TASK ORDER No. 24

Dated this	s day of	, 2012
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CITY PROJECT No. 11749

FORT LAUDERDALE EXECUTIVE AIRPORT DESIGN SERVICES FOR THE PAVEMENT REHABILITATION & REPLACEMENT OF AIRFIELD LIGHTING TAXILANE CHARLIE WEST OF 13-31

Describing a specific agreement between the City of Fort Lauderdale (CITY) and Kimley-Horn and Associates, Inc. (CONSULTANT or KHA) in accordance with the terms of the agreement for professional services dated May 5, 2009 between CITY and CONSULTANT ("MASTER AGREEMENT") and amended and extended to May 4, 2013 by City Commission approval at its meeting on April 17, 2012.

PROJECT BACKGROUND

This project is for rehabilitating the existing airfield pavement along Taxilane Charlie from the non-movement line at Taxiway Bravo, west to its termination point. As part of this project approximately 1300 linear feet of Taxilane Charlie will be rehabilitated. The PCI values for this portion of Taxilane Charlie were below a PCI of 55. The taxilane shows signs of alligator cracking, depressions, swelling, transverse and longitudinal cracking, and weathering and raveling. Asphalt pavement cores will be conducted on the pavement to determine the depth of the cracks and the damage to the underlying layers to conclude if the pavement can be milled and overlaid or if full depth reconstruction is needed.

As part of the Taxilane Charlie rehabilitation the existing edge lights along the taxilane will be replaced with LED edge lights.

SPECIFIC SCOPE OF SERVICES

The project requires professional engineering services for design of the pavement rehabilitation for Taxilane Charlie to include milling and paving, pavement markings, lighting and associated work. Services shall include the following tasks:

Task 1.0 Pre-design Services

During this task, CONSULTANT shall develop a construction phasing plan and preliminary typical sections for the taxilane rehabilitation, undertake preliminary coordination, define the necessary pre-design field survey and geotechnical investigation, 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 to fully define project elements, phasing requirements, and project issues. This will be considered the pre-design meeting with the CITY.
- 2. Coordinate and administer early sub-consultant services.

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- 3. Field review project site.
- 4. Review existing plans and data.
- 5. Define and list design criteria applicable to the project.
- 6. Define topographic survey limits, and obtain those surveys (see Task 6.0 Special Services).
- 7. Recover and restore base mapping of underground facilities from previous projects (if any).
- 8. Define geotechnical investigation limits and requirements, and obtain those investigations (see Task 6.0 Special Services).
- 9. Develop preliminary phasing plans.
- 10. Meet with City to review phasing options, MOT, construction access, and staging options.
- 11. Based on selected phasing options, prepare an order of magnitude Opinion of Probable Construction Cost for the project.
- 12. Establish the schedule for and conduct weekly in-house design meetings.
- 13. Establish the schedule for and conduct monthly review and coordination meetings with the CITY.
- 14. Establish the Quality Control program for the services being provided and QC the services of this phase.
- 15. Provide administration for the services including monthly reports, subconsultant coordination, record keeping, and invoicing.

CONSULTANT shall provide as many as two copies each of the following for CITY review and written approval:

- Design criteria listing
- Preliminary horizontal alignment
- Phasing alternatives
- Preliminary access, MOT and staging plan
- Preliminary Opinion of Probable Cost

Task 2.0 Conceptual Design (30% Plans)

This task consists of the fieldwork, functional layouts, and preliminary plan development necessary to achieve approximately 30% design completion for the project. 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. Develop taxiway pavement geometry to 30% design level.
- 4. Prepare a preliminary pavement design and typical sections for the taxiway pavement and the shoulders based on the geotechnical investigation.
- 5. Prepare a taxiway grading concept and conceptual typical sections for grading.
- 6. Refine project phasing plan and define construction project limits by phase
- 7. Prepare a conceptual construction schedule.
- 8. Develop a construction safety plan concept.

- 9. Conduct weekly in-house design meetings.
- 10. Prepare construction drawings to approximately 30% completion
- 11. Prepare draft outline technical specifications and Engineer's Report.
- 12. Prepare an order of magnitude Opinion of Probable Construction Cost based on the 30% drawings.
- 13. Provide an independent Quality Assurance review for this phase.
- 14. Submit conceptual plans to the CITY for review.
- 15. Provide administration for the services including monthly reports, subconsultant coordination, record keeping, and invoicing.
- 16. Conduct up to one (1) concept design review and coordination meeting with the CITY.

