EXHIBIT 1

Task Order No. 1 Project No.: 11999

Consultant: Kimley-Horn and Associates, Inc.

TASK ORDER No. 1

| Dated this | day of | , 2016 |
|------------|--------|--------|
| | | |

CITY PROJECT No. 11999

FORT LAUDERDALE PUBLIC WORKS DEPARTMENT

FORT LAUDERDALE EXECUTIVE AIRPORT DESIGN SERVICES FOR PAVEMENT REHABILITATION OF TAXIWAY FOXTROT

PROFESSIONAL SERVICES

This Task Order is pursuant to the Agreement between the City of Fort Lauderdale (CITY) and Kimley-Horn and Associates, Inc. (CONSULTANT), a North Carolina corporation authorized to transact business in the State of Florida for Consultant Services for Fort Lauderdale Executive Airport Taxiway Foxtrot Pavement Rehabilitation project, dated March 1, 2016, and expiring on February 28, 2018, between CITY and CONSULTANT ("MASTER AGREEMENT").

PROJECT BACKGROUND

As part of the ongoing Statewide Airfield Pavement Management Program, The Florida Department of Transportation (FDOT) performed a review of Fort Lauderdale Executive Airport's (FXE) pavements in June 2013 and issued a report with its findings in June of 2015. The review included Taxiway Foxtrot, a 6,000+/- foot long by 50 foot wide taxiway located north of and parallel to Runway 9-27 (Exhibit B). The review determined that Taxiway Foxtrot's average Pavement Condition Index (PCI) values on the western 3,600 feet were 59. The FDOT recommends a minimum service level PCI of 65 for parallel taxiways. The minimum service level is recommended to ensure the pavement provides a safe operational surface and efficiently uses maintenance and rehabilitation budgets.

In addition, Federal Aviation Administration (FAA) Advisory Circular 150/5300-13 "Airport Design" includes new criteria for pavement geometry for intersecting taxiways. The geometry of Taxiway Foxtrot within the above mentioned section is non-compliant with the standards of the current Advisory Circular and will be addressed during this project.

This task order is for the purpose of retaining the services of the CONSULTANT to prepare Contract and Bid Documents for the rehabilitation of Taxiway Foxtrot and its connecting/intersecting taxiways within the limits shown in Exhibit B.

SPECIFIC SCOPE OF SERVICES

The project requires professional engineering services for design of the pavement rehabilitation for Taxiway Foxtrot and corresponding connector/intersecting taxiways to include rehabilitation of the existing taxiway; grading and paving of the taxiway intersections, geometric reconfiguration; pavement markings; lighting and signage; turfing; and other associated work. The project will be designed such that construction will be performed in separate phases to accommodate the requirements of airport operations, users, tenants, first responders and protected surfaces.

Consultant: Kimley-Horn and Associates, Inc.

CONSULTANT, along with their sub-consultants, Hillers Electrical Engineering, Inc. (Airfield Electrical and Signage), Tierra South Florida (Geotechnical), and Keith and Associates, Inc. (Survey) shall develop contract documents to address the required modifications at each of the specific areas described above under a single bid package. Additionally, CONSULTANT shall provide Disadvantaged Business Enterprise (DBE) monitoring services through Dickey Consulting Services, Inc. in support of the CITY's DBE Program. Services shall include the following tasks:

Task 1.0-Pre-design Services

CONSULTANT shall develop a construction phasing plan for the taxiway rehabilitation, undertake preliminary coordination, define the necessary pre-design field survey and geotechnical investigation limits, establish weekly in-house design meetings, quality control (QC) program, and will establish communications with the parties and agencies known to CONSULTANT that will be involved or affected by the project. Specific tasks shall consist of the following:

- 1. Meet with the CITY, one (1) time, to fully define project elements, phasing requirements, and project issues.
- 2. Coordinate and administer early sub-consultant services.
- 3. Field review project site and pavement condition (including electrical system and regulator testing).
- 4. Review existing plans and as-built data, including electrical.
- 5. Define and list design criteria applicable to the project.
- 6. Define topographic survey limits, and obtain those surveys (see Task 5.0).
- 7. Define geotechnical investigation limits and requirements, and obtain those investigations (see Task 5.0).
- 8. Review subconsultant deliverables and incorporate study results into the preliminary design.
- 9. Based on the airport aircraft fleet mix and in accordance with FAA Advisory Circular 150/5300-13, CONSULTANT shall develop preliminary horizontal geometry for pavement modifications to the existing connector/intersecting taxiways.
- 10. Develop preliminary phasing plans.
- 11. Meet with CITY and stakeholders, once, to review phasing options.
- 12. Based on selected phasing options, prepare an order of magnitude opinion of probable construction cost for the project.

Deliverables:

CONSULTANT shall provide the following for CITY review and written approval:

- Design criteria listing
- Preliminary horizontal geometry
- Phasing alternatives
- Order of magnitude opinion of probable construction cost
- Agenda and minutes of all meetings

Task 2.0-Conceptual Design (30% Plans)

CONSULTANT shall develop the preliminary plans necessary to achieve 30% design completion for the project, conduct weekly in-house design meetings, and QC review. Drawings

Consultant: Kimley-Horn and Associates, Inc.

will be in AutoCAD Civil 3D based on CITY's current CAD standards. Technical specifications, the Engineer's report, and other written documents will be in MS Word and Adobe PDF format.

Designs will be in accordance with FAA Regulations and Advisory Circulars, and will conform to FDOT guidelines. The Engineer's report will conform to the FAA format. Specific tasks shall consist of the following:

- 1. Prepare base mapping for the project.
- 2. Review field survey data, geotechnical reports, as-built drawings, and other available data
- 3. Identify preliminary construction access, maintenance of traffic (MOT), and staging options.
- 4. Develop taxiway pavement geometry to 30% design level.
- 5. Prepare a preliminary pavement design and typical sections.
- 6. Prepare a taxiway grading concept and conceptual typical sections for grading. Anticipated grading area shall be limited to the new taxiway paving areas (fillets) and immediately adjacent pervious areas.
- 7. Refine project phasing plan and define construction project limits by phase.
- 8. Prepare construction drawings to 30% completion.
- 9. Prepare draft outline technical specifications for the project.
- 10. Prepare draft outline of the Engineer's Report.
- 11. Prepare an opinion of probable construction cost based on the 30% Design Documents.
- 12. Prepare a 30% construction schedule.
- 13. Submit 30% documents to the CITY for review.
- 14. Conduct one (1) 30% design review and coordination meeting with the CITY.

