

TASK ORDER No. 28

Dated this _____ day of _____, 2013

CITY PROJECT No. 11909

FORT LAUDERDALE PUBLIC WORKS DEPARTMENT

**FORT LAUDERDALE EXECUTIVE AIRPORT
NEW AIRFIELD LIGHTING COMPUTER CONTROLLED MONITORING SYSTEM (ALCCMS)
FOR AIR TRAFFIC CONTROL TOWER**

PROFESSIONAL SERVICES

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 General Engineering Aviation Consultant services dated May 5, 2009 between CITY and CONSULTANT ("MASTER AGREEMENT") and amended and extended on April 17, 2012 and extended again to May 4, 2014 by City Commission approval at its meeting on February 19, 2013.

PROJECT BACKGROUND

The Fort Lauderdale Executive Airport (FXE) new Air Traffic Control Tower (ATCT) is currently under construction and is located at 5547 NW 23rd Avenue, in Fort Lauderdale, Florida on the south end of the Fort Lauderdale Executive Airport (see Exhibit 1). This project will be for the coordination of the electrical design and construction services for the installation of a Federal Aviation Administration (FAA) approved Airfield Lighting Computer Controlled Monitoring System (ALCCMS) to be located in the new FAA Air Traffic Control Tower (ATCT) facility and in the existing airfield lighting electrical vault with a new direct fiber-optic/duct bank systems network connection between both facilities.

SCOPE OF SERVICES AND DELIVERABLES

This task order will cover the engineering, electrical design, and construction services.

CONSULTANT shall provide all electrical design services through their sub-consultant, Hillers Electrical Engineering Inc., as described on the tasks herein below:

Task No. 1 Electrical Design Services (Hillers Electrical Engineering, Inc.)

Services during this task shall include the following:

- Schedule and attend all design coordination meetings with City, FAA, and tower personnel.
- Conduct extensive interviews, design reviews & approvals with FAA Air Traffic Controllers and FAA ATC Facilities Technical Department for control panel screens/programming/ graphic's and computer equipment placements in the new ATC Tower.
- Conduct interviews with the current FAA approved manufactures of airfield lighting computer controlled monitoring systems and evaluations.
- Provide all installation details reflecting new fiber-optic cable & duct bank systems installations between the existing airfield lighting vault's new interface computer controller and the new air traffic control tower computer controller and touch screens.
- Provide design for all necessary cable trays & conduit systems from the base of the new ATCT tower to the tower cab. Includes coordination & design with the new FAA ATC designer.
- Coordination & design with the new FAA ATC building designer for new circuits in their panel boards for new ALCCMS system equipment.

- Provide (Type 1.) airfield lighting computer imbedded controlled (CIC) system equipment layouts: touch screens, keyboards, CPU's, TVSS's, cabling, graphic screen layouts reflecting all FXE airfield runways & taxiways, NAVAIDS, Runway Guard Lighting Bars, Wind Socks, PAPI's, logic for software programming per City & ATC FAA Controllers recommendations, equipment installations in FAA air traffic control tower and airfield lighting vault.
- Provide (Type 2.) airfield lighting programmable logic controlled system equipment layouts: touch screens, keyboards, CPU's, TVSS's, cabling, graphic screen layouts reflecting all FXE airfield runways & taxiways, NAVAIDS, Runway Guard Lighting Bars, Wind Socks, PAPI's, logic for software programming per City & ATC FAA Controllers recommendations, equipment installations in FAA air traffic control tower and airfield lighting vault.
- Provide design of direct fiber optic/duct bank systems routing between new FAA ATC and existing airfield lighting vault.
- Provide new ALCCMS power & control circuits, conduit systems to each of the runways, taxiways, runway guard lighting regulators, and NAVAIDS contactors from the new airfield lighting computer controlled system located in the airfield lighting vault.
- Provide design of new vehicle mounted radio/mobile controller for maintenance/operations on airfield inspections. Hillers will be providing design for vehicle mounted radio control in bid documents.
- SUBCONSULTANT shall provide all electrical & ALCCMS specifications, electrical & ALCCMS bid line items and cost estimates on Word Documents to CONSULTANT.
- SUBCONSULTANT shall provide (1) reproducible set of plans & specifications for the new Airfield Lighting Computer Controlled Monitoring System for 30%, 60%, 100% reviews, bid, and permit. The CITY will provide Front End documents.
- SUBCONSULTANT shall provide services during bid & award process.

