<table>
<thead>
<tr>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTRO P25 System Overview</td>
</tr>
<tr>
<td>Motorola Approach to Civil Requirements</td>
</tr>
<tr>
<td>P25 System Transition Plan</td>
</tr>
<tr>
<td>System Performance – Broward Environment</td>
</tr>
<tr>
<td>APX Radio Durability</td>
</tr>
<tr>
<td>Value Added Features</td>
</tr>
<tr>
<td>CAD Integration</td>
</tr>
<tr>
<td>Long Term Value</td>
</tr>
<tr>
<td>Q&amp;A</td>
</tr>
</tbody>
</table>
Explain in more detail your firm’s proposed system for Broward County.
MCC7500e DISPATCH CONSOLE

FAULT TOLERANT NETWORK DESIGN

FAULT TOLERANT NETWORK DESIGN

DISPATCH ASSISTANT WINDOW

ENHANCED TELEPHONY

USES OFF THE SHELF COMPUTER

INTEGRATED INSTANT RECALL RECORDER
ISSI 8000 INTEROPERABILITY

BROWARD COUNTY CORE
- MZC Zone Controllers
- Network Management
- WAVE

MOTOROLA HOSTED CORE
- MZC Zone Controllers
- Network Management
- WAVE

ASTRO 25 Sites
- Alias Transport
- Busy Queuing/Callback
- Fast Start/All Start
- Fast Auto-Roaming
- ISSI Data (Location)

P25 Digital Subscribers

MZC Zone Controllers

Network Management

WAVE

ASTRO 25 Sites

P25 Digital Subscribers
Portable operating at 2.5 watts per FCC type acceptance
Dual loop configuration; exceeds 99.999% availability
KEY ELEMENTS OF MOTOROLA DESIGN

Motorola Design Elements

Fully compliant coverage design
Single simulcast cell design simplifies user operation
Continued use of SmartX interface to Hosted Master Site for transition
Robust microwave dual loop exceeds 99.999% reliability
Geo-diversity and site redundancy
MCC7500/7500e enables full knowledge transfer for dispatch user experience
Unique APX radio to ASTRO infrastructure feature interaction

2. PROJECT APPROACH

A) Completed Compliance Matrix (Appendix A). (Does the vendor indicate compliance with
the specifications? Do any clarifications materially alter the intent of the specifications?) 10

B) P25 System (Refer to specifications sections 2, 4, 6, 7, 8, 9, 10) - Does the vendor clearly identify
their approach to the project? Have they clearly identified how the design will achieve the County’s
coverage and capacity requirements and performance guarantees? Have they identified how the
system provides redundancies and eliminates single points of failure? Have they fully detailed the
configuration and capabilities of their proposed dispatch console system? Have they provided a
cutover strategy that reduces risk? Have they identified interoperability benefits of their system?

Have they identified warranty, maintenance, and support programs? Have they provided a detailed
project schedule? Have they provided a variety of mobile, portable, and control station radio options
for user agencies that provide the desired functionality at various competitive price points? 20

C) Microwave System (Refer to specifications section 3) - Does the vendor clearly identify their
approach to the microwave backhaul section? Have they clearly identified how the design will
achieve the County’s backhaul bandwidth and interface requirements? Have they provided a
dualloop configuration with path studies to validate the feasibility of each path? Have they identified
how the system provides redundancies and eliminates single points of failure? Have they provided
a cutover strategy that reduces risk? Have they identified warranty, maintenance, and support
programs? Have they provided a detailed project schedule? 5

D) Facilities and Infrastructure (Refer to specifications section 5) - Does the vendor clearly identify
their approach to the facilities and infrastructure development? Have they clearly identified how
the site development schedule will align with the radio and microwave components? Have they
considered implications for the existing sites, including shelter space, tower space, power, and
HVAC to support both the old and new systems during cutover? Have they identified a strategy for
retrofitting existing sites with the required DC power system? 5
Approach to Civil Scope Requirements

Presented by: Blake Smith
Please explain your firm’s tower and shelter structures advantages and/or disadvantages.
What does fully compliant mean?

