPDS Replacement Construction Administration

### Average Burdened Labor Rate

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<td>Hourly Rate</td>
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### Principal/Manager Time Breakdown

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<th>Principal/Manager Time</th>
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### Breakdown by Task

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<th>Description</th>
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### Additional Costs Breakdown

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### Total Costs

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### Task 2

#### Project Closeout

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### Task 3

#### Partial RPM Services

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### Total for All Tasks

| Total | 608.10  |

---

### Notes

- Additional comments and details as needed for the tasks listed above.
## Switchgear NPDS Replacement Construction Administration

### EXPENSES

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<th>Task</th>
<th>Description</th>
<th># FTE</th>
<th># People</th>
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<td>1</td>
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<td>1</td>
<td>5</td>
<td>500</td>
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<tr>
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<td>Construction Phase Site Visits - Low Voltage Systems</td>
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<td>1</td>
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<td>5</td>
<td>500</td>
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<td>1</td>
<td>50</td>
<td>1</td>
<td>5</td>
<td>150</td>
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**Subtotal Travel**: $5,600

**Other Expenses**
- Translators: $5
- Phone: $5
- Hotel: $400
- Special Airport Fees: $2
- Other: $2

**Subtotal Other Expenses**: $1,407

**Total Expenses**: $7,007
Switchgear NPDS Replacement Construction Administration

<table>
<thead>
<tr>
<th>Sub Consultant Effort by Major Task Item</th>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
<th>Total</th>
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<tr>
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<td>$ 158,791.03</td>
<td>$ 5,192.24</td>
<td>$ 120,458</td>
<td>$ 284,442.47</td>
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</table>

**TOTAL SUBCONSULTANTS** $ 284,442.47
January 19, 2022

RS&H, Inc.
Mr. Aaron Jackson, PE, LEED AP
Aviation Structural Engineer
10748 Deerwood Park Blvd South,
Jacksonville, Fl. 32256

Subject: Electrical Engineering Construction Administration (CA) Services Fee Proposal for the Palm Beach County Department of Airports (DOA) – Switchgear NPDS Replacement Project. Includes Task 1, 2 and 3 as reflected in RSH Scope of Services, Dated January 2022

Dear Aaron,

Quantum Electrical Engineering, Inc. (QUANTUM) is pleased to provide RS&H an electrical engineering Construction Administration (CA) services fee proposal for the Palm Beach International Airport Switchgear Replacement Project Task 1, 2 and 3 with an anticipated construction duration of 20 months from notice to proceed to substantial completion. The following tasks are included in our scope:

**Task 1: Construction Administration Services**

**Task 1.1: Pre-Construction Conference**
- Includes attendance at (1) pre-construction meeting.

**Task 1.2: RFI/Substitutions/Submittal Review**
- Includes requests for information reviews & approvals.
- Includes substitution request reviews & approvals.
- Includes electrical shop drawings submittals reviews & approvals. Assumption of 38 shop drawings.

**Task 1.3: Witnessing Factory Testing**
- Includes participation in up to 16 hours of factory testing via virtual program for SWGR NPDS, MSC-1 & 2 and Substation B & C.

**Task 1.4: Construction Progress Meetings**
- Includes attendance for up to 94 (1hr) progress construction meetings that will be attended as follows:
  - Attend 74 (1hr) progress construction meetings either virtually or via teleconference.
  - Attend 20 (1hr) on-site progress construction meetings.

**Task 1.5: Construction Progress Site Visits**
- Includes 80 weekly (4hrs each) on-site observation visits.
- Includes a written observation reports, documenting the findings of each site visit.
Task 1.6: FPL Utility Coordination Meetings
- Includes attendance for 4 (3hr) FPL coordination meetings that will be attended either virtually or on-site.

Task 1.7: Shutdown Coordination Efforts
- Includes attendance for up to 150 hours of shutdown coordination site visits and meetings that will be attended either virtually, teleconference or on-site.

Task 1.8: Change Directives and Change Notices
- Includes change order reviews.
- Includes minor plan alterations and revisions.

Task 1.9: Substantial Completion Observation and Punchlist
- Includes 4 site visits for substantial completion inspections (1 visit per phase) (4 phases).
- Development of electrical punch list per each substantial completion inspection.

Task 1.10: Final Observation
- Includes 4 site visits for final observation to verify completion of punch list (1 visit per phase) (4 phases).

Task 1.11: Short Circuit, Device Coordination & Arc Flash Analysis
- Up-dating the existing power system model in SKM Power Tools for Windows for the modifications to the electrical distribution systems. This update will be extensive as it impacts the entire upstream electrical distribution system in the Terminal, Concourses and Old Long Term Parking.
- Perform Short Circuit, Device Coordination and Arc Flash Calculations using SKM.
- Review and evaluate device settings on approximately 100 circuit breakers/relays. Replace existing and/or create new Time Current Curves (TCC) for approximately 50 devices.
- Update one-lines, written report and tabular data.
- Develop new Arc Flash labels and replace the arc flash labels (approximately 500 labels) impacted by the Switchgear Replacement.
- Modify circuit breaker and relay settings for new and existing equipment as required by the study.

Task 2: Project Closeout

Task 2.1: Record Documents
- Include review of Contractor “Red Line Plan Mark-ups.”
- Includes development of record drawings and specifications based on Contractor “Red Line Plan Mark-ups.”

Task 2.2: Warranty Period Inspection
- Includes 4 site visits for warranty period inspections (1 visit per phase) (4 phases).
- Development of electrical warranty discrepancy list per each inspection.

Task 3: Resident Project Representative (RPR) Services

Task 3.1: Partial Resident Project Representative (RPR) Services
Includes part-time RPR services of on-site presence and observation for five visit per week, 2 hours per visit for 80 weeks.
Includes a written observation report, documenting the findings of each site visit.
Includes attendance at up to 80 progress construction meetings.

Exclusions and Assumptions

- QUANTUM shall provide one electronic set of record drawings in PDFs and AutoCAD and record specifications in PDF. RS&H shall provide all distribution and printing of all documents to DOA.