Deliverables:

CONSULTANT shall provide the following for CITY review and written approval:

- CD containing CAD files of 30% plans to verify conformance with current CITY CAD standards along with plot files (24"x36") in pdf format.
- Outline of Technical Specifications.
- Outline of Engineer's Report.
- Conceptual construction schedule.
- Conceptual opinion of probable construction cost.
- · Agenda and minutes of all meetings.

Task 3.0-Design Development (60% Plans)

CONSULTANT, in coordination with their sub-consultants, shall continue designs and contract documents to 60% completion. Work shall consist of construction drawings, technical specifications, QC review, conducting weekly in-house design meetings, and Engineer's report. Specific tasks shall consist of the following:

- 1. Prepare 60% design development drawings for the construction phasing plan details & notes, airfield pavement geometry, typical pavement sections, details, grading, cross sections, pavement demolition, lighting/signage/circuitry plans, and pavement markings based on comments received from Task 2.0.
- 2. Perform preliminary quantity take off.
- 3. Prepare preliminary opinion of probable construction cost.
- 4. Prepare Engineer's Report to 60% completion.

Consultant: Kimley-Horn and Associates, Inc.

- 5. Prepare Technical Specifications.
- 6. Submit plans, specifications, engineering report, and opinion of probable construction cost to the CITY for review and comment.
- 7. Conduct one (1) design review meeting with the CITY and address comments.

Deliverables:

CONSULTANT shall provide the following for CITY review and written approval:

- CAD files of 60% plans to verify conformance with current CITY CAD standards along with plot files (24"x36") in pdf format.
- Preliminary Engineer's Report.
- Preliminary specifications.
- Preliminary opinion of probable construction cost and construction schedule.
- · Agenda and minutes of all meetings.

Task 4.0-Contract Document Preparation (100% Final Plans)

CONSULTANT, in coordination with their sub-consultants, shall complete designs and contract documents, which shall consist of construction drawings, technical specifications, Engineer's report, and QC review. Tasks will consist of the following:

- 1. Finalize design drawings to 100% completion.
- 2. Prepare a final quantity take off and opinion of probable construction cost.
- 3. Conduct a plan-in-hand field review of the project.
- 4. Finalize the technical specifications (including electrical specifications).
- 5. Finalize the Engineer's report.
- 6. Finalize construction schedule.
- 7. Provide plans, specifications, construction documents, bid forms, and certifications to the CITY

The anticipated sheets to be included in the construction drawings are as follows:

| Construction Set | Description |
|------------------|--|
| 1 | Cover Sheet / Location Plan / Vicinity Map |
| 2 | Index of Drawings / General Notes |
| 3 | Summary of Quantities |
| 4 | Access and Safety Plan, 1"=400' |
| 5 | Safety Plan Notes and Details |
| 7-10 | Project Phasing and Safety Plans, 1"=200' |
| 11 | Phasing Summary |
| 12-15 | Existing Conditions Plan, 1"=40', single panel |
| 16-20 | Typical Sections |
| 21-24 | Horizontal Geometry Plan, 1"=40' |
| 25-28 | Demolition Plan, 1"=40' |
| 29-32 | Grading and Drainage Plan, 1"=40' |
| 33-35 | Grading and Paving Details |
| 36-39 | Paving Plans with Elevations, 1"=40' |
| 40-43 | Taxiway Profiles, 1"=40', double panel |
| 44-47 | Pavement Marking Plan, 1"=40' |
| 48-51 | Pavement Marking Details |
| 52-57 | Cross Sections |
| 58-70 | Electrical Drawings, Notes and Details |
| 71 | Boring Logs |

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Deliverables:

CONSULTANT shall provide the following for CITY review and written approval:

- Plan set One (1) copy, 24"x36", signed and sealed
- Bid Documents (electronic)
- Engineer's Report One (1) copy signed and sealed with Word and pdf files.
- Opinion of probable construction cost and construction schedule.
- CD containing CAD files of 100% plans and plot files (24"x36") in pdf in conformance with current CITY CAD standards.

Task 5.0-Sub-consultant Services

FIELD SURVEY AND MAPPING

Keith and Associates, Inc., as a subconsultant, will perform field survey to develop topographic base mapping for the project.

The following services will be provided:

- Horizontal and vertical locations on all existing surface features within the limits to be milled and overlaid (see Exhibit B). Surface features will include but not be limited to: paint marking drainage features, drainage structures, utilities, electrical junction boxes, lights, sign bases, top and bottom of banks. Limits will extend to object free area which is 93' from the centerline of the taxiways. Elevations will be obtained within these limits using a 20-foot grid in North American Vertical Datum of 1988 (NAVD88).
- Only horizontal locations will be provided within the limits to be seal coated (see Exhibit B).
- Set adequate project horizontal control and references.
- Set project benchmarks.
- Locate and obtain surface elevations at soil borings.
- Confirm horizontal and vertical control prior to construction.

Deliverables:

Sub-consultant shall provide the following for CITY review and written approval:

• Provide electronic CAD/pdf files in accordance with Kimley-Horn and CITY CAD standards and one (1) signed and sealed hard copy of survey.

All surveying services shall conform to the applicable requirements of the Standards of Practice per Rule 5J-17 of the Florida Administrative Code. The drawing will adhere to the City of Fort Lauderdale's CAD standards. Horizontal datum for the project will be North American Datum of 1983 with the National Spatial Reference System adjustment of 2011 applied (NAD83/NSRS2011). Vertical Datum for the project will be NAVD88.

GEOTECHNICAL INVESTIGATION & MATERIALS TESTING

Tierra South Florida, Inc., as a subconsultant, will provide the geotechnical investigation services to confirm the thickness of asphalt to be removed from the existing Taxiway Foxtrot as well as to establish the soil parameters for design of the rehabilitated taxiway pavement and taxiway connectors.

The following services will be provided:

Consultant: Kimley-Horn and Associates, Inc.