- Motorola meets all coverage requirements
- As directed by the County, all mandatory sites are being utilized
- Motorola meets and exceeds the *County Business Enterprise* requirement
What does Turn-Key Civil Design mean?

No Assumptions

- We didn’t assume that we can place antennas or dishes on towers that don’t exist
- We didn’t assume that Broward County wants to engage in costly leases and remediation for new tower sites
- Constructibility
- Resilient
- No hidden costs

The requirements are the same for all proposers, the differences are in the offerings.

Motorola is offering a Broward a complete solution
<table>
<thead>
<tr>
<th>Site Name</th>
<th>New 12 X 30 Shelter</th>
<th>Existing Facility</th>
<th>New Diesel Generator</th>
<th>Upgraded Electrical</th>
<th>New Tower Type / Height</th>
<th>Existing Tower Type / Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>Self Supported 296</td>
<td></td>
</tr>
<tr>
<td>Coconut Creek</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>Self Supported 400</td>
<td></td>
</tr>
<tr>
<td>Markham Park</td>
<td>X</td>
<td></td>
<td>80 kw</td>
<td>X</td>
<td>Guyed 415</td>
<td></td>
</tr>
<tr>
<td>Playa</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>Rooftop 280</td>
<td></td>
</tr>
<tr>
<td>Davie</td>
<td>X</td>
<td></td>
<td>80 kw</td>
<td>X</td>
<td>Self Supported 315</td>
<td></td>
</tr>
<tr>
<td>Points of America</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>Rooftop 250</td>
<td></td>
</tr>
<tr>
<td>Miramar</td>
<td>X</td>
<td></td>
<td>80 kw</td>
<td>X</td>
<td>Self Supported 315</td>
<td></td>
</tr>
<tr>
<td>CH 2</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>Guyed 390</td>
<td></td>
</tr>
<tr>
<td>Deerfield</td>
<td>X</td>
<td></td>
<td>100 kw</td>
<td>X</td>
<td>Monopole 180</td>
<td></td>
</tr>
<tr>
<td>Tamarac</td>
<td>X</td>
<td></td>
<td>100 kw</td>
<td>X</td>
<td>Monopole 180</td>
<td></td>
</tr>
<tr>
<td>West Lake Park</td>
<td>X</td>
<td></td>
<td>100 kw</td>
<td>X</td>
<td>Monopole 180</td>
<td></td>
</tr>
<tr>
<td>Sunrise Dispatch</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>Monopole 180</td>
<td></td>
</tr>
<tr>
<td>Coconut Creek Dispatch</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>Monopole 180</td>
<td></td>
</tr>
<tr>
<td>Pembroke Pines Dispatch</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>Monopole 180</td>
<td></td>
</tr>
<tr>
<td>FS106</td>
<td>X</td>
<td></td>
<td>80 kw</td>
<td>X</td>
<td>Self Supported 300</td>
<td>Guyed 400</td>
</tr>
<tr>
<td>EMS</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>Monopole 180</td>
<td></td>
</tr>
<tr>
<td>EOC</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>Monopole 180</td>
<td></td>
</tr>
<tr>
<td>Hard Rock</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
CIVIL DESIGN TAKEAWAYS

Full Constructibility

- Control your schedule
- No Broward County civil costs beyond the proposal
- Opportunity

6. PRICING

The Item Response Form must reflect equipment and services as defined in Scope of Services, Exhibit “A”, as instructed on the Item Response Form, directly into BidSync. Points awarded for price will be based on by applying the following formula: (Lowest Proposed Price / Vendor’s Price) x (Maximum Number of Points for Price) = Price Score 25

Total 25 Points Max
Describe how your firm will perform a switchover/cutover from the County’s existing system to your firm’s proposed system.
## UNIQUE MOTOROLA TRANSITION PLAN