Our proposed Lump Sum Fee for Task 1 is: $158,791.03
Our proposed Lump Sum Fee for Task 2 is: $5,192.24
Our proposed Not-To-Exceed for Task 3 is: $120,458.20

Our proposed total fee is: $284,442.47
(See Attachment for Breakdown)

Sincerely,

Amy Champagne-Baker, PE
President
<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Hours</th>
<th>Rate</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1: Construction Administration Services</td>
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<td></td>
<td></td>
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<tr>
<td>Task 1.1: Pre-Construction Conference (1 meeting at 2hr ea)</td>
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<td>Task 1.6: P&amp;L Utility Coordination Meetings (4 meetings at 2hrs ea)</td>
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<td>Task 1.7: Submittion Coordination Site Visits and Meetings</td>
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<td>Task 1.9: Substantial Completion Observation and Punchlist (4 visits at 8hrs ea)</td>
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<td>Task 1.10: Final Observation (4 visits at 6hrs ea)</td>
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<td>Task 1.11: Short Circuit Device Coordination &amp; Arc Flash Analysis</td>
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| Subtotal | 0 | 376 | 1,177 | 32 | 80 | $108,791.03 |

| Task 2: Project Closeout |        |        |          |
| Task 2.1: Record Documents | 4 | 8 | 18 | 8 | 4 | $8,709.40 |
| Task 2.2: Warranty Period Inspection (4 visits at 2hr ea) | 4 | 8 | 18 | 8 | 4 | $1,103.84 |

| Subtotal | 0 | 12 | 6 | 4 | $5,102.24 |

| Task 3: Project Closeout |        |        |          |
| Task 3.1: Partial Resident Project Representative (RPR) Services (80weeks visits at 11hrs ea) | 80 | 900 | $152,453.20 |

| Subtotal | 0 | 24 | 16 | 32 | 80 | 800 | $152,453.20 |

| Grand Total Hours | 0 | 888 | 84 | 40 | 40 | 1,293 |

| Grand Total Labor Cost | $0.00 | $136,739.04 | $8,801.44 | $9,287.69 | $1,017.40 | $3,676.40 | $394,443.47 |
EXHIBIT A-2 – Task I-22-PBl-R-025: 400Hz GPU Replacement Construction Administration & RPR Services
400Hz GPU Replacement
Construction Administration
& RPR Services

Version 3.0
January 26, 2022
Palm Beach County (PBC), Department of Airports (DOA),
West Palm Beach, Florida

Task Authorization No. 1-22-PBI-R-025
RS&H Project No. 206-310-1-025

Prepared by RS&H
at the direction of Palm Beach
County Department of Airport.
1 PROJECT DESCRIPTION

The Palm Beach County of Airports has requested that RS&H (Consultant) under Agreement with RS&H for Airport Facilities and System Consulting Services for Palm Beach County Department of Airports Project No. DOA 18-2A provide a scope and fee for Construction Administration Services for the 400Hz GPU Point of Use Replacement Project at Palm Beach International Airport (Project).

The following professional disciplines/services/specialties are expected to play a significant role in the development of the Project:

- Project Management
- Architecture CA
- Mechanical Engineering CA
- Electrical Engineering CA
  - Lighting
  - Power
  - Addressable Fire Alarm
  - Updating Short Circuit, Device Coordination and Arc Flash Analysis
- Partial Resident Project Representative (RPR) Services
- Low Voltage Systems CA
  - Security (Access Control)
  - IT Network Systems
- Airfield Engineering CA
- Structural Engineering CA
- Fire Protection Engineering CA
- Special Inspection / Threshold Inspection (SI/TI)

The Consultant design team is made up of the following professionals:

Consultant/Subconsultant: RS&H


Consultant/Subconsultant: Quantum Electrical Engineering, Inc.

Involvement: Electrical Engineering, Partial RPR Services, Updating Short Circuit, Device Coordination and Arc Flash Analysis

Consultant/Subconsultant: Tierra South Florida, Inc.

Involvement: SI/TI

This proposal is to provide construction administration services and partial RPR services to support the construction phase of the 400 Hz GPU replacement project. The project includes the removal of existing central 400 Hz converter equipment and 400Hz/28vDC equipment at 28
boarding bridges on Concourses B and C. New point of use 400 Hz ground power units will be
provided at each boarding bridge, new electrical panels and switchgear equipment, and new
HVAC equipment will be provided in the 400Hz electrical rooms in Concourses B and C. New
doors, door hardware, access control and associated structural modifications will be provided at
the 400Hz and Main Switchgear rooms as part of the project.

**Funding Expectations** – The Project’s total budgeted construction cost is estimated to be
approximately $7,900,000.

**Project Duration** – The Project’s construction schedule is anticipated to be 430 calendar days
from the issuance of Notice to Proceed to the successful contractor, including project closeout.
The project will also include 11 month warranty inspections for the GPU units and central 400Hz
electrical rooms. The actual construction schedule may vary as the Construction progresses.
Changes to the construction schedule may require changes in the Consultant’s efforts and
require adjustments to the compensation indicated in this proposal.

II PROJECT TASKS
Construction Administration tasks will include support services to confirm the project
construction is in compliance with the contract documents. These services include,
submittal/shop drawing review, Response to Requests for Information, Attendance of regular
construction progress meetings, periodic site visits, partial RPR services, substantial completion
and final punch list site visits, project closeout and warranty period inspections. These tasks are
further described below.

**Task 1.1 Construction Administration Services**
The scope (and fee) proposed under this task is based upon an estimated total construction
duration of 430 calendar days, with additional warranty inspections at 11 months for each GPU
and 400 Hz electrical rooms. The scope and fee may need to be modified should the
construction duration exceed this time. Specific task breakdowns are as follows:

The following disciplines/individuals will be present from the Consultant team:

- Project Manager
- Electrical Engineer
Resident Project Representative

**Task 1.2 RFI/Substitutions/Submittal Review**
The Consultant shall review and respond to Request for Information (RFI's), substitution requests, shop drawings, samples, and other submissions furnished by the contractor and submitted to the Consultant. The Consultant Project Manager shall review and approve as required. The Consultant will utilize Newforma for tracking, reviewing, and responding to RFIs and submittals.

Submittal review will be limited to the initial review and a single resubmittal. Any submittal reviews beyond two is excluded.

**Task 1.3 Construction Progress Meetings**
Members of the Consultant Team shall participate in bi-weekly construction coordination meetings until the Contractor has begun work on site. Once Contractor has begun work on site, Members of the Consultant Team shall participate in weekly construction coordination meetings. Each meeting is anticipated to be (1) one hour. The Consultant will prepare the meeting agendas and meeting minutes and distribute the minutes to appropriate parties.