CONSULTANT shall provide as many as two copies each of the following for CITY review and written approval:

- Construction drawings at approximately 30% completion (Electronic PDF Format)
- Outline of Technical Specifications and Engineering Report
- · Conceptual construction schedule
- Order of Magnitude Opinion of Probable Construction Cost

Task 3.0 – Preliminary Design (60% Plans)

During this task, CONSULTANT will continue designs and contract documents to 60% completion, that consist of construction drawings, technical specifications, and engineering report. Tasks shall consist of the following:

- 1. Prepare Taxiway and connecting taxiway profiles.
- 2. Finalize pavement design and typical pavement sections.
- 3. Finalize grading concept and typical grading sections and details.
- 4. Develop proposed cross sections for the taxiway, including slopes for tie-in to existing grade.
- 5. Finalize pavement geometry and limits of pavement demolition.
- 6. Prepare preliminary edge lighting plans (Hillers Electrical Engineering, Inc.).
- 7. Develop phasing plans to 60%.
- 8. Prepare preliminary pavement marking plans.
- 9. Prepare Opinion of Probable Construction Cost based on 60% drawings.
- 10. Prepare construction safety plan with details and notes.
- 11. Develop construction plans to 60% completion.
- 12. Prepare draft-engineering report and technical specifications.
- 13. Provide Quality Control review of the services being provided.
- 14. Conduct weekly in-house design meetings.
- 15. Submit plans, bid documents, engineering report, and opinion of probable construction cost to the CITY for review and comment.
- 16. Conduct design meeting(s) with the CITY.
- 17. Provide administration for the services including monthly reports, subconsultant coordination, record keeping, and invoicing.

Deliverables for this task will consist of the following:

- Construction drawings at approximately 60% completion (Electronic PDF Format)
- Engineering Report and Technical Specifications one copy
- Opinion of Probable Construction Cost one copy

Task 4.0 -Contract Document Preparation (100% Plans)

During this task, CONSULTANT will complete designs and contract documents, to 100% completion, that consist of construction drawings, technical specifications, and engineering report. Tasks will consist of the following:

- 1. Finalize pavement marking layout plan.
- 2. Finalize lighting design (Hillers Electrical Engineering, Inc.).
- 3. Develop construction plans to 100% completion.
- 4. Finalize phasing plans and notes.
- 5. Finalize construction safety plan with details and notes.
- 6. Prepare a final quantity take off and opinion of probable construction cost.
- 7. Conduct a plan-in-hand field review of the construction plans.
- 8. Finalize the technical specifications and the engineering report. Incorporate review comments previously received.
- 9. Provide plans, construction documents, and certifications for the CITY to submit to FDOT for approval and authorization to advertise for bids.
- 10. Provide Quality Control review of the services being provided.
- 11. Provide administration for the services including monthly reports, record keeping, and invoicing.
- 12. Conduct up to one (1) design development meeting with the CITY.
- 13. Develop bid forms with final quantities.
- 14. Prepare supplemental provisions.

The anticipated sheets to be included in the construction drawings for each taxiway design 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
7-8	Project Phasing and Safety Plans, 1"=200'
9	Phasing Summary
10-11	Existing Conditions Plan, 1"=40', single panel
12-13	Typical Sections
14-15	Horizontal Geometry Plan, 1"=40'
16-17	Demolition Plan, 1"=40'
18-19	Grading and Drainage Plan, 1"=40'
20-21	Grading and Paving Details

22-23	Paving Plans with Elevations, 1"=40'
24-25	Taxiway Profiles, 1"=40', double panel
26-27	Pavement Marking Plan, 1"=40'
28-29	Pavement Marking Details
30-31	Cross Sections
32	Electrical Notes and Symbols
33-34	Electrical Demolition, Light Layout
35-38	Electrical Details & Schedules

Deliverables for this task will consist of the following:

- 100% completion
 - Plan sets (24" x 36") two sets, one set signed and sealed
 - Plan set (electronic, including plot files) CD containing CAD files of 100% plans and plot files in pdf format to verify conformance with current CITY CAD standards.
 - CD containing Bid Form Documents, Technical Specifications and Engineering Report
 - Engineering Report Two copies
 - Opinion of Probable Construction Cost Two copies

Task 5.0 - CAD Standards Review

During this task, CONSULTANT will complete CITY CAD standard review of the 100% construction drawings. Tasks will consist of the following:

- Processing CAD files to conform to CITY CAD standards after receiving CAD review comments from the CITY.
- 2. Resubmit CAD drawings to the CITY with processed CAD review.

Deliverables:

Deliverables for this task will consist of the following:

- Plan set (electronic, including plot files) - CD containing CAD files of 100% plans and plot files in pdf in conformance with current CITY CAD standards.

Task 6.0 - Special Services

FIELD SURVEY AND MAPPING (Keith and Associates, Inc.)

This special service will provide up-to-date field mapping of the proposed project site. Keith and Associates, Inc., as a subconsultant, will perform Field survey to develop topographic base mapping for the project.