Field Investigation

- Five (5) cores through existing Taxiway Foxtrot pavement to determine pavement constituent thickness.
- Asphalt Extractions and aggregate gradations on four (4) core samples.
- Five (5) standard penetration test (SPT) borings to ten feet below existing grade to determine soil profile along the proposed taxiway alignment.
- Visual classification of the soils encountered.
- Depth to ground water and estimated depth to seasonal high ground water.
- Obtain soil samples for laboratory tests.

Laboratory Testing

Perform testing on soil samples representing each distinctly different soil type or strata

- Grain size analysis
- One (1) Atterberg Limits
- Two (2) Laboratory California Bearing Ratio
- Two (2) Modified Proctor Tests
- Two (2) Percolation Tests
- Moisture-Density relationship
- Organic content if visual observation is noted

Deliverables:

Sub-consultant shall provide the following for CITY review and written approval:

Geotechnical Services Report – Two (2) copies signed and sealed with pdf files.

DBE MONITORING

CONSULTANT shall, through its sub consultant, Dickey Consulting Services, Inc., provide the services of a DBE Liaison Officer (DBELO) for the design portion of the project. Duties of the DBELO shall include:

- 1. Provide DBE compliance monitoring and reporting services during the project.
- 2. Attend pre-bid meeting to advise bidders of DBE requirements.
- 3. Gather and report statistical data and other information monthly.
- 4. Review third party contracts and purchase requisitions for compliance with the program.
- 5. Advise CITY on DBE matters and achievement monthly.
- 6. Develop DBE forms for monitoring and compliance reporting to FAA-dbe-Connect.
- 7. Review documents and perform interviews as required to monitor DBE compliance.
- 8. Prepare and submit necessary compliance reports to CITY for forwarding to DOT or FAA.

Deliverables:

Sub-consultant shall provide the following for CITY review and written approval:

Prepare and submit necessary compliance reports to CITY for forwarding to FAA.

Task 6.0 Bidding Phase Services

CONSULTANT shall assist the CITY in advertising and bidding the project. CONSULTANT shall perform the following tasks:

Consultant: Kimley-Horn and Associates, Inc.

- 1. Attend and conduct one (1) pre-bid meeting with potential bidders and affected agencies and provide meeting minutes.
- 2. Respond in writing to bidders questions in the form of written addenda as needed to interpret, clarify, or expand the Bid Documents.

PROJECT ASSUMPTIONS

- Plans will be prepared on CAD overlays of the survey and will be in conformance with CONSULTANT'S AutoCAD Civil 3D 2015 CAD standards and in coordination with the CITY current CAD standards. CONSULTANT shall work with the CITY to provide modifications to CAD standards to be used.
- 2. Front-end documents, advertisement, general provisions and related documents will be provided by the CITY. CONSULTANT will provide actual bid proposal forms, technical specifications, the Engineer's report, and other written documents will be in Word format. The Engineer's report will conform to the FAA format. Designs will be in accordance with FAA Regulations and Advisory Circulars, and will conform to FDOT guidelines. Certification of the above will be provided by the CONSULTANT.
- 3. CITY will provide existing plan data and as-built drawings of utilities, fiber optic and previous construction plans as required for the project upon which CONSULTANT may rely. Plans will be in AutoCAD format.
- 4. Coordination with the FAA to identify the FAA underground facilities will be conducted by the CITY.
- 5. Construction Safety and Phasing Plan will be prepared and submitted to the FAA by CITY Staff.
- 6. Environmental services are excluded from this agreement. Should protected species be found within the limits of work and/or if construction encroaches into required burrow setbacks, Kimley-Horn will perform environmental services as an Additional Service billed at our then hourly rate plus expenses.
- 7. Storm water permitting is excluded from this agreement.
- 8. Survey for FAA requirements per FAA Advisory Circular 150/5300 18C, Table 2-1 "for Pavement Design and Construction" are excluded from this agreement.
- 9. Preparation of and submission of airport GIS documents are excluded from this agreement and will be addressed during the Construction Phase by the contractor.
- 10. Airspace review and coordination with the FAA is excluded from this agreement and will be addressed by the CITY.
- 11. If requested by the CITY, CONSULTANT shall provide the CITY with a marked-up set of plans and/or specifications showing the CONSULTANT's QC review corrections and comments.
- 12. CONSULTANT shall submit a final project schedule to the CITY, for approval, within 10 business days after receiving the Notice-to-Proceed (NTP) and prior to beginning work. No work shall commence without an approved schedule. The final schedule shall include design, permitting activities, submittal review timeframes, and other project activities as required to complete the work. CONSULTANT shall submit updated project schedules as required in the specific scope of services.

ADDITIONAL SERVICES

If authorized in writing by the CITY as an amendment to this Task Order, the CONSULTANT shall furnish, or obtain, Additional Services of the types listed in Article 8 of the MASTER AGREEMENT. The CITY, as indicated in the MASTER AGREEMENT, will pay for these services.

Consultant: Kimley-Horn and Associates, Inc.

PERFORMANCE SCHEDULE

The CONSULTANT shall perform the services identified in Tasks 1 through 5 inclusive within 120 working days of written Notice to Proceed, not inclusive of CITY review time. Services for Task 6 will be dependent on CITY bidding schedule.

PROJECT FUNDING

Performance of this project is at the CITY's discretion and may be contingent upon receipt by the CITY of funding from Federal Aviation Administration (FAA) and/or the Florida Department of Transportation (FDOT) under the applicable federal grant and/or Joint Participation Agreement (JPA), and the Airport's approved CIP, respectively, and work shall not begin until funding sources for this project are in place.

METHOD OF COMPENSATION

The services performed will be accomplished using the Not-to-Exceed method of compensation. Reimbursable expenses associated with these services are not included in the fees and will be itemized separately, subject to an established Not-to-Exceed limit. The total hourly rates payable by the CITY for each of the CONSULTANT's employee categories, reimbursable expenses, and sub-consultant fees are shown on Exhibit "A" attached hereto and made a part hereof.