- Pre-Mobilization: (4) meetings total
  - (4) Meetings - The Consultant will participate via ZOOM or another virtual program.
    - The following individuals will be present from the Consultant team at each meeting:
      - Project Manager
      - Electrical Engineer
- Post-Mobilization: (55) meetings total
  - (14) Meetings - The Consultant will be on-site. On-site participation in construction meetings will be coupled with regularly scheduled monthly site visits of Task 1.4. The number of meetings averages to (1) one on-site meeting per month for the duration of construction.
    - The following individuals will be present from the Consultant team at each meeting:
      - Project Manager
      - Resident Project Representative (included in Task 3.1)
  - (41) Meetings - The Consultant will participate via ZOOM or another virtual program.
    - The number of meetings averages to (3) three virtual meeting per month for the duration of construction.
      - The following individuals will be present from the Consultant team at each meeting:

---

*400Hz GPU Replacement CA & RPR Services - (Version 3.0)*
• Project Manager
• Resident Project Representative (included in Task 3.1)

Post-Mobilization: Meeting total varies
  o The Consultant will participate via ZOOM or another virtual program. The number of meetings averages to (3) three virtual meeting per month for the duration of construction
    ▪ The following disciplines/individuals from the Consultant team can be available as necessary for the number indicated:
      • Electrical Engineering: Up to 15 progress meetings
      • Mechanical Engineering: Up to 4 progress meetings
      • Architectural Engineering: Up to 4 progress meetings
      • Structural Engineering: Up to 4 progress meetings
      • Low Voltage/Systems: Up to 4 progress meetings

Task 1.4 Construction Progress Site Visits
The Consultant will conduct construction progress site visits as follows:

  Project Manager will conduct monthly construction progress site visits, (14) fourteen visits averaging (1) one site visit per month once the Contractor has started work on site.
  Electrical Engineer will visit site as appropriate during the construction progress for up to (6) six site visits
  Mechanical Engineer will visit site as appropriate during the construction progress for up to (2) two site visits
  Structural Engineer will visit site as appropriate during the construction progress for up to (2) two site visits
  Architectural will visit site as appropriate during the construction progress for up to (2) two site visits
  Low Voltage/Systems will visit site as appropriate during the construction progress for up to (2) two site visits

A written observation report, documenting the findings of the site visit will be provided for each site visit.

Task 1.5 Change Directives and Change Notices
The Consultant will prepare documentation to issue Change Directives (Field Bulletins) and Change Notices (Field Instructions) with the approval of the Airport. The Consultant will review change proposals submitted by Contractor associated with Change Directives (Field Bulletins).

Owner directed changes that require additional design and documentation effort from the Consultant will be handled through an amendment to the contract. No changes will be
executed, and no work progressed associated with those changes without prior approval from the Airport.

**Task 1.6 Special Inspection / Threshold Inspection**

Tierra South Florida, Inc. shall perform Special Inspection / Threshold Inspection services in accordance with the building code. All inspections will be performed in accordance with the Structural Special Inspection Plan / Threshold Inspection Plan. All elements will be inspected for compliance with the reference drawings and special inspection / threshold inspection plan.

Inspections by the Special Inspector / Threshold Inspector will be performed on an as needed basis and coordinated with the progress of construction. A conformance / non-conformance log will be performed and updated on a monthly basis. Daily inspection logs will be provided on a daily basis. Additionally, a monthly report will be submitted to the authority having jurisdiction and Owner. Report will be a summary of the daily reports and the material testing reporting.

**Task 1.7 Substantial Completion Observation and Punchlist**

The Consultant shall perform, together with the Airport’s authorized representative(s), a substantial completion observation of the project at each turnover. The Consultant shall prepare a punchlist of items that must be completed or that are deficient.

Substantial completion site visits will be provided for each 400Hz GPU unit turn-over during the construction of the project. Substantial completion site visits will also be provided at each 400 Hz electrical room turn-over and completion of door modifications. It is anticipated that the following quantity of substantial completion site visits will be provided:

- Project Manager: Up to 14 site visits for GPU unit turnover and 400 Hz electrical room turnovers.
- Electrical Engineering: Up to 14 site visits for GPU unit turnover and 400 Hz electrical room turnovers.
- Mechanical Engineering: Up to 2 site visits for 400Hz electrical room turnover.
- Architectural: Up to 2 site visits for 400Hz electrical room turnover.
- Structural Engineering: Up to 2 site visits for 400Hz electrical room turnover.
- Low Voltage/Systems: Up to 2 site visits for 400Hz electrical room turnover.

**Task 1.8 Final Observation**

The Consultant shall perform a final observation at each turnover to determine if the project has been completed in accordance with the contract documents and if the contractor has fulfilled all of its obligations thereunder so that the Consultant may recommend approval (from Airport) if
applicable, in writing, the issuance of a Certificate of Substantial Completion and final payment to the contractor.

The following disciplines/individuals will be present from the Consultant team at each Final Observation:

- Project Manager: Up to 14 site visits for GPU unit turnover and 400 Hz electrical room turnovers.

**Task 1.9 Project Management**
Consultant will oversee scheduling, resource allocation, monitoring, oversight, direction, and control for all aspects of the Consultant team’s efforts including assembly and coordination of all documentation.

The Consultant will issue monthly progress reports with each invoice to the Airport project manager during this portion of the project.

**Task 1.10 Short Circuit, Device Coordination & Arc Flash Analysis**
Consultant’s Electrical Engineer will update the existing Short Circuit, Device Coordination & Arc Flash Study pertaining to the electrical equipment added, removed and/or modified as part of the PBI 400Hz GPU Replacement Project. The scope shall include:

- Updating the existing power system model in 5KM Power Tools for Windows
- Re-run the Short Circuit, Device Coordination and Arc Flash Calculations
- Updating one-lines, written report and tabular data
- Develop arc flash labels on new/modified equipment

**Task 2.1 Record Documents**
The Consultant shall obtain red-line as-built drawings from Construction Contractor and prepare "Record Drawings", which shall become the property of the Airport corrected to show significant changes made in the work during the construction of the project. Such corrections shall be the "as-built" prints, drawings, field sketches and other data furnished to the Consultant by the Airport and the contractor, and any amendments issued during construction.