<table>
<thead>
<tr>
<th>Challenge to Successful Transition</th>
<th>Unique Motorola Approach</th>
</tr>
</thead>
</table>
| Tower site space                  | Expedite public service move to MOTOTRBO system  
                                    | Base station transition from AC to DC                                                   |
| Operational impact                | Leverage SmartX to support legacy SmartZone users  
                                    | Incorporate T1 loop switch function per RFP                                             |
| System performance                | Motorola’s intimate knowledge of the existing SmartZone system and Broward County operations enables seamless cutover |
| Interoperability                  | Motorola can support unique functionality between Hosted Master Site and the new Broward County system |
| Training                          | Familiarity with APX radios and Gold Elite consoles                                      |
CURRENT CONFIGURATION

CAD
VPI

MZC Zone Controllers
Network Management
Hosted Master Core

Gold Elite Dispatch
Sunrise

Gold Elite Dispatch
Pembroke Pines

Gold Elite Dispatch
Coconut Creek

Broward County
800 MHz
SmartZone Simulcast

Ft. Lauderdale
800 MHz
P25 Simulcast

Coral Springs
800 MHz
P25 Simulcast

Plantation
800 MHz
P25 Single Site

Hollywood
800 MHz
SmartZone Simulcast

Existing Microwave

CAD VPI

MZC Zone Controllers
Network Management
Hosted Master Core

Gold Elite Dispatch
Sunrise

Gold Elite Dispatch
Pembroke Pines

Gold Elite Dispatch
Coconut Creek

Broward County
800 MHz
SmartZone Simulcast

Ft. Lauderdale
800 MHz
P25 Simulcast

Coral Springs
800 MHz
P25 Simulcast

Plantation
800 MHz
P25 Single Site

Hollywood
800 MHz
SmartZone Simulcast

Existing Microwave
Step 1: Replace Gold Elite Consoles at 3 dispatch centers with new MCC 7500 consoles.

Step 2: Implement geo-diverse ASTRO 25 IP cores at Sunrise and Coconut Creek.

Step 3: Implement ISSI connection from Broward County cores to Motorola Hosted Core.

Step 4: Build out new 6/11 GHz MPLS microwave backbone; still support T1 connections.

Step 5: Implement geo-diverse prime sites at Hard Rock and CORE.

Step 6: Implement first phase channel cutover to P25 TDMA; cutover designated users.

Step 7: Implement second phase channel cutover to P25 TDMA and designated users.

Step 8: Complete remaining channels cutover to P25 TDMA; cutover remaining users.

Step 9: Upgrade system and consoles to current release (7.17 and 7500e).

Step 10: Final acceptance testing.
FINAL STEP – UPGRADE SYSTEM AND CONSOLES TO LATEST SYSTEM RELEASE

CAD  VPI

MZC Zone Controllers
Network Management
Hosted Master Core

MZC Zone Controllers
Network Management
Broward County Core (x2) Geographic Diversity) Sunrise and Coconut Creek

