

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2012	2013	2014	2015	2016
Capital Expenditures	\$ 238,649	0	0	0	0
Operating Costs	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income (County)	0	0	0	0	0
In-Kind Match (County)	0	0	0	0	0
NET FISCAL IMPACT	\$238,649				
# ADDITIONAL FTE POSITIONS (Cumulative)					

Is Item Included in Current Budget? Yes X No _____
 Budget Account No: Fund 3801 Dept 411 Unit B548 Object 4907 \$119,324.00
 Fund 3801 Dept 411 Unit B547 Object 4907 \$119,325.00

Reporting Category _____

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

This item is funded from the 800 MHz Renewal/Replacement Fund which was established in 2000 and is made up of annual fees paid by all full time users of the system (primarily PBSO and Fire Rescue, but also municipal, state and Federal direct connect users as well) and \$12.50 Fine and Forfeiture proceeds.

C. Departmental Fiscal Review: _____ *W* 1-19-12

III. REVIEW COMMENTS:

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

N. Davis 1/24/2012
 OFMB
1/23/12 *1/31/12*

Dr. J. Jacobson 1/30/12
 Contract Administrator
 1-30-12 B. Wheeler

This item complies with current County policies.

B. Legal Sufficiency:

James P. [Signature] 1/31/12
 Assistant County Attorney

C. Other Department Review:

 Department Director

CONSULTANT SERVICES AUTHORIZATION
JOHNSON LEVINSON RAGAN DAVILA (JLRD, Inc.)
RF ENGINEERING CONSULTANT SERVICES
PROJECT NO. 12201
COUNTYWIDE

THIS AUTHORIZATION NO. 2 to the Contract dated 06/21/11 (R2011-0850) between Palm Beach County and the Consultant identified herein is for the Consultant Services described in Item 3 of this Authorization.

1. **CONSULTANT:** **JLRD, Inc.**
1450 Centrepark Blvd., Suite 350
West Palm Beach, FL 33401
2. **History:** CSA No. 1 provided for specialty engineering selection services.
3. **Services completed to date:** CSA No. 1 is complete.
4. **Description of Services to be provided by Consultant:** Professional services shall include RF consultant services, as detailed on the attached proposal dated January 3, 2012.
5. **Time of Commencement:** Consultant shall begin work promptly on the requested services upon receipt of this executed document which shall constitute official "Notice to Proceed".
6. **Compensation:** The compensation to be paid to the Consultant for the requested services shall be:

Lump Sum fee of	\$217,349
Time and Material, Not to Exceed charge of	\$21,300
TOTAL	\$238,649

7. This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed to termination date, together with reimbursable expenses (if applicable) then due.

Consultant agrees to waive any and all claims for lost profits or anticipated future profits in the event of a termination with or without the cause under this Contract.

8. If not previously provided or for a new project, the Consultant shall provide County with an executed Conflict of Interest Disclosure Form, attached hereto and incorporated herein.

9. **EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED**, all other terms, conditions, and obligations of the original Contract shall remain in full force and effect.

IN WITNESS WHEREOF, this Authorization is accepted, subject to the terms and conditions of the aforementioned Contract.


COUNTY

ATTEST:
Sharon R. Bock, Clerk & Comptroller

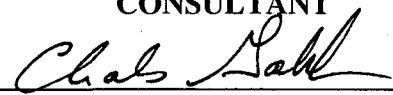
PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

By: _____
Deputy Clerk

By: _____
Shelley Vana, Chair

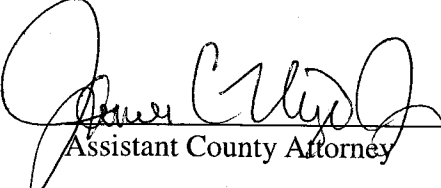
WITNESS:


Dana Simmons
Name (type or print)

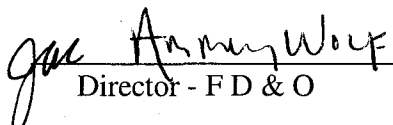
CONSULTANT
By: 
Name: CHARLES G. BLOWMAN
Title: VICE-PRESIDENT
Date: 4/5/2012

Approved as to Form and Legal Sufficiency

Approved as to terms and conditions



Assistant County Attorney



Director - FD & O

January 3, 2012

Mr. John Chesher, Director
Palm Beach County
2633 Vista Parkway
West Palm Beach, FL 33411-5604

Re: RF Engineering Consultant Services

Dear John,

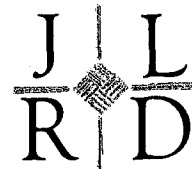
We are pleased to submit the following proposal for professional services in conjunction with electrical RF design and review for Palm Beach County Radio System Upgrades, located in Palm Beach County, Florida.