- Full size electronic to scale drawings updated sets of drawings in PDF and CAD format.
- Electronic updated sets of specifications in PDF format.
Task 2.2 Warranty Period Inspection
The Consultant shall conduct an on-site observation of the Project prior to the expiration of any warranty period and advise the Owner of recommended action, if any, to be taken under the terms of any warranty. As the project will have various phased warranty periods for the GPU replacement equipment and 400 Hz electrical equipment, there will be a requirement for multiple warranty period inspections. The Consultant will coordinate to conduct warranty period inspections concurrent with later construction progress site visits to the greatest extent possible, but this proposal includes the following anticipated warranty period inspection site visits:

▷ Project Manager: Up to 14 site visits for warranty period inspection.
▷ Electrical Engineering: Up to 14 site visits for warranty period inspection.
▷ Mechanical Engineering: Up to 2 site visits for warranty period inspection.
▷ Architectural: Up to 2 site visits for warranty period inspection.
▷ Structural Engineering: Up to 2 site visits for warranty period inspection.
▷ Low Voltage/Systems: Up to 2 site visits for warranty period inspection.

Task 2.3 Project Management and Discipline Coordination
Consultant will oversee scheduling, resource allocation, monitoring, oversight, direction, and control for all aspects of the team’s efforts including assembly and coordination of all documentation.

The Consultant will issue monthly progress reports with each invoice to the Airport project manager during this portion of the project.

Task 3.1 Partial RPR Services
The Consultant shall provide part-time RPR services for the project that will consist of on-site presence and observation for (30) thirty hours per week. The RPR will observe the on-site construction to confirm the work is in compliance with the contract documents and is progressing according to the construction schedule. The RPR will provide a weekly observation report identifying the progress of the construction and any deficiencies or discrepancies observed. The RPR will attend the construction progress meetings noted above as well as coordinate with other discipline team members for support during site visits. RPR will be provided by Quantum Electrical Engineering, Inc.
III MEETINGS AND PRESENTATIONS

The following meetings and presentations will be attended as part of this proposal:

<table>
<thead>
<tr>
<th>Task</th>
<th>Presentation / Meeting / Site Visit</th>
<th>Total Meetings</th>
<th>In-Person Meetings/Site Visits</th>
<th>Conference Calls/ Web-Based</th>
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<td>Construction Progress/Coordination Meetings</td>
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<td>1.7</td>
<td>Substantial Completion Site Visits</td>
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<td>2.2</td>
<td>Warranty Period Inspection Site Visits</td>
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<td>3.1</td>
<td>Partial RPR Site Observations</td>
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IV DELIVERABLES

The following deliverables will be submitted as part of this proposal:

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<tbody>
<tr>
<td>1.1</td>
<td>Preconstruction Meeting Agenda and Meeting Minutes</td>
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<tr>
<td>1.4</td>
<td>Construction Progress Site Visit Reports</td>
<td>PDF</td>
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<tr>
<td>1.6</td>
<td>Special Inspection / Threshold Inspection Reports</td>
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<td>1.7</td>
<td>Substantial Completion Punch List Reports</td>
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<td>1.8</td>
<td>Monthly Project Status Reports</td>
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<td>1.10</td>
<td>Short Circuit, Device Coordination &amp; Arc Flash Report</td>
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<td>2.1</td>
<td>Record Documents -Drawings and Specifications</td>
<td>PDF &amp; CAD</td>
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<td>2.2</td>
<td>Warranty Period Inspection Reports</td>
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<td>2.3</td>
<td>Monthly Project Status Reports</td>
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<tr>
<td>3.1</td>
<td>Weekly RPR Project Progress Reports</td>
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</table>

V ASSUMPTIONS AND EXCLUSIONS

The following assumptions have been made for this Scope of Work:

Site Observations and RPR on-site presence will be during normal working hours while the contractor is on-site.

Contractor will provide field mark-ups in electronic format for the completion of Record Documents.

Warranty Period inspections will occur at 11 months from each substantial completion turn-over of 400 Hz GPU units and Electrical Rooms.
The following items are excluded from this Scope of Work unless otherwise noted:

- Submittal reviews beyond two
- Fees associated with permitting
- Attendance of contractor/building inspector testing or site inspection visits.
- RS&H will only perform services/work related in any way to PFAS chemicals or substances possibly containing PFAS chemicals (including but not limited to sampling, handling and remediating) to the extent the Palm Beach County Department of Airports specifically directs, in writing. RS&H to perform such services/work, and RS&H shall not be liable for the nonperformance of such services/work.

VI PROFESSIONAL SERVICES FEE AND FEE TYPE

RS&H will provide for a Fixed Lump Sum Fee as shown below. See Attachment for a breakdown of costs.

\[
\begin{align*}
RS&H \text{ (Task 1 & 2)} &= \$298,420.26 \\
Quantum \text{ (Task 1 & 2)} &= \$28,938.16 \\
Tierra South Florida, Inc \text{ (Task 1)} &= \$3,165.00 \\
\text{Total} &= \$330,523.42
\end{align*}
\]

RS&H will provide for a Maximum Fee, utilizing agreed to billing rates, Not-To-Exceed as shown below. See Attachment for a breakdown of costs.

\[
\begin{align*}
\text{Quantum (Task 3)} &= \$228,774.70
\end{align*}
\]

RS&H will provide the above referenced services for a Maximum Not-to-Exceed Fee as shown below. See Attachment for a breakdown of costs.

\[
\begin{align*}
\text{RS&H (Expenses)} &= \$20,251.00
\end{align*}
\]

Total Fee as follows:

\[
\begin{align*}
\text{Lump Sum Fee (Task 1 & 2)} &= \$330,523.42 \\
\text{Maximum Fee, Not-to-Exceed (Task 3)} &= \$228,774.70 \\
\text{Cost-Plus, Not-to-Exceed (Expenses)} &= \$20,251.00
\end{align*}
\]

\[
\text{Total Project Fee (Not-To-Exceed)} = \$579,549.12
\]

Should scope items/activities/efforts/durations be modified at the request of the Airport or need to be adjusted based on design/construction scheduling, the Consultant Team will need to modify the fee to accommodate the changes. Such changes will be compensated through an amendment (through Additional Services requested by the Consultant) to the Task Order or
similar vehicle. Effort, fee, and schedule adjustments resulting from a change in scope will be assessed and approved by the Airport prior to the execution of the change.
PALM BEACH COUNTY DEPARTMENT OF AIRPORTS  
Airport Facilities & Systems Planning, Design, Engineering and Construction Management Professional Services  