Plans sheets are anticipated to include the following;

Cover Sheet	C101
Airfield Layout Plan	C102
Safety Plan Sheet	C103
General Electrical Notes	E101
Electrical Site Plan	E201
Airfield Electrical Vault Demolition Plan	E301
Airfield Electrical Vault Installation Plan	E302
Electrical Block Diagrams and Notes	E303
Electrical Risers, Schedule and Details	E304
Electrical Risers, Schedule and Details	E305
Electrical Risers, Schedule and Details	E306
Airfield Graphic Touch Screen Layout	E307
Electrical Details	E308
FAA Tower ALCMS Installation Plan	E401
FAA Tower ALCMS Installation Plan	E402

Deliverables

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

- Set of plans & specifications for the new Airfield Lighting Computer Controlled Monitoring System for 30%, 60%, 100% both in CAD and pdf format for review.
- Electrical & ALCCMS specifications, electrical & ALCCMS bid line items and cost estimates on Word Document.

Task No. 2 Electrical Construction Phase Services (Hillers Electrical Engineering, Inc.)

Construction Services scope includes the following:

- Attend Construction Progress Meetings with CITY, FAA and Contractor (up to 12 meetings).
- Coordination with FAA Tower & CITY Personnel & Contractor during Installation of the ALCCMS Equipment in the FAA ATC Facility and Airfield Lighting Vault Building.
- Shop Drawings Reviews & Approvals (Hardware, Software, Programming, System Schematic Equipment Layouts & Wiring Plans, Warranties, CCR Regulator, Fiber-Optic Cable System, Vault Electrical & Control Equipment).
- On-site factory visit with FAA and CITY personnel to witness complete in place ALCCMS operation, verifications & testing prior to shipping.
- Periodic on-site inspections for ALCCMS System Equipment being installed in FXE Airfield lighting vault and in new FAA ATC fiber-optic cabling/duct bank systems installation between Airfield Lighting Vault and new FAA Tower Cab. (12 hours per week – 9 weeks).
- Preliminary & Final On-Site System Testing and System Cut-Over.
- Preliminary & Final System Training for CITY Maintenance and FAA ATC Staff.
- Final System review & approvals for contractor/manufacture provided "Record Drawings" and O&M Maintenance Manuals and spare parts.

Task No.3 Subconsultant Plan Review

The CONSULTANT is responsible for all work of their sub consultants to meet the deliverables included in this task order as well as the following tasks:

1. CONSULTANT shall review Subconsultant plans for Quality Control.
2. CONSULTANT shall attend pre-design coordination and review meetings.
3. CONSULTANT shall provide base drawing for airfield for design of direct fiber optic/conduit systems routing between new FAA ATC and existing airfield lighting vault.

PROJECT ASSUMPTIONS

Specific assumptions for the project:

1. Any work beyond the scope of services will require a separate written authorization and will be considered Additional Services.
2. Plans will be prepared on CAD overlays and will be in conformance with CONSULTANT's AUTO CAD Civil3D 2009 CAD standards and in coordination with the CITY's current CAD standards. The CONSULTANT shall work with the CITY to provide modifications to CAD standards to be used.
3. Task order includes Design and Construction Phase Services.
4. CONSULTANT assumes that the New FAA ATC Tower Building & Site Plans electronic files will be available for the new ALCCMS design via the CITY.
5. The FAA's consultant shall provide all new FAA ATC tower & site electronic drawing(s) files (interior & exterior) on AutoCAD 2010 to CONSULTANT.
6. Notes:
 - The current FAA L-890 Advisory for Airport Lighting Control and Monitoring system (ALCCMS) AC 150/5345-56A Approved Manufacturer List reflects (2) two different types of control operating systems.
 - (Type 1.) Computer Imbedded controlled operating system (CIC) is provided by ADB Airfield Solutions, LLC and Crouse-Hinds Airport Lighting Products.