Broward County
700 MHz
P25 Simulcast

Ft. Lauderdale
800 MHz
P25 Simulcast

Coral Springs
800 MHz
P25 Simulcast

Plantation
800 MHz
P25 Single Site

Hollywood
800 MHz
SmartZone Simulcast

AVIAT Microwave Dual Loop Configuration

MCC7500e Dispatch Sunrise

MCC7500e Dispatch Pembroke Pines

MCC7500e Dispatch Coconut Creek
## KEY ADVANTAGES OF MOTOROLA TRANSITION

<table>
<thead>
<tr>
<th>Unique Advantage</th>
<th>Guarantees Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructible system design approach</td>
<td>YES</td>
</tr>
<tr>
<td>Intimate knowledge of current County and municipal systems</td>
<td>YES</td>
</tr>
<tr>
<td>Expedite the completion of the County TRBO system</td>
<td>YES</td>
</tr>
<tr>
<td>Continued use of SmartX interface to Hosted Master Site</td>
<td>YES</td>
</tr>
<tr>
<td>Single rack implementation for new microwave</td>
<td>YES</td>
</tr>
<tr>
<td>Followed County instructions in RFP (support T1 connectivity)</td>
<td>YES</td>
</tr>
<tr>
<td>Full knowledge transfer for dispatch user experience</td>
<td>YES</td>
</tr>
</tbody>
</table>
P25 Radio System
Day to Day Operations
System Performance
Broward Environment
Presented by: Clay Whitehead
Describe how your firm’s proposed system will perform in the County’s environment as compared to other systems for other counties.
PERFORMANCE IN THE BROWARD COUNTY ENVIRONMENT – SIMILAR GEOGRAPHY

The following P25 systems are awarded and under deployment:
- Boca Raton
- Boynton Beach
- Clay County
- Delray Beach
- Ft. Lauderdale (HMS)
- Martin County
- Palm Beach County
- Plantation (HMS)
- St. Lucie County
3. PAST PERFORMANCE

Describe prime Vendor’s experience on projects of similar nature, scope and duration, along with evidence of satisfactory completion, both on time and within budget, for the past five years. Provide a minimum of three projects with references for P25 Phase II systems that include microwave and site development components. 15

Vendor should provide references for similar work performed to show evidence of qualifications and previous experience. Refer to Vendor Reference Verification Form and submit as instructed. Only provide references for non-Broward County Board of County Commissioners contracts. For Broward County contracts, the County will review performance evaluations in its database for vendors with previous or current contracts with the County. The County considers references and performance evaluations in the evaluation of Vendor’s past performance.

Past performance of the vendor including timely completion of projects, compliance with Scope of Work performed within budgetary constraints, and user satisfaction (Does the vendor demonstrate they have the ability to implement the system in compliance with the RFP within budget?)

Were the provided references for projects of similar size and complexity to Broward County’s RFP?
4. WORKLOAD OF THE FIRM

For the prime Vendor only, list all completed and active projects that Vendor has managed within the past five years. In addition, list all projected projects that Vendor will be working on in the near future. Projected projects will be defined as a project(s) that Vendor is awarded a contract but the Notice to Proceed has not been issued. Identify any projects that Vendor worked on concurrently. Describe Vendor’s approach in managing these projects. Were there or will there be any challenges for any of the listed projects? If so, describe how Vendor dealt or will deal with the projects’ challenges. 5
ASTRO System Resilience and Radio Durability

Presented by: Clay Whitehead & Dax Lopez
Please expound on the durability of your firm’s equipment.
NO SINGLE POINT OF FAILURE

ASTRO SYSTEM RESILIENCY DESIGN
INTERFERENCE LOCATOR
TRIANGULATE TO LOCATE INTERFERERS

- Locate interference to 0.25 sq. Miles
- Enables Customer techs and STs to quickly locate and remediate Interference
- Improves Simulcast channel availability (Simulcast Feature)

PROTECTS THE COUNTY’S GRADE OF SERVICE
A radio is a first responders communication lifeline

Its ability for the radio to be easy to use / accessible [Ergonomics], the ability to talk and clearly hear [Audio] the desired information and the ability to do it in more places [Coverage] for many years to come [Durability] are its most important features.
The Endoskeleton Design offers the best of both worlds

- Ruggedness & Robustness of a metal housing
- Ergonomics & shock/impact resistance of a plastic outer skin
- Sealed Endoskeleton for improved Submersible reliability
- APX does not rely on the polycarbonate outer housing for water sealing

Polycarbonate Alloy “Skin”
- High Abrasion Resistance
- Improved chemical resistance
- Impact resistance
Gorilla Glass Display technology improves display performance by 5x factor while increasing display size.

Brightness improves viewing angle to 170 degrees.