RS&H, INC.  
400 Hz Construction Administration & RPR  
Task Authorization No. I-22-PBI-R-025  

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
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<th>Fee</th>
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<td>Task 2</td>
<td>Project Closeout (Lump Sum)</td>
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<td>Task 3</td>
<td>Partial RPR Services (Maximum Fee, Not-To-Exceed)</td>
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Subtotal RS&H Labor Hours 1,297
Subtotal RS&H Labor Fee $298,420.26

Subconsultants
- Quantum Electrical Engineering, Inc. (Lump Sum) $28,938.16
- Quantum Electrical Engineering, Inc. (Maximum Fee, Not-To-Exceed) $228,774.70
- Tierra South Florida, Inc. (Lump Sum) $3,165.00

Subtotal Subconsultant Fee $260,877.86

Expenses
- Travel $19,851.00
- Other $400.00

Subtotal Expenses $20,251.00

Total Project Fee $579,549.12
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<td>Activity 3</td>
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**Notes:**
- Budget figures are estimates.
- Actual figures are actual expenditures to date.
- Progress percentages reflect the completion status of each activity.
## EXPENSES

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<th>Item</th>
<th>Rate</th>
<th>Hours</th>
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<td><strong>SUBTOTAL OTHER EXPENSES</strong></td>
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I-22-PBI-R-025 - 400 Hz CA & RPR - Fee_20220126.xls

1/27/2022
### 400 Hz Construction Administration & RPR

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<thead>
<tr>
<th>Sub Consultant Effort by Major Task Item</th>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
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<td>Quantum Electrical Engineering, Inc.</td>
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<td>Terra South Florida</td>
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<td><strong>TOTAL SUBCONSULTANTS</strong></td>
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</table>
January 18, 2022

RS&H, Inc.
Mr. Keith Nix, PE, LEED AP
Senior Aviation Buildings Engineer
10748 Deerwood Park Blvd South,
Jacksonville, FL 32256

Subject: Electrical Engineering Construction Administration (CA) Services Fee Proposal for the Palm Beach County Department of Airports (DOA) - Palm Beach International Airport 400Hz Ground Power Unit (GPU) Replacement. Includes Task 1 and 2 as reflected in RSH Scope of Services, Dated September 2021

Dear Keith:

Quantum Electrical Engineering, Inc. (QUANTUM) is pleased to provide RS&H an electrical engineering Construction Administration (CA) services fee proposal for the Palm Beach International Airport 400Hz Ground Power Unit (GPU) Replacement Task 1 and 2 with an anticipated construction duration of 430 calendar days. The following tasks are included in our scope:

Task 1: Construction Administration Services

Task 1.1: Pre-Construction Conference
- Includes attendance at pre-construction meeting.

Task 1.2: RFI/Substitutions/Submittal Review
- Includes requests for information reviews & approvals.
- Includes substitution request reviews & approvals.
- Includes electrical shop drawings submittals reviews & approvals. Assumption of 15 shop drawings.

Task 1.3: Construction Progress Meetings
- Includes attendance at up to 19 progress construction meetings either virtually or via teleconference.

Task 1.4: Construction Progress Site Visits
- Includes up to 6 periodic on-site observation visits.
- Includes a written observation report, documenting the findings of each site visit.

Task 1.5: Change Directives and Change Notices
- Includes change order reviews.
- Includes minor plan alterations and revisions.

Task 1.6: Substantial Completion and Final Observations
- Includes up to 14 site visits for substantial completion inspections.
- Development of electrical punch list per each substantial completion inspection.
Mr. Keith Nix, P.E.
Electrical Engineering CA Services Fee Proposal for the 400Hz Ground Power Unit (GPU) Replacement

Task 1.9: Short Circuit, Device Coordination & Arc Flash Analysis
- Updating the existing power system model in SKM Power Tools for Windows for the modifications to the electrical distribution systems serving the 400Hz Rooms.
- Perform Short Circuit, Device Coordination and Arc Flash Calculations using SKM.
- Update one-liners, written report and tabular data.
- Develop Arc Flash labels on new/modified equipment.
- Modify circuit breaker settings and adhere new arc flash labels to equipment.

Task 2: Project Closeout

Task 2.1: Record Documents
- Include review of Contractor “Red Line Plan Mark-ups.”
- Includes development of record drawings based on Contractor “Red Line Plan Mark-ups.”

Task 2.2: Warranty Period Inspection
- Includes up to 14 site visits for warranty period inspections.
- Development of electrical warranty discrepancy list per each inspection.

Task 3: Resident Project Representative (RPR) Services

Task 3.1: Partial Resident Project Representative (RPR) Services
- Includes part-time RPR services of on-site presence and observation for five visit per week, 6 hours per visit for 55 weeks.
- Includes a written observation report, documenting the findings of each site visit.
- Includes attendance at up to 55 progress construction meetings.

Exclusions and Assumptions
- QUANTUM shall provide one electronic set of record plans for Task 2 to RS&H in PDFs and AutoCAD. RS&H shall provide all distribution and printing of all documents to DOA.

Our proposed Lump Sum Fee for Task 1 is: $ 25,090.12
Our proposed Lump Sum Fee for Task 2 is: $ 3,848.04
Our proposed Not-To-Exceed Fee for Task 3 is: $ 228,774.70
Our proposed total fee is: $ 257,712.86
(See Attachment for Breakdown)

Sincerely,

Amy Champagne-Baker, PE
President

Palm Beach County
2755 Vista Parkway, Suite 1-9
West Palm Beach, FL 33411
561.210.9224

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

www.QuantumElectricalEngineering.com
<table>
<thead>
<tr>
<th>Phase of Work</th>
<th>Task 1: Construction Administration Services</th>
<th>Task 2: Project Closeout</th>
<th>Task 3: Project Closeout</th>
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<td>1. Pre-Construction Conference</td>
<td>1. Record Documents</td>
<td>1. Partial Nst Project Rep (RPS) Services</td>
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<td>1.2 RFV/Substitutions/Submittal Review</td>
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<td>1.5 Services (50 visits at 0.1 hr ea)</td>
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<td>1.3 Substantial Completion and Final Observations (16 visits at 2 hrs ea)</td>
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<td>1.6 Short Circuit, Device Coordin &amp; Arc Flash Analysis</td>
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</table>
December 22, 2021
Revised January 26, 2022

RS&H
10478 Deerwood Park Blvd South
Jacksonville, FL 32256

Attention: Mr. Keith Nix, PE
Senior Aviation Buildings Engineer

Subject: Proposal for Threshold Inspection Services
PBLA 400 HZ Replacement
Palm Beach International Airport
West Palm Beach, Florida
TSFGeo Proposal No. 2112-911

Dear Keith:

As requested, TSFGeo is pleased to submit this proposal for providing Threshold Inspection Services for the above referenced project. Herein, we provide a general discussion of services that we understand will be required for this project, present our Schedule of Fees for such services.