Johnson, Levinson, Ragan, Davila, Inc. (JLRD), hereinafter referred to as the Engineer, proposes to furnish professional services for **Palm Beach County**, hereinafter referred to as the Client for the Scope of Services outlined below for the fees stipulated herein.

SCOPE OF SERVICES

The Engineer will perform the following:

1. Attend meetings as required with the Client.
2. Provide RF Design, vendor review, and other related services as described in the attached Radio System Upgrades Statement of Work (SOW) (*Task One: Analog Microwave System; Task Two: Motorola SmartZone Master Site Equipment (MSE) Renewal/Replacement*). Note: SOW includes tasks for "Consultant" (JLRD) and its subcontractor (RCC).
3. Respond to review comments, answer RFI's from the field, and review shop drawings and equipment documentation as submitted by the contractor for general conformance with the design documents.
4. Conduct occasional site visits during construction to observe the progress and compliance with the documents
5. Provide administrative support and management services for RF specialty subconsultant.
6. Engineer will provide services identified as "Consultant" in SOW.
7. Additional services mutually agreed upon.



JOHNSON, LEVINSON,
RAGAN, DAVILA, INC.
CONSULTING ENGINEERS

1450 Centrepark Boulevard, Suite 350
West Palm Beach, FL 33401
(561) 689-2303 • (561) 689-2302 Fax
www.jlrdinc.com

Mr. John Chesher, Director
January 3, 2012
Page – 2

Re: RF Engineering Consultant Services

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED)

This project does not include engineering effort associated with obtaining LEED Certification.

ITEMS SPECIFICALLY EXCLUDED FROM THE SCOPE OF SERVICES

1. Identification of and/or abatement design for hazardous materials.
2. Field verification of existing concealed conditions.

ITEMS TO BE FURNISHED BY CLIENT AT NO EXPENSE TO THE ENGINEER

Assist the Engineer by furnishing at no cost to the Engineer, all available pertinent information including, but not by way of limitation, previous studies, drawings, specifications, test reports, and any other data relative to performance of the above services for the project.

Designate a person to act as the Client representative with respect to the services to be performed under this Agreement. Such person shall have complete authority to transmit instruction, receive information, interpret and define the Client policies and decisions with respect to materials, equipment, and systems pertinent to the Engineer's services.

TIME OF PERFORMANCE

The Engineer will perform his services with due and reasonable diligence, consistent with sound professional practices and the timely receipt of information necessary for performing the agreed to services.

FEES TO BE PAID

For items 1 through 5 of the Scope of Services, the Engineer shall be paid a lump sum fee of Two Hundred Seventeen Thousand Three Hundred Forty Nine Dollars (\$217,349.00), which includes a 10-percent mark-up of sub consultant services for management and administrative costs.

For item 6 of the Scope of Services, the Engineer shall be paid an hourly fee based upon the attached Rate Schedule. We estimate the total amount to be paid for the services to be roughly Twenty One Three Hundred Dollars (\$21,300.00). JLRD promises to notify the Client when this upset limit is approached, and agrees to not proceed with services beyond this amount without prior approval. Hourly rates shall be consistent with the prime agreement.

Out-of-pocket expenses are not anticipated, but may be reimbursed for direct non-salary expenses in accordance with Paragraph 5.5.3 of the prime agreement contract between PBC and JLRD, if needed.

Mr. John Chesher, Director
January 3, 2012
Page – 3

Re: RF Engineering Consultant Services

PROBABLE CONSTRUCTION COSTS

Statements of the probable costs of construction are NOT included under "Basic Services".

MODIFICATIONS AND ADDITIONS TO EXISTING SYSTEMS

Because of the Engineer's many years of background and experience in design and construction, the Engineer is qualified to make recommendations and designs which, in the Engineer's opinion, will meet the needs of the situation. These services will be performed to the best of the Engineer's skill and ability and commensurate with the economics of the situation. Although the documented components of the existing systems to be modified can be analyzed, the actual components of the existing systems cannot be fully determined because the Engineer was not present during fabrication or construction, and therefore is not responsible for unforeseen conditions which affect final construction.

SPECIALTY CONSULTANT

The Scope of Services for this contract requires the use of a Specialty Consultant, RCC Consultants, Inc., to provide the professional design services. As such, the percentage of fee to be paid to the Consultant is significantly higher than that due to the Engineer. These fees are itemized per the attached and should be considered during the Owner's evaluation/calculation of the volume of work/fees earned by the Engineer vs. the overall contract value.