- (Type 2.) Programmable Logic Control (PLC) operating system is provided by Liberty Airport System.
- The FAA Title 49 CFR, Part 18.36c states all procurement transactions will be conducted in a manner providing full and open competition.
- This proposal is based on providing Bid Documents reflecting the (2) two types of proposed ALCCMS operating systems, so all FAA approved ALCCMS manufacturers have the opportunity to bid on project.

CITY'S REPOSIBILITIES

- The City's project manager, or a designated representative, will coordinate the project for the CITY.
- The City shall provide Front-end to Bid Specifications.
- The CITY will provide existing plan data and as-built drawings as well as the Front End documents. CITY shall provide CONSULTANT with access to project site as required.

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 the Master Agreement, will pay for these services.

PERFORMANCE SCHEDULE

The CONSULTANT shall perform the services identified in Task 1 through Task 3 inclusive within 90 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 the Airport's Capital Improvement Program, 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 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 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 shall be provided for the following Not-to-Exceed amounts:

Task No	Task Title	Labor Fees		Total
		Consultant	Sub consultant	
1	Electrical Design Services	\$ 0.00	\$40,700.00	\$40,700.00
2	Electrical Construction Phase Services	\$0.00	\$34,300.00	\$34,300.00
3	Project Coordination	\$11,605.00	\$0.00	\$11,605.00
All tasks				\$ 86,605.00
Contingency				\$ 1,200.00
TOTAL				\$ 87,805.00

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** at the address shown below. **Please be sure that all correspondence refers to the City project number and title as stated above.**

City of Fort Lauderdale
City Hall, 4th Floor – Engineering
100 North Andrews Avenue
Fort Lauderdale, FL 33301

CONSULTANT CONTACTS

David R. Bardt, P.E.
Kimley-Horn and Associates, Inc.
1920 Wekiva Way, Suite 200
West Palm Beach, FL 33411
Email: dave.bardt@kimley-horn.com
Phone: 561-840-0851
Fax: 561-863-8175

CLOSURE

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

CITY OF FORT LAUDERDALE, a municipal corporation
of the State of Florida:

By _____
LEE R. FELDMAN, City Manager

(CORPORATE SEAL)

ATTEST:

JONDA K. JOSEPH,
City Clerk

Approved as to form:

CARRIE L. SARVER,
Assistant City Attorney

CONSULTANT

WITNESSES:

Starda Dunne
STARDA DUNNE

Print Name

KIMLEY-HORN AND ASSOCIATES, INC.

By: *DRB*

Name: David R. Bardt, P.E.

Title: Sr. Vice President

Larry Flowers
LARRY FLOWERS

Print Name.

ATTEST:

By: *KS*

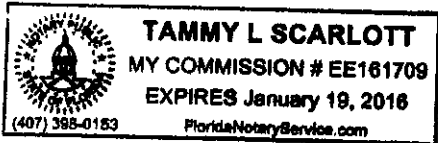
Name: Kevin Schanen, P.E.

Title: Vice President



STATE OF FLORIDA:
COUNTY OF PALM BEACH:

David R. Bardt and Kevin Schanen as Sr. Vice President and Vice President respectively, of Kimley-Horn and Associates, Inc., acknowledged the foregoing instrument before me this 30th day of October, 2013, on behalf of the corporation. They are personally known to me and did not take an oath.



Tammy L. Scarlott
Notary Public, State of Florida
(Signature of Notary taking Acknowledgement)

Name of Notary Typed, Printed or Stamped

My Commission Expires

Commission No.