PROJECT DESCRIPTION

Based on the available information, we understand that the project will consist of a replacing 6 doors in Concourse C. this will involve demolition of existing headers and installation of new headers and CMU block.

QUALIFICATIONS

TSFGeo is a recognized MBE consulting engineering and testing firm providing integrated services in several disciplines, including geotechnical engineering, construction services, materials engineering & testing, roof & pavement consulting, threshold services, and facilities consulting and engineering.

TSFGeo’s Florida offices, located in Miami Lakes, West Palm Beach, Orlando, and Tampa, have over 45 engineers, inspectors, and support staff available to assist our clients. Our inspectors are ACI, CTQP and FDOT trained/certified in their respective disciplines, as required by industry standards. Our engineering staff includes registered professional engineers with significant construction experience in South Florida.
PBIA 400 HZ Replacement  
TSFGeo Proposal No. 2112-911

TSFGeo has earned a reputation for delivering quality service at reasonable costs. TSFGeo has successfully completed thousands of projects for a variety of industries and organizations, including private, corporate and industrial clients; medical facilities, civilian and military agencies of the federal, state and local governments, colleges and universities, and local education agencies.

PROPOSED SCOPE OF SERVICES

We recognize that construction projects are built in the "real world" and that proposed schedules do not always work out. Therefore, we appreciate the importance of being able to respond to requests for our services on short notice and of working hours other than the normal schedule, including nighttime work and weekend work.

Based on our understanding of the project requirements, we anticipate that the following testing services will be required during the design and construction phases of the project.

THRESHOLD INSPECTION SERVICES

- Provide Threshold Inspector Representative to observe installation of structural steel, CMU walls, concrete placement and grout placement and other inspections necessary to comply with permitted construction documents and Threshold inspection plan;
- Mold compressive strength test cylinders (5 cylinders per set);
- Test compressive strength concrete cylinders; and,
- Provide final compliance letter that all inspected work was performed as per Florida Building Code, project specifications and city requirements.

Please note that our services do not include supervision or direction of the actual work. Job site safety will be the sole responsibility of the contractor. Construction defects not related to structural works, such as water penetration (in roofing, windows, doors, louvers), and building finishings (interior, exterior), stairs (railings, surface finish, tread/riser ratio) are not part of our scope of work. TSFGeo cannot be responsible for non-structural defects that could lead to structural elements failures down the road.

ESTIMATED COST

The actual cost of our services will be highly dependent on the construction schedule. We propose to provide our services on a unit cost basis; based on the actual work performed and the unit fees attached to this proposal. Invoices will be submitted monthly for the portion of work completed. An estimate for each proposed task is indicated below:

- Threshold Inspection Services $3,165.00
PBIA 400 HZ Replacement
TSFGeo Proposal No. 2112-911

We appreciate the opportunity to offer our services for your project. Should you have any questions or need additional information, do not hesitate to contact me at (561) 687-8536.

Respectfully submitted,

TSFGE0

R. Morgan Dickinson, P.E.  Stephen Hey
Principal Engineer  Engineering Specialist

Attachments:  Unit Fee Schedule
PBIA 400 HZ Replacement
TSFGeo Proposal No. 2112-911

FEES BREAKDOWN FOR
Construction Materials Testing Services

THRESHOLD INSPECTION SERVICES

1. Concrete tests, estimate 3 sets @ $45.00/set
   $ 135.00

2. Threshold Inspector Representative, Estimate 36 hours @ $75.00/hour
   $ 2700.00

3. Principal Engineer, P.E. (Coordination, site visits, sign and seal reports)
   Estimate 2 hours @ $175.00/hour
   $ 350.00

TOTAL THRESHOLD INSPECTION SERVICES:
   $ 3,165.00

General Notes:

Please note the following procedures will apply to our services:

1. Field work hours for inspectors are Monday thru Friday, 8:00AM to 5:00PM.
2. We need 24 hours’ notice by contacting our office (561) 687-8536 prior to any site visit.
3. We can accommodate weekend inspections if necessary with a minimum of 48 hours’ notice.
4. Field work beyond 8 hours/day, night time and weekends (OT) will be billed at the regular rate times 1.5
5. Stand-by time will be billed at hourly rate listed.

AUTHORIZATION

<table>
<thead>
<tr>
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<th>INVOICE TO:</th>
</tr>
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<td>Name:</td>
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<td>Title:</td>
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<td>Date:</td>
<td>Phone #:</td>
</tr>
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EXHIBIT A-3 – Task I-22-PBI-R-026: PCA and GPU Point of Use Design & Bidding Services (Supplemental)
PCA and GPU Point of Use
Design & Bidding Services
(Supplemental)
Scope of Work

Version 1.0
January 24, 2022
Palm Beach County (PBC) Department of Airports / DOA,
West Palm Beach, FL

Task Authorization No: I-22-PBI-R-026

Prepared by RS&H Inc. at the
direction of PBC DOA
I PROJECT DESCRIPTION

The Airport has requested that RS&H (Consultant) under the Agreement with RS&H for Airport Facilities and System Consulting Services for Palm Beach County Department of Airports Project No. DOA 18-2A provide a scope and fee to replace the existing central 400 Hz system in Concourses B and C, installation of point of use, stand-alone PC Air units, and the removal of the existing central glycol plant and piping distribution network under Task I-19-PBI-R-020 (Project).