MINORITY / SBE

Because of the type of professional services requested to be provided by JLRD, Inc. for this task authorization, minority / SBE requirements will not be met as there are no local, specialized firm which comply with these requirements. Therefore, this project will be excused when reporting the final calculation of minority / SBE participation percentages.

Mr. John Chesher, Director
January 3, 2012
Page - 4

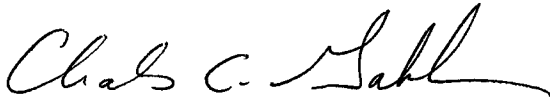
Re: RF Engineering Consultant Services

ACCEPTANCE

Acceptance of this proposal may be indicated by the signature of a duly authorized official of the Client in the space provided below. One (1) signed copy of this proposal returned to the Engineer will serve as an Agreement between the two (2) parties and as a Notice to Proceed (unless indicated otherwise by the Client). This contract will be binding on the parties hereto. Should this proposal not be accepted within a period of thirty (30) days from the above date, it shall become null and void. Should this document not be executed and returned to us, all parties acknowledge and agree that "authorization to proceed" through any other means constitutes formal acceptance of all terms and conditions herein.

Very truly yours,

JOHNSON, LEVINSON, RAGAN, DAVILA, INC.



Charles C. Gableman, P.E., RCDD
Vice President

CCG/bev

Enc.

Accepted by:

Signature

Date

Designated Client Representative

(Print or Type Name)

**Palm Beach County
RF Engineering Consultant Services**

Supplemental Agreement	Description	RCC				JLRD Support - Hrly / NTE		
		Hours	Labor	Travel	Total	Hours	Labor	Total
SA #1	Analog Microwave System Upgrade							
1*	Kickoff Meeting, Needs Assessment, and Site Survey	32	\$ 6,100.00	\$ 2,162.00	\$ 8,262.00	16	\$ 150.00	\$ 2,400.00
2*	Detailed Design	96	\$ 17,160.00	\$ 885.50	\$ 18,045.50	16	\$ 150.00	\$ 2,400.00
3	Procurement Documentation	36	\$ 6,720.00	\$ -	\$ 6,720.00	8	\$ 150.00	\$ 1,200.00
4*	Implementation, Project Management, and Oversight	282	\$ 51,360.00	\$ 8,199.50	\$ 59,559.50	40	\$ 150.00	\$ 6,000.00
5	Project Schedule	18	\$ 3,360.00	\$ -	\$ 3,360.00	4	\$ 150.00	\$ 600.00
					\$ 95,947.00			\$ 12,600.00
SA #2	Motorola SmartZone MSE Renewal / Replacement							
1*	Kickoff Meeting, Needs Assessment, and Site Survey	52	\$ 9,860.00	\$ 2,668.00	\$ 12,528.00	12	\$ 150.00	\$ 1,800.00
2	Design Review	118	\$ 21,920.00	\$ -	\$ 21,920.00	10	\$ 150.00	\$ 1,500.00
3*	Implementation, Project Management, and Oversight	202	\$ 37,610.00	\$ 3,944.50	\$ 41,554.50	24	\$ 150.00	\$ 3,600.00
4	Project Schedule	18	\$ 3,360.00	\$ -	\$ 3,360.00	4	\$ 150.00	\$ 600.00
5*	System Performance Evaluation	102	\$ 18,600.00	\$ 3,680.00	\$ 22,280.00	8	\$ 150.00	\$ 1,200.00
					\$ 101,643.00			\$ 8,700.00
* On-Site Tasks								
					\$ 197,590.00			\$ 21,300.00
			Prime Markup	10%	\$ 19,759.00			\$ -
					\$ 217,349.00			\$ 21,300.00
			Lump Sum + Hrly / NTE		\$ 238,649.00			

STATEMENT OF WORK

PROFESSIONAL CONSULTING SERVICES Palm Beach County Radio System Upgrades

I. DEFINITIONS:

CID – Palm Beach County Capital Improvements Division

Consultant – Johnson, Levinson, Ragan, Davila, Inc. (JLRD)

Deliverables - a tangible or intangible object produced as a result of the project that is intended to be delivered to the County.

ESS – Palm Beach County Electronic Services & Security Division

Subcontractor – business, RF Design Professional, to perform part or all of the obligations assigned by JLRD.

II. SCOPE OF WORK:

A. **Task One: Analog Microwave System Upgrade** – one-for-one replacement of equipment in ten (10) separate tower facilities. Replacement equipment must tie-in and communicate with existing microwave system components.