TERMS OF COMPENSATION

Services will be provided for the following Not to Exceed amounts:

| Task | | Lal | oor Fees | _ , . | | | |
|------|-------------------------------------|------------|----------------|----------|--|--|--|
| No | Task Title | Consultant | Sub consultant | Total | | | |
| 1 | Pre-Design Services | \$21,030 | | \$21,030 | | | |
| 2 | Conceptual Design (30%) | \$58,950 | | \$58,950 | | | |
| 3 | Design Development (60%) | \$64,010 | | \$64,010 | | | |
| 4 | Contract Documents (100%) | \$45,655 | | \$45,655 | | | |
| 5 | Sub-consultant Services: | | | | | | |
| | Dickey Consultant Services, Inc. | | \$6,060 | \$6,060 | | | |
| | Keith & Associates, Inc. | | \$14,760 | \$14,760 | | | |
| | Tierra SF | | \$9,151 | \$9,151 | | | |
| | Hillers Electrical Engineer | | \$27,740 | \$27,740 | | | |
| 6 | Bidding Services | \$4,645 | | \$4,645 | | | |
| | SUB-TOTAL | | | | | | |
| | | REIMBUR | SABLE EXPENSES | \$840 | | | |
| | TOTAL | | | | | | |

Consultant: Kimley-Horn and Associates, Inc.

CITY CONTACTS

Requests for payments should be directed to City of Fort Lauderdale Accounts Payable via e-mail to AcctsPayable@FortLauderdale.gov. All other correspondence and submittals should be directed to the attention of Fernando Blanco, Airport Engineer/Project Manager II, at the address shown below. Please be sure that all correspondence refers to the City project number and title as stated above.

Fernando Blanco
Project Manager II
City of Fort Lauderdale
City Hall, 5th Floor Engineering
100 North Andrews Avenue
Fort Lauderdale, FL 33301

Email: fblanco@fortlauderdale.gov

Phone: 954-828-6536 Fax: 954-828-5074 Christopher Bennett, P.E.
Senior Project Manager
City of Fort Lauderdale
City Hall, 4th Floor Engineering
100 North Andrews Avenue
Fort Lauderdale, FL 33301

Email: cbennett@fortlauderdale.gov

Phone: 954-828-6522 Fax: 954-828-5074

CONSULTANT CONTACTS

Kimley-Horn and Associates, Inc. 1920 Wekiva Way, Suite 200 West Palm Beach, FL 33411 Tom O'Donnell P.E., Senior Project Manager Email: tom.odonnell@kimley-horn.com

Phone: 561-845-0665 Fax: 561-863-8175

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Consultant: Kimley-Horn and Associates, Inc.

IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first written above.

| | CITY | |
|------------------------------------|---|--------|
| ATTEST: | CITY OF FORT LAUDERDALE, corporation of the State of Florid | |
| JEFFREY A. MODARELLI City Clerk | LEE R. FELDMAN, City Manage | er |
| (SEAL) | Approved as to form: | |
| | RHONDA MONTOYA HASAN Assistant City Attorney | |

Consultant: Kimley-Horn and Associates, Inc.

CONSULTANT

| WITNESESS: | KIMLEY-HORN AND ASSOCIATES, INC., A North Carolina Corporation |
|---|--|
| Print Name: | By: David R. Bardt, PE Sr. Vice President |
| Print Name: | |
| ATTEST: | |
| Thomas F. O'Donnell, PE Assistant Secretary | |
| (CORPORATE SEAL) | |
| | |
| STATE OF: COUNTY OF: | |
| , 2016, by David R. E | acknowledged before me this day of Bardt as Sr. Vice President for Kimley-Horn and ation authorized to transact business in the State of |
| (SEAL) | Notary Public, State of Florida (Signature of Notary Public) |
| | Name of Notary Typed, Printed or Stamped |
| Personally Known OR Produced Iden Type of Identification Produced | |

Task Order No. 1 Project No.: 11999 Consultant: Kimley-Horn and Associates, Inc.

EXHIBIT A

EXHIBIT "A" MAN-HOUR ESTIMATE FOR Pavement Rehabilitation of Taxiway Foxtrot City Project No. 11999 3/17/2016