Survey limits for Taxilane Charlie will consist of approximately the non-movement line at the intersection with Taxiway Bravo to ramp at the west termination of Taxilane Charlie and a

varying width of 200 to 300 feet centered on the taxilane centerline, as well as areas for taxilane connectors to all ramps.

The following services will be provided:

- Set adequate project horizontal control and references. Establish baselines for the rehabilitated taxilane.
- Set project benchmarks.
- Perform a topographic survey within the survey limits to locate all above-ground features and all evidence of below-ground features.
- Obtain elevations within the survey limits using a 20-foot grid.
- Map the survey and provide files electronically and in signed and sealed hardcopy, in accordance with KHA requirements.
- Provide surfaces and contours

GEOTECHNICAL INVESTIGATION & MATERIALS TESTING (Tierra South Florida, Inc.)

Geotechnical investigation will be performed to confirm the existing pavement section of Taxilane Charlie as well as to establish the soil parameters for design of the rehabilitated taxilane pavement and taxilane connectors. Tierra South Florida, Inc., as a subconsultant, will provide the following services:

Field Investigation

- 8 cores through existing Taxilane Charlie pavement to determine pavement constituent thickness.
- Asphalt Extractions on core samples.
- Visual classification of the soils encountered below pavement cores
- Depth to ground water and estimated depth to seasonal high ground water
- 8 standard penetration test (SPT) borings to ten feet below existing grade to determine soil profile including layer thickness along the proposed taxiway alignment (one boring each 200 feet).

ELECTRICAL AND LIGHTING DESIGN (Hillers Electrical Engineering, Inc.)

Hillers Electrical Engineering, Inc. (HEE) will be retained by the CONSULTANT to conduct the electrical design services associated with Taxilane Charlie Pavement Rehabilitation.

The following items are included in our scope:

- Includes all CITY and CONSULTANT design coordination meetings.
- Includes as-build reviews & field verifications and assessment of existing conditions.
- Includes replacement of all existing quartz taxiway edge lighting within proposed project limits with new LED taxiway lighting fixtures elevated and flush. Also all transformers will be replaced to match new LED fixture specifications.
- Includes replacement of all existing quartz lamp signage within proposed project limits with new LED lamp signage. Also all transformers will be replaced to match new LED fixture specifications. Signage foundations will be replaced accordingly per existing conditions.

- Includes new airfield lighting & signage plans reflecting all edge in-pavement & elevated mounted lighting and signage installation details and plans layouts within project limits.
- Does not include any type of cable & conduit systems, base can installations, duct bank systems, airfield vault improvements, and signage beyond project limits.
- HEE shall provide electrical design (one-set) of reproducible drawings for 30%, 60%, 100% reviews, bid, and construction phases.
- Includes Electrical Calculations and Engineers Electrical Report.
- HEE shall provide all FAA specifications electrical bid line items and cost estimates.
- Provide Bid Package.

Task 7.0 -Bidding Phase Services

During this phase, CONSULTANT will assist the CITY during the advertising of the project. Upon receipt of authorization to advertise, CONSULTANT will do the following tasks:

- 1. Assist with one (1) pre-bid meeting with potential bidders and affected agencies.
- 2. Respond in writing to bidders questions.

PROJECT ASSUMPTIONS

- 1. Plans will be prepared on CAD overlays of the survey and will be in conformance with CONSULTANT'S AUTO CAD Civil3D 2011 CAD standards and in coordination with the CITY current CAD standards. The CONSULTANT shall work with the CITY to provide modifications to CAD standards to be used.
- 2. CONSULTANT will provide CADD files during 100% plan submittal only to verify conformance with current CITY CAD standards.
- Technical specifications, the engineering report, and other written documents will be in Word. The engineering report will conform to the FAA format. Designs will be in accordance with FAA Regulations and Advisory Circulars, and will conform to FDOT guidelines.
- 4. Coordination with FAA and FAA documentation such as the FAA Construction Safety and Phasing Plan (CSPP), and the FAA Airport Development Safety Assessment Worksheet are not included in this scope.
- 5. The 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 the CONSULTANT may rely on.
- 6. There are no permit applications required for this project.
- 7. The construction phase services scope and fess will be defined during the final design phase, but shall require the CONSULTANT to administer the construction contract and provide partial construction phase services. Construction phase services are not included in this scope.

ADDITIONAL SERVICES

If authorized in writing by the City as an amendment to this Task Order, the Consultant shall furnish, or obtain from others, Additional Services of the types listed in Article 8 of the Master

Agreement. The City, as indicated in Article 7 of the Master Agreement, will pay for these services. Conversion of CITY supplied plans that are not in compliance with current CITY CAD standards and are to be incorporated into the work shall be considered additional services. Should additional stakeholder meetings be required, the meetings, meeting preparation, exhibit preparation and meeting documentation shall be considered as additional services.