1. Kickoff meeting, needs assessment and site survey:

a. Consultant shall coordinate project kickoff meeting to review scope of work and project schedule with CID, ESS and Subcontractor.

b. Consultant and subcontractor shall interview ESS to determine the present and future applications that will be served by the upgraded microwave system to include the migration of the existing dispatch console connections from the County's other 6 GHz microwave system.

c. Consultant and subcontractor shall collect from ESS available documentation on the current system and provide oversight on the transition of these circuits from the analog system to the new system.

d. Subcontractor shall perform site survey of typical installation.

e. Consultant and subcontractor shall compile required documentation that consists of existing tower loading diagram, shelter floor plan, power plan, rack diagrams and recommended T-1/DSO assignments.

Scope of Work Report

Needs Assessment Report

Migration, Tie-In and Transition Report

Site Survey Summary

2. Detailed design:

- a. Consultant and subcontractor shall develop a detailed design for upgrading the microwave system. The design shall include: Microwave Path Analysis; listing of required FCC license modifications; System Block-Level Diagram; Equipment list; Cost to furnish and install; floor plans; specifications; and any other information required for a complete and operational system.
- b. Subcontractor shall develop a cutover plan to allow for a smooth transition from the analog system to the digital system.
- c. Provide 35%, 95%, and Final Submittals for Review. Provide written responses and incorporate into the design package.
- d. Subcontractor shall include cover page signed and sealed by a Florida state licensed Professional Engineer.

Microwave path analysis report
Required FCC license modification report
System Diagram (block style)
System Diagram (elevation view)
Equipment List
Implementation (Cutover) Plan narrative

3. Procurement Documentation:

- a. Subcontractor shall develop the necessary equipment list and installation services required to upgrade the microwave system.
- b. Consultant shall assist ESS and CID with reviewing quotations and qualifications from microwave bidders.

Equipment List
Installation Services List

4. Implementation, project management and oversight:

- a. Consultant shall provide project management and oversight for the implementation of the microwave system upgrade by the microwave vendor.
- b. Subcontractor shall provide detailed design for project.
- c. Consultant shall participate in regular teleconference with ESS, CID, microwave installer, and subcontractor to resolve any issues and to ensure schedule compliance.

- d. Subcontractor shall oversee the physical installation of the equipment.
- e. Subcontractor shall attend and oversee the testing /staging at the vendor facility (even if out of state) with ESS representatives.
- f. Subcontractor shall perform an inspection and witness the testing of each equipment installation in County facilities. The testing will be performed by the installing contractor and observed by the subcontractor using vendor-provided test equipment.
- g. Subcontractor shall inspect the test equipment and witness the performance of the testing and record the results. The testing shall be performed for the whole system when all paths are properly installed and configured.
- h. Subcontractor shall develop and provide an Acceptance Testing Report when the acceptance testing is completed. Report shall include cover page signed and sealed by a Florida State licensed Professional Engineer provided by the subcontractor.
- i. Consultant and subcontractor shall create a punch list of deficiencies, manage the punch list and monitor its completion by the subcontractor.
- j. Consultant and subcontractor shall monitor the cutover of applications supported by the current microwave system
- k. Consultant shall turn over to ESS, following submittal review and approval by the subcontractor, the close out project package, as-built documentation (subcontractor to update construction documents to provide record drawings to CID), warranty documentation, training for County maintenance personnel provided by the Installer / Contractor / Vendor and ensure that all related submittals have been received by CID.

Project Plan (Design, phasing, cost)
Equipment Staging / Testing Report
Installation / Inspection Reports
Certified Acceptance Test Report
Punch List
Close Out Package

5. Project schedule:

- a. Consultant with assistance from the subcontractor shall provide a detailed design plan, including: schedule and expected costs by date as well as the following:

submittal reviews, procurement lead times, installation milestones, testing, training and warranty terms.

Project Schedule / Costs

B. Task Two: Motorola SmartZone Master Site Equipment (MSE) Renewal/Replacement – one-for-one replacement of Motorola head-end equipment in one (1) facility.

1. Kickoff meeting, Needs Assessment and Site Survey:

- a. Consultant shall attend project kickoff meeting to review scope of work and project schedule with CID, ESS, subcontractor and Motorola.
- b. Consultant and subcontractor shall interview ESS to determine the present and future applications that will be served by the renewal/replacement of the County's MSE.
- c. Consultant and subcontractor shall collect from ESS available documentation on the current system and provide over sight on the replacement.
- d. Subcontractor shall perform site survey of the County's Master Site.
- e. Subcontractor shall review and provide comments on Motorola's submittal of the new floor plan, power plan, and rack diagrams.