| EXHIBIT NO. A TO FORM OF CONTRACT | Principal | Senior Professional | Project Manager | Senior Engineer | Engineer/ Planner | Senior Designer | Support Staff | Total Hours | Unit Cost | Labor Cost |
|---|-----------|------------------------|--------------------|--------------------|----------------------|--------------------|------------------|----------------|--------------|---------------|
| Kimley-Horn and Associates, Inc. | | | | . | | | | | | |
| · | \$230.00 | \$195.00 | \$185.00 | \$160.00 | \$115.00 | \$125.00 | \$65.00 | | | |
| TASK DESCRIPTION - BASIC ENGINEERING | | T | 1 | 1 | Γ | | | ı | 1 | |
| Task 1.0 Pre-design Services | | | | | | | | | | |
| 1 Meet with the CITY to fully define project elements, phasing requirements, and project issues | | | 4 | 1 | 2 | 2 | 2 | 11 | \$ 137.27 | \$ 1,510.0 |
| 2 Coordinate and Administer Early Sub-consultant Services | 2 | 2 | 2 | 1 | 2 | | | 9 | \$ 178.89 | |
| 3 Field Review Project Site and Pavement Condition | | | 4 | | 4 | 6 | 2 | 16 | \$ 130.00 | \$ 2,080. |
| 4 Review existing plans and as-built data | | | 2 | 1 | 4 | 4 | | 11 | \$ 135.45 | \$ 1,490.0 |
| 5 Define and List Design Criteria Applicable to the Project | 1 | 1 | 4 | | | | | 6 | \$ 194.17 | |
| 6 Define Topographic Survey Limits and Obtain Surveys | | | 2 | | 2 | 1 | | 5 | \$ 145.00 | |
| 7 Define Geotech Requirements and Obtain those investigations | | | 2 | 1 | 2 | 1 | | 6 | \$ 147.50 | \$ 885.0 |
| 8 Review subconsultant deliverables and incorporate study results into the preliminary design. | | | 2 | 1 | 6 | 6 | | 15 | \$ 131.33 | \$ 1,970.0 |
| 9 Develop preliminary horizontal layout | 2 | 2 | 4 | | 8 | 8 | | 24 | \$ 146.25 | \$ 3,510. |
| 10 Develop preliminary phasing plans | | 1 | 4 | | 8 | 8 | | 21 | \$ 135.95 | \$ 2,855.0 |
| 11 Meet with CITY and takeholders to review phasing options | | | 4 | 1 | 6 | 2 | 2 | 15 | \$ 131.33 | \$ 1,970. |
| 12 Prepare an Order of Magnitude Opinion of Probable Construction Cost | | 2 | 4 | | | | 2 | 8 | \$ 157.50 | \$ 1,260.0 |
| Subtota | al 5.0 | 8.0 | 38.0 | 6.0 | 44.0 | 38.0 | 8.0 | 147 | \$ 143.06 | \$ 21,030.0 |
| Task 2.0 Conceptual Design (30% Submittal) | | | | | | | | | | |
| 1 Prepare Base Mapping for the Project | 1 | 1 | 8 | 2 | 8 | 12 | | 32 | \$ 145.16 | \$ 4,645.0 |
| 2 Review Available Data | | | 4 | 1 | 4 | 4 | 2 | 15 | \$ 132.67 | \$ 1,990.0 |
| 3 Identify preliminary construction access, maintenance of traffic (MOT), and staging options. | | | 4 | | 2 | 4 | | 10 | \$ 147.00 | \$ 1,470.0 |
| 4 Develop Taxiway Pavement Geometry to 30% Design Level | 1 | 1 | 8 | 1 | 8 | 12 | | 31 | \$ 144.68 | \$ 4,485.0 |
| 5 Prepare a Preliminary Pavement Design & Typical Sections | | | 4 | 1 | 8 | 4 | | 17 | \$ 136.47 | \$ 2,320.0 |
| 6 Prepare a Taxiway Grading Concept | 1 | 1 | 14 | 1 | 8 | 16 | | 41 | \$ 148.66 | \$ 6,095.0 |
| 7 Refine project phasing plan and define construction project limits by phase | 1 | 1 | 12 | 1 | 8 | 18 | | 41 | \$ 145.73 | \$ 5,975.0 |
| 8 Prepare Construction Plans to 30% | 4 | 8 | 30 | 5 | 36 | 80 | 2 | 165 | \$ 140.00 | \$ 23,100.0 |
| 9 Prepare Draft Outline Technical Specifications | | | 4 | | | | 2 | 6 | \$ 145.00 | \$ 870.0 |
| 10 Prepare Draft Outline of the Engineer's Report | | | 4 | | | | | 4 | \$ 185.00 | \$ 740.0 |
| 11 Prepare Opinion of Probable Cost | | | 4 | 1 | 12 | | | 17 | \$ 134.12 | \$ 2,280.0 |
| 12 Prepare Conceptual Construction Schedule | | | 4 | 1 | 6 | 2 | | 13 | \$ 141.54 | \$ 1,840.0 |
| 13 Submit Plans to City for Review | | | 2 | 1 | 2 | 4 | 2 | 11 | \$ 126.36 | \$ 1,390.0 |
| 14 Concept Design Meeting with City | | | 6 | 1 | 2 | 2 | | 11 | \$ 159.09 | \$ 1,750.0 |
| Subtota | al 8 | 12 | 108 | 16 | 104 | 158 | 8 | 414 | \$ 142.39 | \$ 58,950.0 |

EXHIBIT "A" MAN-HOUR ESTIMATE FOR Pavement Rehabilitation of Taxiway Foxtrot City Project No. 11999 3/17/2016

| EXHIBIT NO. A TO FORM OF CONTRACT | Principal | Senior Professional | Project Manager | Senior Engineer | Engineer/ Planner | Senior Designer | Support Staff | Total Hours | Unit Cost | Labor Cost |
|--|------------|------------------------|--------------------|--------------------|----------------------|--------------------|------------------|----------------|--------------|---------------|
| Kimley-Horn and Associates, Inc. | | | | | | | | | | |
| | \$230.00 | \$195.00 | \$185.00 | \$160.00 | \$115.00 | \$125.00 | \$65.00 | | | |
| TASK DESCRIPTION - BASIC ENGINEERING | | 1 | 1 | 1 | 1 | ı | | | | |
| Task 3.0 Design Development (60% Submittal) | | | | | | | | | | |
| 1 Develop Construction Plans to 60% | 6 | 14 | 40 | 40 | 120 | 120 | 10 | 350 | \$ 135.31 | \$ 47,360.00 |
| 2 Perform Quantity Take Off | | | 8 | 12 | 18 | 8 | | 46 | \$ 140.65 | \$ 6,470.00 |
| 3 Prepare Opinion of Probable Construction Cost | | | 4 | 4 | 4 | | | 12 | \$ 153.33 | \$ 1,840.00 |
| 4 Prepare Engineering Report | | | 4 | 4 | 4 | 2 | 2 | 16 | \$ 138.75 | \$ 2,220.00 |
| 5 Prepare Technical Specifications | | | 4 | 4 | 8 | | 2 | 18 | \$ 135.00 | \$ 2,430.00 |
| 6 Submit Plans and Documents to City for Review | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 14 | \$ 153.57 | \$ 2,150.00 |
| 7 Design Meeting with City | | | 4 | 2 | 2 | 2 | | 10 | \$ 154.00 | \$ 1,540.00 |
| S | ubtotal 8 | 16 | 66 | 68 | 158 | 134 | 16 | 466 | \$ 137.36 | \$ 64,010.00 |
| Task 4.0 Contract Document Preparation (100% Submittal) | | | | | | | | | | |
| 1 Finalize Design Drawings to 100% Completion | 6 | 10 | 16 | 30 | 30 | 60 | 8 | 160 | \$ 141.00 | \$ 22,560.00 |
| 2 Prepare Final Quantitiy Take-off and Opinion of Probable Construction Cost | 2 | 2 | 8 | 12 | 18 | 6 | | 48 | \$ 147.29 | \$ 7,070.00 |
| 3 Conduct a Plan-in-hand field review of the project | | | 8 | | 2 | 2 | 2 | 14 | \$ 149.29 | \$ 2,090.00 |
| 4 Finalize the Technical Specificiations | 2 | 2 | 8 | 6 | 6 | | 2 | 26 | \$ 158.08 | \$ 4,110.00 |
| 5 Finalize the Engineer's Report | 2 | 2 | 6 | 6 | 6 | 2 | 3 | 27 | \$ 150.19 | |
| 6 Finalize Construction Schedule | | | 6 | 6 | 6 | 2 | 2 | 22 | \$ 142.73 | |
| 7 Provide plans, construction documents, bid forms, and certifications to the CITY | | | 4 | 2 | 6 | 6 | 2 | 20 | \$ 131.50 | \$ 2,630.00 |
| l s | ubtotal 12 | 16 | 56 | 62 | 74 | 78 | 19 | 317 | \$ 144.02 | \$ 45,655.00 |