II PROJECT TASKS

TASK TWO DESIGN PACKAGES

Task 1.1 Two Design Packages

Due to funding, the Project separated the project into two separate packages: (1) for the 400Hz and (1) for the PCA after the 60% Document Submittal. This required the Consultant to revise the drawings to remove scope, and required additional, duplicate efforts to recreate these drawings, and specs for the PCA package, and administer a separate bidding package and bidding process, as well as a separate permit effort.

TASK FACILITY MANAGEMENT SYSTEM

Task 2.1 Facility Management System

During design of the Project, PBI asked the Consultant to design an independent facility management network for the 400Hz/PCA control/monitoring system. The original intent in our proposal for Project was that the new 400Hz GPUs and PCA units would be connected into the existing network that monitored these systems previously. After further research by PBI into the capabilities of the existing system, the Consultant was directed to design a new independent network.

III PROFESSIONAL SERVICES FEE AND FEE TYPE

For Lump Sum fee:

RS&H will provide the above referenced services for a Fixed Lump Sum Fee of $19,495.20. See Attachment for a breakdown of costs.
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<td>$19,495.20</td>
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<tr>
<td>SUBCONSULTANTS</td>
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<td>$-</td>
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<td>REIMBURSABLE EXPENSES</td>
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<td>Reimbursable Expenses</td>
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**SUMMARY:**

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<td>2.1</td>
<td>Facility Management System</td>
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**TOTAL LABOR**

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**Total Proposed Fee**

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**Total Basic Services Contract Value**

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**RS&H, INC.**

**PROJECT PROPOSAL**

Task Authorization No. 1-22-PBI-R-026 - PCA and GPU Point of Use Design & Bidding Services (Supplemental)

**Labor Effort ( Lump Sum )**

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**RS&H, INC.**

**PROJECT PROPOSAL**

Task Authorization No. 1-22-PBI-R-026 - PCA and GPU Point of Use Design & Bidding Services (Supplemental)

**Labor Effort ( Lump Sum )**

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EXHIBIT A-4 – Task III Services
TASK III SERVICES

Level 3 Tasks – Miscellaneous Planning and Engineering Services: Work to be completed under Level 3 Tasks will be issued per the level of authority contained in PPW CW-F-050, by way of a separate proposal or task authorization, as described in the original Consulting Agreement (R-2019-0612).

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<td>Misc. AEP and Construction Consulting Services Amendment #5</td>
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<td>Sub-total (Level 3)</td>
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EXHIBIT B-I: Summary of Fees

This Amendment #5, as described herein, consists of multiple tasks. As summarized below, these initial efforts have an overall budget of $1,325,943.87.

LEVEL 1 TASKS:

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<th>DESCRIPTION</th>
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<td>I-22-PBI-R-024:</td>
<td>Switchgear NP05 Replacement Construction Administration &amp; RPR Services</td>
<td>$397,560.35</td>
<td>$120,459.20</td>
<td>$8,880.00</td>
<td>$526,899.55</td>
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<td>I-22-PBI-R-025:</td>
<td>400Hz GPU Replacement Construction Administration &amp; RPR Services</td>
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<td>PCA and GPU Point of Use Design &amp; Bidding Services (Supplemental)</td>
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LEVEL 3 TASKS:

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<th>DESCRIPTION</th>
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<td>Task III-19-DOA-R-001</td>
<td>Misc. AEP and Construction Consulting Services Amendment #5</td>
<td>$200,000.00</td>
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Grand Total (Amendment #5) $1,325,943.87
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 #2; Amendment #5:

<table>
<thead>
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<td>Compensation:</td>
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<tr>
<td>Task I-22-PBI-R-025</td>
<td>400Hz Replacement Construction Administration &amp; RPR Services</td>
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<td>Duration:</td>
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<td>Compensation:</td>
<td>$579,549.12</td>
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<tr>
<td>Task I-22-PBI-R-026</td>
<td>PCA and GPU Point of Use Design &amp; Bidding Services (Supplemental)</td>
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<tr>
<td>Duration:</td>
<td>Per Contract</td>
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<tr>
<td>Compensation:</td>
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<th>LEVEL 3 TASKS:</th>
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<td>Task III-19-DOA-R-001</td>
<td>Misc. AEP and Construction Consulting Services Amendment #5</td>
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<tr>
<td>Duration:</td>
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<tr>
<td>Compensation:</td>
<td>$200,000.00</td>
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</table>

**TOTAL = $1,325,943.87**

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.
EXHIBIT C – PROPOSED SCHEDULES

Task I-22-PBI-R-024  Switchgear NPDS Replacement Construction Administration
Duration: 655 Working Days
(~917 Calendar Days)

Task I-22-PBI-R-025  400Hz Replacement Construction Administration and RPR Services
Duration: 306 Working Days
(~430 Calendar Days)

Task I-22-PBI-R-026  PCA and GPU Point of Use Design & Bidding Services (Supplemental)
Duration: Per Contract
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 5.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Amendment 5 Totals</th>
<th>% of Amendment 5</th>
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<tbody>
<tr>
<td>Quantum</td>
<td>$542,155.33</td>
<td>40.89%</td>
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<tr>
<td>Tierra South Florida</td>
<td>$3,165.00</td>
<td>0.24%</td>
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</table>

**TOTALS $545,320.33 41.13%**

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.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Base (R2019-0612) Totals</th>
<th>Amendment 1 (R2020-0414) Totals</th>
<th>Amendment 2 (R2020-1607) Totals</th>
<th>Amendment 4 (R2021-0844) Totals</th>
<th>Amendment 5 Totals</th>
<th>Total Fees</th>
<th>% of Total Contract</th>
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<td>Colome</td>
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<td>Tierra South Florida</td>
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<td>$323,400.00</td>
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<td>$661,533.98</td>
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<tr>
<td>Lakdas-Yohalem</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>0.00%</td>
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<td>Connico</td>
<td>$90,000.00</td>
<td>$107,100.00</td>
<td>$89,948.59</td>
<td>$79,100.00</td>
<td>$366,148.59</td>
<td>3.25%</td>
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<td>Digital Building Services</td>
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<td>$183,689.00</td>
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<td>1.63%</td>
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</tr>
<tr>
<td>Master Consulting Engineers</td>
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<td>$83,855.96</td>
<td>$4,960.00</td>
<td>$32,078.44</td>
<td>$120,904.40</td>
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<tr>
<td>Quantum</td>
<td>$0.00</td>
<td>$176,934.11</td>
<td>$1,222,288.80</td>
<td>$149,029.00</td>
<td>$542,155.33</td>
<td>2,090,407.24</td>
<td>18.56%</td>
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<tr>
<td>CRI</td>
<td>$0.00</td>
<td>$117,500.00</td>
<td>$0.00</td>
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<td>$117,500.00</td>
<td>3,929,148.72</td>
<td>34.89%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>$374,237.23</strong></td>
<td><strong>$700,277.80</strong></td>
<td><strong>$1,725,705.92</strong></td>
<td><strong>$583,607.44</strong></td>
<td><strong>$545,608.33</strong></td>
<td><strong>3,929,148.72</strong></td>
<td><strong>34.89%</strong></td>
</tr>
</tbody>
</table>