Eliminates Bi-fringence effect (rainbow effect due to injection molding or polarized sunglasses.)
# UNCOMPROMISING SPECS

<table>
<thead>
<tr>
<th>Receiver Specifications</th>
<th>APX</th>
<th>Market Leader</th>
<th>How it affects User Performance…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Output</td>
<td>1500 mW</td>
<td></td>
<td>Audio</td>
</tr>
<tr>
<td>Frequency Stability</td>
<td>± .1 ppm</td>
<td></td>
<td>Audio &amp; Coverage</td>
</tr>
<tr>
<td>Sensitivity (Digital 5% BER)</td>
<td>.211 µV</td>
<td></td>
<td>Coverage</td>
</tr>
<tr>
<td>Selectivity (12.5kHz)</td>
<td>± 72 dB</td>
<td></td>
<td>Coverage</td>
</tr>
<tr>
<td>Intermodulation</td>
<td>± 81 dB</td>
<td></td>
<td>Coverage</td>
</tr>
<tr>
<td>Spurious Response</td>
<td>± 98 dB</td>
<td></td>
<td>Coverage</td>
</tr>
<tr>
<td>FM Hum and Noise (12.5kHz)</td>
<td>± 53 dB</td>
<td></td>
<td>Audio &amp; Coverage</td>
</tr>
<tr>
<td>Audio Distortion</td>
<td>0.9%</td>
<td></td>
<td>Audio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transmitter Specifications</th>
<th>APX</th>
<th>Market Leader</th>
<th>Audio Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Stability (12.5kHz)</td>
<td>± .1 ppm</td>
<td></td>
<td>Coverage</td>
</tr>
<tr>
<td>FM Hum and Noise</td>
<td>± 48 dB</td>
<td></td>
<td>Audio &amp; Coverage</td>
</tr>
<tr>
<td>Audio Distortion</td>
<td>0.6 %</td>
<td></td>
<td>Audio</td>
</tr>
</tbody>
</table>
MULTI-MIC NOISE CANCELLING

- BEAM FORMING
- ADAPTIVE NOISE SUPPRESSION
- ADAPTIVE SPEAKER EQUALIZATION
- ADAPTIVE AGC
- ADAPTIVE WIND PORTING
Value-Added Features Above the P25 Standard

Presented by: Dax Lopez
Highlight features and functions of your firm’s proposed system that will add value for the County compared to the County’s existing system. Are there any features that the County will not be able to obtain? Are there any limitations?
LOCATION ON PTT

Location sent upon PTT in addition to regular time or distance based updates

- Location updates sent during voice group calls and emergency calls
- Location updates sent even if no data channels are available
- Not available with APX radios on Non-Motorola Infrastructure
ENHANCED GEO SELECT
DYNAMIC OPERATION BASED ON LOCATION

- Draw a Geo Fence in your Mapping Application and send parameters to the Radio
- Permanent or Dynamic Maps supported
- Can Trigger Channel Selected, Voice Announcements, Color Updates
- **Not available with APX radios on Non-Motorola Infrastructure**
• Quick Send a Text to entire Talkgroup.

• Everyone receives the message Simultaneously

• No impact to IV&D

• Not available with APX radios on Non-Motorola Infrastructure

Talkgroup Text Messaging

Simultaneously Text / Alert Radio Users

- Dispatcher
- Talkgroup 1
- Talkgroup 1
- Talkgroup 1
- CORE
OTA SOFTWARE UPDATE
SIMULTANEOUSLY UPDATE RADIO FIRMWARE

• Simultaneous Update of Firmware to all Radios.
• Radios users have no knowledge of Firmware Updates until complete.
• Not available with APX radios on Non-Motorola Infrastructure
Updates to Alias name in the Provisioning Manager or by User updates all radios and consoles positions.

Radio updates performed on PTT over Voice Channel.