EXHIBIT "A" **MAN-HOUR ESTIMATE FOR** Pavement Rehabilitation of Taxiway Foxtrot City Project No. 11999 3/17/2016

| EXHIBIT NO. A TO FORM OF CONTRACT | Principal | Senior | Project | Senior | Engineer/ | Senior | Support | Total | U | Unit | Labor |
|--------------------------------------|-----------|--------------|----------|----------|-----------|----------|---------|-------|----|--------|---------------|
| | | Professional | Manager | Engineer | Planner | Designer | Staff | Hours | | Cost | Cost |
| Kimley-Horn and Associates, Inc. | | | | | | | | | | | |
| | \$230.00 | \$195.00 | \$185.00 | \$160.00 | \$115.00 | \$125.00 | \$65.00 | | | | |
| TASK DESCRIPTION - BASIC ENGINEERING | • | | | | | | | | | | |
| | | | | | | | | | | | |
| Task 6.0 Bidding Phase Services | | | | | | | | | | | |
| 1 Attend Pre-Bid Conference | | | 4 | 1 | 1 | 1 | 1 | 8 | \$ | 150.63 | \$ 1,205.00 |
| 2 Responses to Bidder's Questions | 1 | 1 | 4 | 4 | 6 | 6 | 3 | 25 | \$ | 137.60 | \$ 3,440.00 |
| Subtota | al 1 | 1 | 8 | 5 | 7 | 7 | 4 | 33 | \$ | 140.76 | \$ 4,645.00 |
| | | | | | | | | | | | 1 |
| Raw Labor Subtotal | 1 | 1 | 8 | 5 | 7 | 7 | 4 | 1,377 | \$ | 141.10 | \$ 194,290.00 |

| <u>DIRECT EXPENSES</u> | |
|--|-------------|
| A Postage, Express, Courier | \$42 |
| B. Plots | \$42 |
| C. Prints-Plan Sheets | |
| D. Printing-Reports and Specifications | |
| TOTAL DIRECT EXPENSES | \$840.0 |
| SUBCONSULTANT EXPENSES | |
| A. Specialty Subconsultants-Design | |
| Keith and Associates, Inc. | \$14,760. |
| Tierra, Inc | \$9,151. |
| Dickey Consultants Inc. | \$6,060.0 |
| Hillers | \$27,740.0 |
| TOTAL SUBCONSULTANT EXPENSES | \$57,711.0 |
| TOTAL EXPENSES | \$58,551. |
| | |
| TOTAL PROJECT FEE | \$252,841.0 |



Revised May 9, 2016 Revised March 31, 2016 Revised March 11, 2016 Revised January 5, 2016 Revised December 12, 2015 Revised December 5, 2015 November 4, 2015

Mr. Tom O'Donnell, PE Kimley-Horn 1920 Wekiva Way, Suite 200, West Palm Beach, FL 33411

Direct: 561-840-0825 Mobile: 305-710-7178 Main: 561-845-0665

RE: Agreement for Professional Services

Project Name: Fort Lauderdale Executive Airport –Taxiway Foxtrot

Project Location: City of Fort Lauderdale, Florida

Our Project/Proposal Number: 07202.M1

Dear Mr. O'Donnell:

In accordance with your request and subsequent discussions between members of our association and yourself, this agreement between Keith & Associates, Inc. ("CONSULTANT"), and Kimley-Horn and Associates, Inc. ("CLIENT") for professional services is submitted for your consideration and approval. CONSULTANT will begin work after receipt of a fully executed copy of this Agreement.

I. PURPOSE OF AGREEMENT/PROJECT DESCRIPTION

The purpose of this Agreement is to outline the scope of services recommended by CONSULTANT and accepted by CLIENT, and to establish the contractual conditions between CONSULTANT and CLIENT with respect to the proposed services.

CONSULTANT is to provide professional services associated with the rehabilitation of Taxiway Foxtrot and associated connectors, see attached project Limits.

II. SCOPE OF SERVICES

Section 1 - Engineering Services

Not a part of this Agreement.

Section 2 - Planning Services

Not a part of this Agreement.

Section 3 - Surveying Services

Task 001 Topographic Survey:

Survey limits are as shown on Attachment 'A' Project Limits.

The following services will be provided for the Design Engineer:

Perform Topographic Survey containing the following:

- Horizontal and vertical locations on all existing surface features within the blue survey limits areas, including but not limited to: paint marking, drainage features, drainage structures, utilities, electrical junction boxes, lights, sign bases, top and bottom of banks. Limits to extend to the Taxiway object free area which is 93' from the centerline of the taxiways. Elevations taken on a 20-foot grid.
- Only Horizontal locations in red areas.
- Set adequate project horizontal control and references. Does not include setting baseline in field.
- Set project benchmarks.
- Locate and obtain surface elevations at soil borings.
- Confirm horizontal and vertical control prior to construction.
- Map the survey and provide files electronically and in hardcopy with TIN file.

All surveying services shall conform to the applicable requirements of the Standards of Practice per Rule 5J-17 of the Florida Administrative Code. The drawing will adhere to the City of Fort Lauderdale's CADD standards. Horizontal datum for the project will be North American Datum of 1983 with the National Spatial Reference System adjustment of 2011 applied (NAD83/NSRS2011). Vertical Datum for the project will be North American Vertical Datum of 1988.

The Lump Sum Fee for this Task is.....\$ 14,760.00



Section 4 - Additional Services

The undertaking by CONSULTANT to perform professional services defined within this Agreement extends only to those services specifically described herein. If upon request of CLIENT, CONSULTANT agrees to perform additional services hereunder, CLIENT shall be obligated to pay CONSULTANT for the performance of such additional services an amount (in addition to all other amounts payable under this Agreement) based on an hourly fee in accordance with CONSULTANT'S current professional fee schedule, plus reimbursable expenses as incurred by CONSULTANT, unless a lump sum addendum to Agreement is executed by the parties to this Agreement which addresses the additional services.