PERFORMANCE SCHEDULE

The CONSULTANT shall perform the services identified in Tasks 1 through 7 inclusive within 120 working days of written Notice to Proceed.

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), 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 will be itemized separately, subject to an established Not-to-Exceed limit. The total hourly rates payable by the CITY for each of CONSULTANT's employee categories, reimbursable expenses and subconsultant 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:

<u>Description</u> Task 1	<u>Labor</u> \$ 17,040.00	Sub-consultants	<u>Totals</u> \$ 17,040.00
Task 2	\$ 30,285.00		\$ 30,285.00
Task 3	\$ 81,625.00		\$ 81,625.00
Task 4	\$ 18,080.00		\$ 18,080.00
Task 5	\$ 4,690.00		\$ 4,690.00
Task 6	\$ 0.00	\$ 32,215.00	\$ 32,215.00
Task 7	\$ 3,875.00		\$ 3,875.00

Reimbursable Expenditures (Not to Exceed) \$

\$3,850.00

Total

\$ 191,660.00

CLOSURE

All Provisions of the Master Agreement remain in full force and effect. IN WITNESS OF THE FOREGOING, the parties have set their hands and seal.

WITNESSES:	CITY OF FORT LAUDERDALE:
	By JOHN P. "JACK" SEILER, Mayor
Print Name	
	By LEE R. FELDMAN, City Manager
Print Name	
(SEAL)	ATTEST:
	JONDA K. JOSEPH, City Clerk
	Approved as to form:
	CARRIE L. SARVER, Assistant City Attorney

\mathcal{F}	Name: David R. Bardt, P.E. Title: Sr. Vice President ATTEST: By: Name: Russell Barnes, P.E. Title: Sr. Vice President
Kimley-Horn and Associates, Inc, ackr	. Vice President and Sr. Vice President respectively, of nowledged the foregoing instrument before me this 2, on behalf of the corporation. They are personally
MARLENE S. WILKINS MY COMMISSION # EE 052667 EXPIRES: January 4, 2015 Bonded Thru Notary Public Underwriters	Notary Public, State of Florida (Signature of Notary taking Acknowledgement) Madene S. Wilkins Name of Notary Typed, Printed or Stamped 1-4-15 My Commission Expires

EE 052667 Commission No.

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8/30/2012

MAN-HOUR ESTIMATE FOR EXHIBIT "A"

Pavement Rehabilitation & Replacement of Airfield Lighting of Taxilane Charlie West of 13-31 City Project No. 11749 5/31/2012

Subtotal	16 Concept Design Meeting with City	15 Administration	14 Submit Plans to City for Review	13 Independent Quality Assurance Review	12 Prepare Conceptual Construction Schedule	11 Prepare Order of Magnitude Opinion of Probable Cost	10 Prepare Outline of Engineer's Report	9 Prepare Outline Technical Specifications	8 Prepare Construction Plans to 30%	7 Conduct Design Team Meetings - 4 (Weekly)	6 Develop Construction Safety Plan - Conceptual	5 Refine project phasing plan and define construction project limits by phase	4 Develop Preliminary Grading Concept	3 Prepare Pavement Design & Typical Sections	2 Develop Geometry to 30% level	1 Prepare Base Mapping	Task 2- Conceptual Design (30% Submittal) (One Month)	Subtotal	16 Administration	15 Quality Assurance Review	14 Meetings with City Staff -1 (Monthly)		12 Prepare an Order of Magnitude Opinion of Probable Construction Cost	11 Identify Preliminary Construction Access, MOT and Staging Options	10 Develop preliminary phasing plans	9 Develop preliminary horizontal layout	8 Define Geotech Requirements and Obtain those investigations	7 Recover and restore base mapping of underground facilities from	6 Define Field Survey Requirements and Obtain Surveys	5 Define and List Design Criteria for Project	4 Review existing plans and data		2 Coordinate and Administer Early Subconsultant Services	1 Attend and Participate in an Issues and Project Definition Meeting	Task 1- Predesign Services (One Month)	TASK DESCRIPTION BASIC ENGINEERING		Kimley-Horn and Associates, Inc.		EXHIBIT NO. A TO FORM OF CONTRACT
19	4	4		2					2	1		2	2		2			23	4	2	4	_					1		_		_	3	2	4			\$225.00	Dave	Manager	Project
54	2	2	1	2	4	4	_	_	10	4	2	6	8	2	G G	0		38	ப	2	2	4	2	2	4	2	2	2	2	1	4	3	1	4			\$125.00	Sarah	Engineer	Prof.
76				0	4	12			20	4	4	4	8	4	10	6		24				4	8	2	4	2					4						\$110.00	Cody	Analyst	Engineer
112	0		2	4	2				30	4	8	10	16	8	18	10		43		2	0	4		4	10	6		2	2		10	2		1			\$95.00	Art	Tech	CADD
4		4																6	2											1	1		1	1			\$65.00	Sharda	Admin.	Clerical/
265	6	10	3	8	10	16	1		62	13	14	22	34	14	35	16		134	7	6	6	13	10	8	18	10	3	4	5	2	20	8	4	10					Hours	Total
\$ 114.28		\$ 141.00		\$ 135.00	\$ 113.00		\$ 125.00		\$ 108.87			\$ 117.73	\$ 113.24		\$ 111.00	\$ 100.63		\$ 127.16	١.	\$ 148.33		\$ 118.85		١.		\$ 104.00		\$ 110.00	\$ 133.00					\$ 156.00					Cost	Unit
\$ 30,285.00	\$ 1	\$ 1	\$	\$	\$ 1	\$ 1,820.00	€		\$ 6,750.00	\$ 1,	↔	\$	€9	↔	↔	\vdash		\$ 17,040.00	\$	\$ 890.00	\$ 1	8	-	ક્ક	\$ 1,890.00	\$ 1	\$	\$ 440.00	\$	\$	\$	\$ 1	\$	-					Cost	Labor