EXHIBIT 1

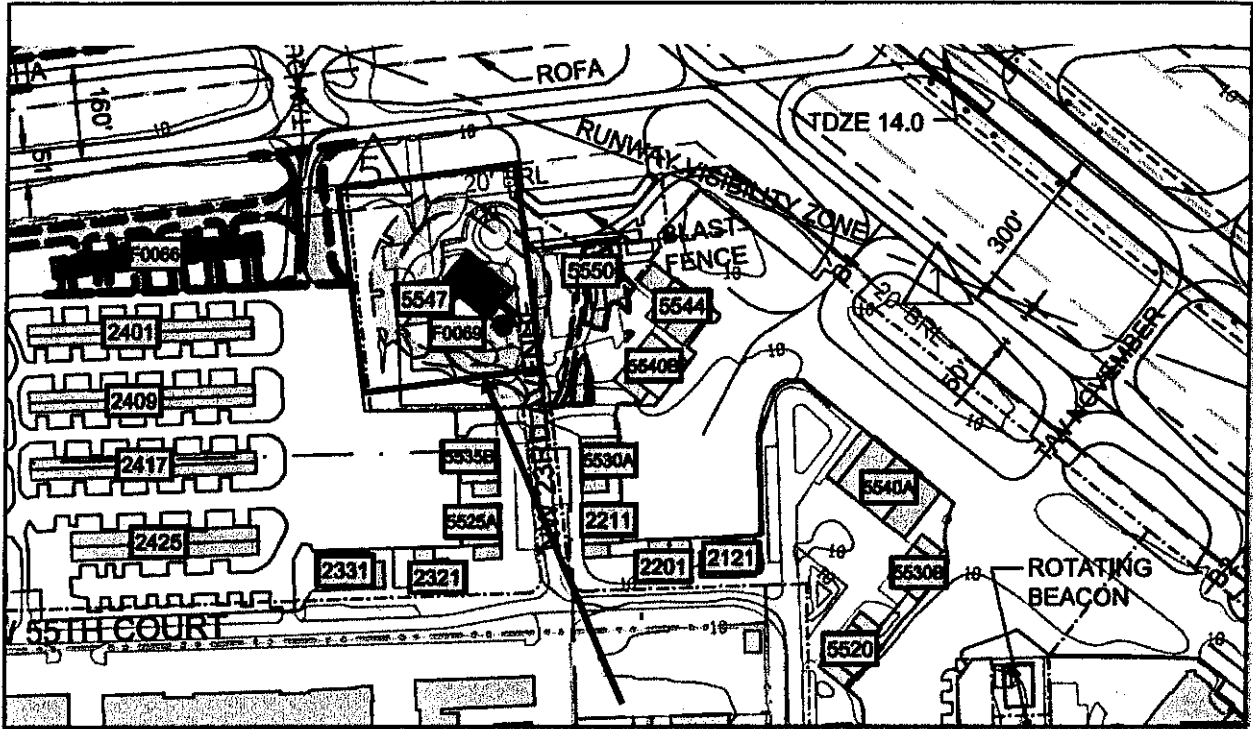


Exhibit 1. Project Location

EXHIBIT "A"
MAN-HOUR ESTIMATE FOR
New Airfield Lighting Computer Controlled Monitoring System (ALCCMS)
Fort Lauderdale Executive Airport (FXE)