1. Value varies from previous contract Table D-2. Amendment 5 Table D-2 value updated to include:
2. Value varies from contract Table D-2; value matches value on Amendment 4 Table D-2. Amendment 1 & 2 Table D-2 indicated value was $20,021.35 which was a mistype; Amendment 4 Table D-2 value updated to correct value of $20,021.45.
3. Value varies from contract Table D-2. Amendment 5 Table D-2 value updated to include:
   a. Fee Reallocation & Reduction Letter dated 2021-12-08.
4. Value varies from contract Table D-2. Amendment 5 Table D-2 value updated to reflect:
   a. Level I Tasks & Level III Tasks
SCHEDULE 1(A)
LIST OF PROPOSED DBE FIRMS
(Professional Services)

LOI/SOQ Project Description: Palm Beach County Department of Airports

Name of Respondent: RS&H, Inc.
Contact Person: Pat Hargrove
Address: 10748 Deerwood Park Blvd S, Jacksonville FL 32256
Phone No.: 904-256-2437
Fax No.: 800-464-4358

<table>
<thead>
<tr>
<th>Name, Address &amp; Phone No. of DBE Firm</th>
<th>Description of Type of Work</th>
<th>Classification (Check applicable box)</th>
<th>Percentage of DBE Participation</th>
</tr>
</thead>
</table>
| Quantum Electrical                   | Electrical Engineering Design Services | Prime Consultant | Black | Hispanic | Women | Other
|                                      |                             | Subcontractor | %     | %        | %     | As %
| Tierra South Florida                 | Threshold Inspection Services | Prime Consultant | %     | %        | %     | Asian/Pacific
|                                      |                             | Subcontractor  | %     | %        | %     |

Total Percentage of DBE Participation: 41.13 %

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

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

Signature:
Pat Hargrove, AIA NCARB, Vice President, Aviation
Print Name/Title of Person Executing on Behalf of the Respondent

Date: 2/23/2022

Schedule 1(A) v. 11-30-11
SCHEDULE 2(A)
LETTER OF INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE
(Professional Services)

LOI/SOQ Project Description: Services for Palm Beach County Department of Airports

Change Order/Task /Amendment No. (if applicable): 
Name of Prime Respondent: RS&H, Inc.
Name of DBE Firm: Quantum Electrical Engineering, Inc.

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

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

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

Electrical Engineering Design Services

(Additional Sheets may be used as necessary.)

Total Percentage of Participation by DBE Firm for this Project: 40.89 %

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

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

<table>
<thead>
<tr>
<th>Name of Subcontractor</th>
<th>Percentage of work to be subcontracted</th>
<th>DBE Certified</th>
<th>Non-DBE</th>
</tr>
</thead>
</table>

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

Quantum Electrical, Inc.

Printed Name of DBE Subcontractor
By: 
Signature
Date: 1/27/2022

Schedule 2(A)
v.10-26-11
SCHEDULE 2(A)
LETTER OF INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE
(Professional Services)

LOI/SOQ Project Description: Services for Palm Beach County Department of Airports

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

Name of Prime Respondent: RS&H, Inc.

Name of DBE Firm: Tierra South Florida, Inc.

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

☐ Black   ☐ Hispanic   ☐ Women   ☑ Other (Please Specify) Asian / Pacific  ☐ Prime Consultant   ☐ Subcontractor   ☐ Manufacturer   ☐ Supplier

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

Threshold Inspection Services

(Additional Sheets may be used as necessary.)

Total Percentage of Participation by DBE Firm for this Project: 0.24 %

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

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

(Name of Subcontractor) ☐ DBE Certified ☐ Non-DBE

(Percentage of work to be subcontracted)

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

Tierra South Florida, Inc.

Printed Name: Morgan Dickinson

By: ____________________________

Signature: _______________________

Date: 1/27/2022

Schedule 2(A)
v.10-26-11
<table>
<thead>
<tr>
<th>NAICS Description</th>
<th>NAICS Code</th>
<th>Estimated Percentage of Available DBE</th>
<th>Available DBE</th>
<th>Total Available</th>
<th>Weighted Percentage</th>
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<tbody>
<tr>
<td>Engineering Services</td>
<td>541330</td>
<td>30.00%</td>
<td>149</td>
<td>1286</td>
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<tr>
<td>Architectural Services</td>
<td>541310</td>
<td>45.00%</td>
<td>40</td>
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<tr>
<td>Construction Management</td>
<td>236220</td>
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<td>239</td>
<td>815</td>
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<td>Testing Services</td>
<td>541380</td>
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<td>12</td>
<td>92</td>
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<tr>
<td>Land Surveying &amp; Mapping</td>
<td>541370</td>
<td>2.50%</td>
<td>24</td>
<td>144</td>
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<tr>
<td>Planning Services</td>
<td>541320</td>
<td>10.00%</td>
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<tr>
<td>Other Consulting Services</td>
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<td>Total</td>
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<td>100.00%</td>
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<td>1858</td>
<td>19.72%</td>
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<table>
<thead>
<tr>
<th>General Consulting Services Contracts</th>
<th>DBE Participation to date</th>
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<tr>
<td>R2008-2418</td>
<td>21%</td>
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<tr>
<td>R2009-1643</td>
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<tr>
<td>R2011-1333</td>
<td>29%</td>
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<tr>
<td>R2014-6031</td>
<td>13%</td>
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<tr>
<td>Median Participation</td>
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<tr>
<td>Adjustment for Past Participation</td>
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<tr>
<td>DBE Project Goal</td>
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