EXHIBIT "A" MAN-HOUR ESTIMATE FOR

Pavement Rehabilitation & Replacement of Airfield Lighting of Taxilane Charlie West of 13-31 City Project No. 11749 5/31/2012

A MAIN A MAIN	2 Resubmit CAD drawings to CITY	1 Process CAD files to conform with CITY standards	Task 5 - CAD Standards Review (One week)	Subtotal	8 Administration	7 Provide plans for the CITY to submit to FDOT.	6 Provide Quality Control review of the services being provided.	5 Prepare Supplemental Provisions	4 Develop Bid Forms and Final Quantities	3 Finalize Engineers Report	2 Finalize Technical Specifications	1 Finalize Design Drawings	Task 4 - Contract Document Preparation (One Month)	Subtotal		18 Design Meeting with City	17 Submit Plans and Documents to City for Review	16 Prepare Draft Technical Specifications	15 Prepare Draft Engineering Report	14 Develop Construction Plans to 60%	13 Design Team Meetings - 4 (Weekly)	12 Prepare Preliminary Construction Safety Plan with Details and Notes	11 Perform Quality Control Review	10 Prepare Preliminary Opinion of Probable Construction Cost	9 Perform Quantity Take Off	8 Prepare Preliminary Pavement Marking Plans	7 Develop Construction Phasing Plans to 60 %	6 Finalize Demolition Limits	5 Finalize Pavement Geometry			2 Finalize Pavement Design & Sections	1 Prepare Taxilane Charlie and Connecting Taxiway Profiles	Task 3 - Preliminary Design (60% Submittal) (Two Months)	TASK DESCRIPTION - BASIC ENGINEERING		Kimley-Horn and Associates, Inc.		EXHIBIT NO. A TO FORM OF CONTRACT
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	3 0	2		88	2	2	4	4	6	4	4	12		100	4	2	4	12	4	40	4	2	4	10	6	4	12	2	6	6	10	6	12			\$125.00	Sarah	Engineer	Prof.
,		0		54			4	4	8	8	12	18		233				40	14	50	4	10	4	20	20	8	16	0	10	12	10	0	15			\$110.00	Cody	Analyst	Engineer
i	8 8	34		33			4		4			24		280		0	4			90	4	14	10	4	10	18	30	4	20	20	18	4	30			\$95.00	Art	Tech	CADD
,	5			17	4				4	4	4			α	8																					\$65.00	Sharda	Admin.	Clerical/
7	46	37		156	10	4	16	8	22	16	22	58		/16	22	6	8	54	18	184	14	26	32	36	36	30	58	6	36	38	44	11	57					Hours	Total
-	\$ 109.44	1		06.511 \$		\$ 102.50		١.		\$ 102.50	١.	\$ 114.83		\$ 114.00	_	١.			\$ 113.33		\$ 126.43			\$ 118.89						\$ 104.47			\$ 105.26					Cost	Unit
•	-	3		\$ 1	\$ 1	\$ 410.00	-	↔	_	↔	€9	\$ 6,660.00		\$ 81,625.00	8	\$	\$	€9	\$	\$	_	\$	-	\$	\$	S	\$	\$	\$	\$	\$ 5,410.00	€						Cost	Labor

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8/30/2012

EXHIBIT "A" MAN-HOUR ESTIMATE FOR

Pavement Rehabilitation & Replacement of Airfield Lighting of Taxilane Charlie West of 13-31 City Project No. 11749 5/31/2012