10/29/2013

EXHIBIT NO. A TO FORM OF CONTRACT		Project Management				Production					Labor Cost	
Kimley-Horn and Associates, Inc.		Principal	Project Manager	Total Hours	Labor Cost	Senior Engineer	P.E. / Sr. Designer	Engineer Analyst	CADD Tech	Clerical/ Admin.	Total Hours	Labor Cost
TASK DESCRIPTION - BASIC ENGINEERING		\$225.00	\$225.00			\$170.00	\$125.00	\$110.00	\$95.00	\$65.00		
1	Plan Review and Quality Control		8	8	\$ 1,800.00	11	14			5	30	\$ 3,945.00
2	Attend Pre-Design and Review Meetings		14	14	\$ 3,150.00		6			4	10	\$ 1,010.00
3	Provide Sub-Consultant with Base Drawings		2	2	\$ 450.00		10				10	\$ 1,250.00
Raw Labor Subtotal		0	24	24	\$ 5,400.00	11	30	0	0	9	50	\$ 6,205.00
TOTAL DIRECT EXPENSES												
SUBCONSULTANT EXPENSES												
A. Specialty Subconsultants-Design												
Design - Hilliers Electrical Engineering (HEE)												
Construction - Hilliers Electrical Engineering (HEE)												
TOTAL SUBCONSULTANT EXPENSES												
TOTAL EXPENSES												
TOTAL FEE - PROJECT MANAGEMENT												
TOTAL FEE - PRODUCTION												
TOTAL KHA LABOR												
CONTINGENCY (10%)												
TOTAL KHA FEE												
TOTAL PROJECT FEE												
\$0												
\$40,700												
\$34,300												
\$75,000												
\$75,000												
\$5,400												
\$6,205												
\$11,605												
\$1,200												
\$12,805												
\$87,805												

**PROJECT: FXE New Airfield Lighting Computer Controlled Monitoring System (ALCMS) for New FAA ATC Tower & Existing Airfield Lighting Vault.
 HILLERS ELECTRICAL ENGINEERING, INC.
 SCOPE FEE SUMMARY
 FEE PROPOSAL**

PHASE OF WORK	Rate	Proj. Mgr. Hours	\$115.00	Prof. Eng. Hours	\$110.00	Proj. Eng. Hours	\$95.00	CADD/TECH Hours	\$80.00	Clerical Hours	\$45.00	Total Hours	TOTAL TASK COST
Design Phase													
Design Coord. Mtgs City, FAA ATC		1		24		24				4		53	\$5,215.00
FAA ATC ALCMS Programming / Graphic Screens Design & Approvals		4		32		32		16		4		88	\$8,480.00
FAA ATC ALCMS Equipment Layouts / Risers Design & Approvals		4		16		20		20		1		61	\$5,765.00
FAA ATC Electrical & Control Systems Design & Approvals		2		8		12		12		1		35	\$3,255.00
Airfield Vault ALCMS Equipment, Electrical & Control System Design		4		16		32		20		1		73	\$6,905.00
New Airfield Site Conduit & Fiber Systems Connection ATC to Vault		1		8		16		20		1		46	\$4,160.00
Specifications, Costs Estimates, Bid Line Items		4		24		12				16		56	\$4,960.00
Bid & Award Services		2		8		8				2		20	\$1,960.00
Subtotal		22		136		156		88		30		432	\$40,700.00
Construction Services													
Construction coordination mtg. FXE, FAA ATC, Contractor (12 weeks)		1		12		12						25	\$2,575.00
Computer Control System Shop Drawings Reviews & Approvals		1		48		36				2		87	\$8,905.00
On-site at Factory Testing & Approvals (3 days)		1		24						1		26	\$2,800.00
ALCMS Airfield Vault & FAA ATC Installations (12 hrs per wk - 9 weeks)		1		8		108				3		120	\$11,390.00
Preliminary & Final Testing / FXE & FAA ATC Approvals		1		40		8				2		51	\$5,365.00
Manufacturer on-site visit Training FXE & FAA ATC		1		8		4				1		14	\$1,420.00
Review ALCMS System Record Drawings		1		8		8				2		19	\$1,845.00
Subtotal		7		148		176		0		11		342	\$34,300.00
Total Hours		29		284		332		88		41		774	
Total Labor Cost		\$3,335.00		\$31,240.00		\$31,540.00		\$7,040.00		\$1,845.00		\$75,000.00	\$75,000.00