Additional services shall include revisions to work previously performed that are required due to a change in the data or criteria furnished to CONSULTANT, a change in the scope or concept of the project initiated by CLIENT, or services that are required by changes in the requirements of public agencies after work under this Agreement has commenced.

If the preceding scope of services includes public agency permitting, our quoted fees/hours include services to respond to the agency's first RAI (Request for Additional Information). Additional agency requests or requirements shall be considered an increase to our scope of services.

PROPOSAL FEES

| | Our Project/Proposal Number | 0720 |)2.M1 | Perso | onnel and Hourly | Rates | | |
|--------|-----------------------------|-------|-----------|----------------------|--|----------------------------|-----|-------------|
| | Proposal Date | 5/9/2 | 2016 | 15 | 80 | 81 | 1 | |
| | Tasks | | | Senior Technician | Professional Surveyor & Mapper (PSM) | Survey Party (2) Person | Tas | k Subtotals |
| No. | Description | | | \$75.00 | \$120.00 | \$95.00 | | |
| 001 | TOPO SURVEY | | | 36 | 15 | 108 | \$ | 14,760.00 |
| | | | | | | | \$ | - |
| | | | | | | | \$ | - |
| | | | | | | | \$ | - |
| | | | | | | | \$ | - |
| | | | | | | | \$ | - |
| Perso | nnel Hours | | | 36 | 15 | 108 | \$ | 14,760.00 |
| Perso | nnel Cost | | | \$ 2,700.00 | \$ 1,800.00 | \$ 10,260.00 | | |
| Perso | nnel Subtotal | \$ | 14,760.00 | | | | | |
| | laneous Expenses | \$ | - | | | | | |
| Direct | Expenses | \$ | - | | | | | |
| GRAN | D TOTAL | \$ | 14,760.00 | | | | | |

TIERRA SOUTH FLORIDA, INC 2015/2016 STARDARD UNIT FEE SCHEDULE

DAY TIME RATES

| I. | FIELD INVESTIGATION | Unit | # of Units | | Unit Price | | Total |
|--------|---|----------------------|-------------|----------------|----------------------------|----------------|---------------------------|
| | Mobilization of Men and Equipment Truck-Mounted Equipment Specialized ATV/Mudbug Support Vehicle | Trip Trip Trip | 1 0 2 | \$ \$ \$ | 350.00 720.00 150.00 | \$ \$ \$ | 350.00 0.00 300.00 |
| | Standard Penetration Test Borings (By Truck-Mounted Equipment) Land: 0 - 50 ft depth 50 - 100 ft depth | L.F. L.F. | 50 0 | \$ \$ | 12.00 14.00 | \$ \$ | 600.00 0.00 |
| | Grout-Seal Boreholes (By Truck-Mounted Equipment) Land: 0 - 50 ft depth 50 - 100 ft depth | L.F. L.F. | 50 0 | \$ \$ | 4.50 5.50 | \$ \$ | 225.00 0.00 |
| | Field Permeability Tests | Test | 2 | \$ | 300.00 | \$ | 600.00 |
| | Pavement Cores, Asphalt | Each | 5 | \$ | 100.00 | \$ | 500.00 |
| II. | LABORATORY TESTING | | | | | | |
| | Natural Moisture Content Tests | Test | 3 | \$ | 10.00 | \$ | 30.00 |
| | Grain-Size Analysis - Full Gradation | Test | 2 | \$ | 65.00 | \$ | 130.00 |
| | Grain-Size Analysis - Single Sieve | Test | 0 | \$ | 35.00 | \$ | 0.00 |
| | Organic Content Tests | Test | 0 | \$ | 35.00 | \$ | 0.00 |
| | Atterberg Limit Tests Liquid Limit Tests (Only) Plastic Limit Tests (Only) | Test Test Test | 1 0 0 | \$ \$ \$ | 75.00 52.00 33.50 | \$ \$ \$ | 75.00 0.00 0.00 |
| | Field CBR | Test | 2 | \$ | 600.00 | \$ | 1,200.00 |
| | Proctor Test a) Modified b) Standard | Test Test | 2 0 | \$ \$ | 108.00 102.00 | \$ \$ | 216.00 0.00 |
| | Bitumen Extraction | Test | 4 | \$ | 150.00 | \$ | 600.00 |
| | Bitumen Gradation | Test | 4 | \$ | 150.00 | \$ | 600.00 |
| Ш | ENGINEERING/COORDINATION/MANAGEMENT | - | | | | | |
| | Project Manager | Hour | 1 | \$ | 165.00 | \$ | 165.00 |
| | Principal Engineer | Hour | 2 | \$ | 150.00 | \$ | 300.00 |
| | Senior Engineer | Hour | 4 | \$ | 125.00 | \$ | 500.00 |
| | Project Engineer | Hour | 12 | \$ | 105.00 | \$ | 1,260.00 |
| | Senior Technician | Hour | 14 | \$ | 75.00 | \$ | 1,050.00 |
| | CADD | Hour | 6 | \$ | 75.00 | \$ \$ | 450.00 9,151.00 |
| The un | it rates provided are, those for both public and private | sectors | | | | Ψ | 3,131.00 |

The unit rates provided are those for both public and private sectors.

Raj Krishnasamy, P.E Principal Geotechnical Engineer

Proposal for Fort Lauderdale Executive Airport (FXE)

Disadvantaged Business Enterprise (DBE) Monitoring and Reporting Services for Taxiway F Rehabilitation

Submitted to:
Mr. Tom O'Donnell
Kimley-Horn and Associates, Inc.

Prepared by:
Dickey Consulting Service, Inc.
P.O. Box 892
Fort Lauderdale, FL 33302
Phone: 954-467-6822

rione: 954-46*7-*6622 Fax: 954-467-7033

E-mail: sdickey@dickeyinc.com
www.dickeyinc.com

Proposal for DBE Monitoring and Reporting Services

Scope of Services: Provide professional DBE Liaison Officer (DBELO) services for the FXE Taxiway F Rehabilitation Project.