\$32,215.00								TOTAL SUBCONSULTANT EXPENSES
\$13,325.00 \$11,570.00								Hillers Electrical Engineering, Inc.
\$7,320.00								A. Specialty Subconsultants-Design Keith and Associates, Inc.
								SUBCONSULTANT EXPENSES (Task 6)
\$3,850.00								TOTAL DIRECT EXPENSES
\$1,200								E. Printing-Reports and Specifications
\$1,200								D. Prints-Plan Sheets
\$850								C. Plots
\$600								A Postage, Express, Courier B. CADD Computer Reimbursement
								DIRECT EXPENSES
\$ 155,595.00	115.77	1,344 \$	36	518	387	292	111	Raw Labor Subtotal
\$ 3,875.00	143.52	27 \$		8	0	10	8	Subtotal
\$ 2,285.00	134.41	17 \$	1	6	0	6	4	2 Responses to Bidder's Questions
\$ 1,590.00	159.00	10 \$	0	2		4	4	1 Attend Pre-Bid Conference
								Task 7 - Bidding Assistance
								TASK DESCRIPTION - BASIC ENGINEERING
			\$65.00	\$95.00	\$110.00	\$125.00	\$225.00	
			Sharda	Art	Cody	Sarah	Dave	Kimley-Horn and Associates, Inc.
Cost	Cost	Hours	Admin.	Tech	Analyst	Engineer	Manager	
Labor	Unit	Total	Clerical/	CADD	Engineer	Prof.	Project	EXHIBIT NO. A TO FORM OF CONTRACT



Revised July 16, 2012 May 18, 2012

Mr. David R. Bardt, P.E. Sr. Vice President Kimley- Horn and Associates, Inc. 1920 Wekiva Way Suite 200 West Palm Beach, FL 33411 561-840-0851 Direct 561-845-0665 Office

RE: Agreement for Professional Services

Project Name: Fort Lauderdale Executive Airport - Taxiway Charlie

Project Location: City of Fort Lauderdale, Florida

Our Project/Proposal Number: 07202.04

Dear Mr. Bardt:

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 a portion of Taxiway Charlie at Fort Lauderdale Executive Airport.

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

The Sub-Consultant will prepare a Topographic Survey within the limits as shown on the attached EXHIBIT and provide following:

- Set adequate project horizontal control and references
- Set project benchmarks
- Perform a topographic survey within the survey limits to locate all above-ground features and all
- · evidence of below-ground features
- · Obtain elevations within the survey limits using a 20-foot grid
- Map the survey and provide files electronically and in hardcopy
- Provide surfaces and contours

All surveying services shall conform to the applicable requirements of 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 2007 applied (NAD83/NSRS2007). Vertical Datum for the project will be North American Vertical Datum of 1988 (NAVD 1988). Deliverables will include signed and sealed copies and a CD.

The Lump Sum Fee for this Task is.....\$ 7,320.00

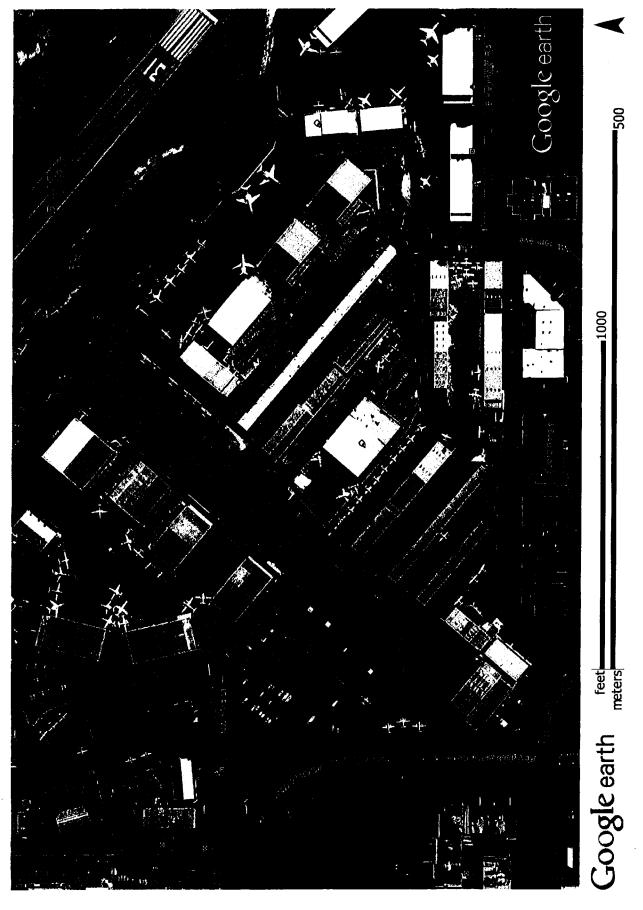
Duty Code	Hours	Rate Table	Total
01-Admin. Assistant		\$50.00	\$0.00
15-Technician	32	\$65.00	\$2,080.00
16-Senior Technician		\$75.00	\$0.00
60-Professional Surveyor		\$105.00	\$0.00
70-Principal		\$150.00	\$0.00
78-Field Crew Supervisor		\$90.00	\$0.00
80-Senior Professional Surveyor	12	\$120.00	\$1,440.00
81-2-Person Field Crew	40	\$95.00	\$3,800.00
82-3-Person Field Crew		\$115.00	\$0.00
83-4-Person Field Crew		\$135.00	\$0.00
TOTAL			\$7,320.00

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.