Scope of Work Report
Needs Assessment Report
Submittal Reviews

2. Design Review:

- a. Subcontractor shall review Motorola's design and implementation project for the renewal/replacement of the MSE. Subcontractor will provide detailed peer review and compare against industry best practices. Subcontractor will highlight areas of concern and provided recommendations as needed.
- b. Subcontractor shall develop a cutover plan to allow for a smooth transition from the SmartZone 3.0 to the Project 25/Smart X configuration and Gold Elite Console system upgrades.

Detail Peer Review Report and Associated Recommendations

3. Implementation, project management and oversight:

- a. Consultant shall provide management and oversight for the implementation of the MSE.

- b. Subcontractor shall coordinate & participate in the detailed design reviews (35%, 95%, Final) with ESS and Motorola to finalize the implementation schedule. Written responses to comments shall be provided to ESS and incorporated into the design package.
- c. Consultant and subcontractor shall document all status meetings with CID and Motorola and provide recommendations on any past implementation issues that have arisen with other systems.
- d. Consultant and subcontractor shall participate in regular teleconference with CID and vendor to resolve any issues and to ensure schedule compliance.
- e. Subcontractor shall inspect the physical installation of the equipment by Motorola.
- f. Subcontractor shall attend and oversee the testing of the MSE staging at the Motorola's facility (out of state) with ESS representatives.
- g. Subcontractor shall perform an inspection and verify the testing of each piece of equipment installed in County and other facilities (municipal dispatch centers). The testing will be performed by Motorola using Motorola-provided test equipment, if required.
- h. Subcontractor shall witness the performance of the system and testing and will record the results. The testing shall be performed for the whole system when all components are properly installed and configured.
- i. Subcontractor shall develop and provide ESS an Acceptance Testing Report when the acceptance testing is completed. Report shall include cover page signed and sealed by a Florida state licensed Professional Engineer provided by the subcontractor.
- j. Consultant and subcontractor shall create a punch list of deficiencies, manage the punch list and monitor its completion by Motorola.
- k. Subcontractor shall monitor the cutover of applications supported by the current SmartZone system to include the County's Netvisa/GenWatch application.
- l. Consultant shall turn over to ESS, following submittal review and approval by the subcontractor, the close out project package including: Motorola's as built documentation, warranty documentation, overseeing training for County personnel to ensure all related submittals have been received by CID.

Project Plan (Design, phasing, cost)
Equipment Staging / Testing Report
Installation / Inspection Reports

Certified Acceptance Test Report
Punch List
Close Out Package

4. Project schedule:

- a. Consultant with assistance from the subcontractor shall provide a detailed design plan, including: schedule and expected costs by date as well as the following: submittal reviews, procurement lead times, installation milestones, testing, training and warranty terms.

Project Schedule / Costs

5. System Performance Evaluation:

- a. Subcontractor shall review the proposed APCO25 phased migration plan provided by Motorola. The Consultant and subcontractor will utilize this information to provide the best migration path for the County to become fully APCO 25 compliant within 5 years of the successful installation of the MSE.
- b. The Consultant with assistance from the subcontractor shall interview the public safety entities (approximately 20) that are currently full-time users of the system to gather the following information:
1. Capital equipment replacement plans for older analog only radios to new analog/digital capable radios.
 2. Replacement and/or upgrade of existing dispatch consoles at users' sites or the installation of new consoles.
 3. The implementation of voice encryption (ADP and/or AES) for all of the agencies' users.
 4. Once the information is compiled the Consultant and subcontractor shall make long term recommendations to CID based on user feedback.

PBC User Requirements Forecast
Migration Path Recommendation Report

SCHEDULE 1

LIST OF PROPOSED SBE-M/WBE SUBCONSULTANTS

PROJECT NAME: RF Engineering Consultant Services PROJECT NO. 12201

NAME OF PRIME CONSULTANT: Johnson Levinson Ragan Davila, Inc. (JLRD)

DESCRIPTION OF WORK: CSA #2

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES OF SUBCONSULTANTS

Name, Address and Phone Number	(Check one or both Categories)		Subcontract Amount				
	Minority Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
1. None	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
2.	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
3.	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
4.	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
5.	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
(Please use additional sheets if necessary)			Total	\$	\$	\$	\$

Total Price \$ 238,649.00 Total SBE Participation \$ 0 SBE % 0

- Note:
- The amounts listed on this form must be supported by the Subconsultant prices included on Schedule 2 in order to be counted toward goal attainment.
 - Firms may be certified by Palm Beach County as an SBE and/or M/WBE. If firms are certified as both an SBE and M/WBE, please indicate the dollar amount under the appropriate category.
 - M/WBE information is being collected for tracking purposes only.