DBELO duties shall include:

- 1. Provide DBE compliance monitoring and reporting services during the project.
- 2. Attend meetings as required...
- 3. Review third party contracts and purchase requisitions for compliance with the program.
- 4. Gather and report statistical data and other information as required.
- 5. Perform interviews as required to monitor DBE compliance.
- 6. Advise the City on DBE matters and achievement.
- 7. Develop DBE forms for monitoring and compliance reporting to FAA-dbe-Connect.
- 8. Review documents to monitor DBE compliance.
- 9. Prepare and submit necessary compliance reports to the City for forwarding to DOT or FAA.

| Title | Rate | Total Hours | Total |
|---------------------|---------------------------|-------------|---------|
| DBE Principal | \$161.13 | 15 | \$2,417 |
| DBE Liaison Officer | E Liaison Officer \$95.88 | | \$3,643 |
| | | | \$6,060 |



HILLERS ELECTRICAL ENGINEERING, INC.

May 17, 2016

Mr. Thomas O'Donnell, P.E. Kimley-Horn & Associates, Inc. 1920 Wekiva Way, Suite 200 West Palm Beach, FL. 33411

Subject: Revised Electrical Design Services Fee Proposal for the City of Fort

Lauderdale Executive Airport (City) Proposed (7) Connectors on Existing Taxiway "F"- East of Taxiway "G" Pavement Rehabilitation, Electrical, Edge Quartz Lighting & Signs. Design is based City provided Criteria.

Dear Tom:

Hillers Electrical Engineering, Inc. (HEE) is pleased to provide Kimley-Horn & Associates, Inc. (KH) an electrical design services fee proposal for the Executive Airport (12) connectors located on Taxiway "F"-West of Taxiway "G" Electrical, Lighting and Signage Project.

The following items are included in our scope:

- Includes all City, FAA and KH Design Team design coordination meetings.
- Includes as-build reviews & field verifications and assessment of existing conditions.
- Includes all electrical calculations and regulator load testing.
- Includes airfield vault modifications for related to T/W "F" project.
- Includes airfield lighting electrical plans reflecting all cable & conduit systems, edge lighting installations, airfield vault modifications, ductbank systems and installation details for all electrical & lighting equipment installations.
- Includes Taxiway "F" (7) connectors / fillets existing signage relocations, layouts, signage schedule and equipment installation plans and detail layouts.
- HEE shall provide CADD design per current City CADD Standards for all phases.
- HEE shall provide electrical & signage design to KH 1-set of electronic files for 60%, 100% reviews, permits, bid phases.
- Includes Engineers Electrical & Signage Design Report.
- HEE shall provide all FAA specifications electrical bid line items and cost estimates.

23257 State Road 7, Suite 100, Boca Raton, Florida 33428 561-451-9165 Fax: 561-451-4886

- KH shall provide all printing of Plans & Specifications for reviews, bid phases, permits and construction phases to the City.
- Provide Bid & Award services Bid Package.
- Does not include Construction services.

Our proposed LS Electrical & Signage Design Report is: \$ 1335.

Our proposed LS Electrical & Signage Design Phase is: \$ 25,070.

Our proposed Bid & Award Services is: \$ 1335.

Grand Total \$ 27,740.

Sincerely, (See Attachment for Breakdown)

Thomas Doran, Vice-President

FT. LAUDERDALE EXECUTIVE AIRPORT

City of Fort Lauderdale, Florida

TAXIWAY "F"- West of TW "G" (7) Connectors Design Services

| Hillers Electrical Engineering, Inc. | | | | | | |
|--------------------------------------|---|--|--|---|--|--|
| Principal | Prof. | Proj. | CADD | Clerical | Total | Total |
| | Engineer | Engineer | Technical | Support | Hours | Base |
| \$135.00 | \$125.00 | \$115.00 | \$70.00 | \$60.00 | | \$\$ |
| | | | | | | |
| 1 | 4 | 4 | | 1 | 10 | \$1,155.00 |
| | 2 | 6 | | 1 | 9 | \$1,000.00 |
| | 6 | | | 1 | 7 | \$810.00 |
| 2 | 24 | 50 | 32 | 4 | 112 | \$11,500.00 |
| 2 | 8 | 20 | 12 | 1 | 43 | \$4,470.00 |
| 1 | 6 | 6 | 6 | 1 | 20 | \$2,055.00 |
| 2 | 20 | | | 21.5 | 43.5 | \$4,060.00 |
| 1 | 4 | 4 | | 4 | 13 | \$1,335.00 |
| 1 | 4 | 4 | 2 | 2 | 13 | \$1,355.00 |
| 10 | 78 | 94 | 52 | 36.5 | 270.5 | \$27,740.00 |
| \$1,350.00 | \$9,750.00 | \$10,810.00 | \$3,640.00 | \$2,190.00 | | \$27,740.00 |
| | \$135.00 1 2 2 1 2 1 1 10 | ### Engineer ### \$135.00 ### \$125.00 ### \$ | Principal Prof. Engineer Proj. Engineer \$135.00 \$125.00 \$115.00 1 4 4 2 6 2 24 50 2 8 20 1 6 6 2 20 6 1 4 4 4 4 4 1 78 94 | Principal Prof. Engineer Proj. Engineer CADD Technical \$135.00 \$125.00 \$115.00 \$70.00 1 4 4 4 2 6 6 6 2 24 50 32 2 8 20 12 1 6 6 6 2 20 6 6 1 4 4 2 1 4 4 2 10 78 94 52 | Principal Prof. Engineer Proj. Engineer CADD Technical Support Clerical Support \$135.00 \$125.00 \$115.00 \$70.00 \$60.00 1 4 4 1 2 6 1 1 2 24 50 32 4 2 8 20 12 1 1 6 6 6 1 2 20 21.5 2 1 4 4 4 4 1 4 4 2 2 10 78 94 52 36.5 | Principal Prof. Engineer Proj. Engineer CADD Technical Support Clerical Support Total Hours \$135.00 \$125.00 \$115.00 \$70.00 \$60.00 \$60.00 1 4 4 1 10 9 6 1 7 18 17 18 18 18 18 18 18 18 18 |

Prepared By: Hillers Electrical Engineering, Inc. 5-10-16

EXHIBIT B