June 1, 2012

Kimley-Horn & Associates, Inc. 1920 Wekiva Way, Suite 200 West Palm Beach, FL 33411

Attention:

Ms. Eileen M. Velez-Vega, P.E.

Re:

Proposal for Geotechnical Services

Proposed Taxiway Charlie West Rehabilitation Project

Ft. Lauderdale Executive Airport

Ft. Lauderdale, Florida TSF Proposal No.: 1206-191

Dear Eileen:

As requested, **Tierra South Florida**, **Inc. (TSF)** is pleased to submit this proposal for the above-referenced project. The proposal is based on e-mail from Ms. Eileen M. Velez-Vega, P.E. dated May 31st, 2012.

We understand that the improvement consist of rehabilitation of Taxiway Charlie. The work will consist of milling and resurfacing Taxiways Charlie West.

This proposal includes an outline of our proposed scope of work, an estimate of the total fees, and our anticipated schedule for completion of the work.

PROPOSED SCOPE OF WORK

All work performed by TSF will be in general accordance with Advisory Circular AC 150. As requested, based on our understanding of the project, we have been requested to obtain 8 (eight) pavement cores and drill a total of eight (8) Standard Penetration Test (SPT) borings to a depth of 10 feet below existing grade. Additionally, we propose to perform 6 field CBR tests (Kessler Method).

The following laboratory testing will be performed on selected samples:

Extraction and Gradation

Borings and test locations will be approximately located in the field by our personnel based on information provided to us. Elevations at boring locations can be interpreted from topographic plans

if furnished by others.

Prior to drilling at the project site, TSF will notify the local utility companies and request that

underground utilities be marked. Our experience, however, is that the utility companies will not

mark privately owned utilities. We believe that significant coordination will likely be required to

perform the field operations and the work will be conducted at night time to avoid disturbance to

patrons.

Upon completion of the field exploration, laboratory testing will be performed on selected samples.

A geotechnical engineer will evaluate the results of all drilling and laboratory testing. A report will

be issued that contains the exploration data, laboratory data, depth to ground water and estimated

depth and elevation (NGVD) to seasonal high ground water and a discussion of the site and

subsurface conditions and pavement recommendation.

ESTIMATED FEES

It is proposed that the fee for the performance of the services outlined above is determined on a unit

price basis in accordance with the attached Fee Schedule and that the work be performed pursuant to

Tierra's General Conditions enclosed herewith and incorporated into this proposal. On the basis of

the proposed quantities, it is estimated that the total fee will be approximately \$13,325 for night time

work.

Our estimate covers the work needed to present our findings and recommendations in a formal

report. Not included are reviews of foundation drawings, preparation of construction specifications,

special conferences and any other work requested after submittal of our report.

Boring, sampling, and testing requirements are a function of the subsurface conditions encountered.

Therefore, the estimated fee previously indicated is approximate, and compensation for the

exploration will be based on the actual work and tests performed. We will endeavor to keep the

exploration cost at a minimum consisting with good engineering practice.

12-2022

1 age 3

SCHEDULE AND AUTHORIZATION

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

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

Respectfully submitted,

TIERRA SOUTH FLORIDA, INC.

François Thomas, P.E. Principal Engineer

Attachments: 1. Fee Estimate

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

TIERRA SOUTH FLORIDA, INC 2009/2010 STARDARD UNIT FEE SCHEDULE

NIGHT RATES

1.	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 0	\$ \$ \$	350.00 720.00 150.00	\$ \$ \$	350.00 0.00 0.00
	Standard Penetration Test Borings (By Truck-Mounted Equipment) Land: 0 - 50 ft depth 50 - 100 ft depth	L.F. L.F.	80 0	\$ \$	18.00 21.00	\$ \$	1,440.00 0.00
	Grout-Seal Boreholes (By Truck-Mounted Equipment) Land: 0 - 50 ft depth 50 - 100 ft depth	L.F. L.F.	80 0	\$ \$	6.75 8.25	\$ \$	540,00 0.00
	Field Permeability Tests	Test	3	\$	350.00	\$	1,050.00
	Pavement Cores, Asphalt	Each	16	\$	225.00	\$	3,600,00
	Pavement Cores, Concrete	Each	0	\$	225,00	\$	0.00
II.	LABORATORY TESTING						
	Visual Examination/Stratify	Per Hour	3	\$	100.00	\$	300.00
	Natural Moisture Content Tests	Test	4	\$	10.00	\$	40.00
	Grain-Size Analysis - Full Gradation	Test	3	\$	65.00	\$	195.00
	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	0 0 0	\$ \$ \$	75.00 52.00 33.50	\$ \$ \$	0.00 0.00 0.00
	Field CBR	Test	0	\$	600.00	\$	0.00
	Grain-Size with Hydrometer	Test	0	\$	115.00	\$	0,00
	Proctor Test a) Modified b) Standard	Test Test	0 0	\$ \$	108.00 102.00	\$ \$	0.00 0.00
	Bitumen Extraction	Test	4	\$	150.00	\$	600,00
	Bitumen Gradation	Test	4	\$	150.00	\$	600.00
181	ENGINEERING/COORDINATION/MANAGEM	MENT					
	Project Manager	Hour	4	\$	165.00	\$	660.00
	Principal Engineer	Hour	0	\$	150.00	\$	0,00
	Senior Engineer	Hour	6	\$	125.00	\$	750.00
	Project Engineer	Hour	20	\$	100.00	\$	2,000.00
	Senior Technician	Hour	12	\$	75.00	\$	900,00
	CADD	Hour	4	\$	75.00	\$	300.00
The u	nit rates provided are, those for both public and p	rivate sectors				\$	13,325.00

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

Raj Krishnasamy, P.E Principal Seotechnical Engineer



HILLERS ELECTRICAL ENGINEERING. INC.

June 21, 2012

Mr. David Bardt, P.E. Kimley-Horn & Associates, Inc. 4431 Embarcadero Drive West Palm Beach, FL. 33407

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

Executive Airport (City) Taxiway "C" Electrical, Edge Lighting and

Signage Project. Project Length 1300 ft.

Dear Dave:

Hillers Electrical Engineering, Inc. (HEE) is pleased to provide Kimley-Horn & Associates, Inc. (KH) an electrical design services fee proposal for the Executive Airport Taxiway "C" Relocation Electrical, Lighting and Signage Project.

The following items are included in our scope:

- Includes all City and KH design coordination meetings.
- Includes as-build reviews & field verifications and assessment of existing conditions.
- Includes all electrical calculations and regulator load testing.
- Includes replacement of existing airfield electrical systems for Taxiway C.
- Includes airfield lighting electrical plans reflecting all cable & conduit systems, edge lighting installations, electrical for signage, airfield vault modification, ductbank systems and installation details for all electrical & lighting equipment installations.
- KH shall provide signage layouts & signage schedule to HEE accordingly.
- KH shall provide all base drawings to HEE on AutoCAD 2010.
- HEE shall provide electrical design to KH electronically for 30%, 60%, 100% reviews, bid and construction phases.
- Includes Engineers Electrical Report.
- HEE shall provide all FAA specifications electrical bid line items and cost estimates.
- KH shall provide all printing of Plans & Specifications for reviews, bid phases and construction phases to the City.
- Provide Bid Package.
- Does not include Construction services.

Our proposed electrical design fee is: \$ 11,570.

Sincerely,

Thomas Doran, Vice-President

Exhibit 1

FT. LAUDERDALE EXECUTIVE AIRPORT

City of Fort Lauderdale, Florida

TAXILANE "C" Design Services

Task Description		Hillers Electrical Engineering, Inc. Base Package							
	2/16/2010	Project	Prof.	Proj.	CADD		Clerical	Total	Total
		Manager	Engineer	Engineer			Support	B & Alt	Base
	Direct Labor Rates	\$115.00	\$100.00	\$95.00	\$80.00		\$45.00	Hours	\$\$
Construction Phase Services									
								0	\$0.00
Design coordination meeting City & KHA Design Team		1	2	2			1	6	\$550.00
On-Site Verifications & As Built Reviews			1	4			1	6	\$525.00
Electrical Calculations			8				1	9	\$845.00
Taxiway Lighting Plans 30, 60, 100%		2	12	24	24		1	63	\$5,675.00
Installation & Layout Details			1	1	2		1	5	\$400.00
Specifications & Bid Items & Cost Estimates		1	16	4			12	33	\$2,635.00
Bid & Award		1	4	4			1	10	\$940.00
								0	\$0.00
								0	\$0.00
								0	\$0.00
								0	\$0.00
Total		5	44	39	26	0	18	132	\$11,570.0
Fotal Labor Costs:		\$575.00	\$4,400.00	\$3,705.00	\$2,080.00	\$0.00	\$810.00		\$11,570.00

Prepared By: Hillers Electrical Engineering, Inc. 6-21-12