Not available with APX radios on Non-Motorola Infrastructure

Provisioning Manager App  
(Radio ID 12345 = “Sgt. Smith”)
PremierOne CAD to ASTRO 25 Integration

Presented by: Kynan Stevenson
Describe how your firm’s proposed system will interface with the PremierOne CAD system.
<table>
<thead>
<tr>
<th>Motorola Integration Advantage</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage Existing Investment</td>
<td>YES</td>
</tr>
<tr>
<td>Functionality since 2012 – Proven integration</td>
<td>YES</td>
</tr>
<tr>
<td>Responder Location – Voice PTT/Emergency, CAD-driven poling</td>
<td>YES</td>
</tr>
<tr>
<td>Advanced Messaging – Incidents, messages, queries, CJIS data</td>
<td>YES</td>
</tr>
<tr>
<td>Radio Console Integration – Assign talkgroup, open channel</td>
<td>YES</td>
</tr>
<tr>
<td>Push-To-Talk Status Monitor – Display unit in CAD</td>
<td>YES</td>
</tr>
<tr>
<td>Emergency Activation Alert – Notify CAD and Mobile users</td>
<td>YES</td>
</tr>
<tr>
<td>Leverage Existing Investment</td>
<td>YES</td>
</tr>
</tbody>
</table>

No Third Party Integrators Required
Discuss long term value to Broward County.
HARRIS COUNTY
PUBLIC SAFETY LTE INTEGRATION

- Regional core hosting neighboring cities as well as cities across state lines
- Complex integration across LMR, LTE, applications, and devices
- Push-To-Talk between P25 and LTE on a live customer network
LA-RICS
REGIONAL LTE NETWORK
231 SITE REGIONAL LTE NETWORK
COMPLEMENTS NEW P25 PHASE 2 TDMA LMR NETWORK
INITIAL DEPLOYMENT OF 1,000 LTE VEHICLE MODEMS
TURNKEY SITE SOLUTION - CONSTRUCTIBLE
INTEROPERABILITY WITH BROWARD COUNTY MUNICIPALITIES

- **MZC Zone Controllers**
  - Hosted Master Core
  - MCC Dispatch
    - Sunrise
    - Pembroke Pines
    - Coconut Creek

- **AVIAT Microwave Dual Loop Configuration**
  - Broward County Core (x2) Geographic Diversity
    - Sunrise and Coconut Creek

- **Network Management**

- **CAD VPI**

- **Broward County**
  - 700 MHz P25 Simulcast
  - MCC Dispatch
  - Sunrise

- **Ft. Lauderdale**
  - 800 MHz P25 Simulcast
  - MCC Dispatch
  - Pembroke Pines

- **Coral Springs**
  - 800 MHz P25 Simulcast
  - MCC Dispatch
  - Coconut Creek

- **Plantation**
  - 800 MHz P25 Single Site
  - MCC Dispatch
  - Pembroke Pines

- **Hollywood**
  - 800 MHz SmartZone Simulcast
  - MCC Dispatch
  - Pembroke Pines
MOTOROLA FIELD SERVICE ORGANIZATION

94 Technical “Badged” Service Personnel

13 Senior Engineers

Over 400 years local experience
DETAILED CUTOVER PLAN
STEP ONE – REPLACE CONSOLES

CAD
VPI

MZC Zone Controllers
Network Management
Hosted Master Core

Broward County
800 MHz
SmartZone Simulcast

Ft. Lauderdale
800 MHz
P25 Simulcast

Coral Springs
800 MHz
P25 Simulcast

Plantation
800 MHz
P25 Single Site

Hollywood
800 MHz
SmartZone Simulcast

MCC Dispatch
Sunrise

MCC Dispatch
Pembroke Pines

MCC Dispatch
Coconut Creek

Existing Microwave
STEP TWO – INSTALL REDUNDANT CORES

Broward County Core (x2) Geographic Diversity)
Sunrise & Coconut Creek

Hosted Master Core

CAD  VPI

MZC Zone Controllers

Network Management

MZC Zone Controllers

Network Management

Broward County
800 MHz
SmartZone Simulcast

Ft. Lauderdale
800 MHz
P25 Simulcast

Coral Springs
800 MHz
P25 Simulcast

Plantation
800 MHz
P25 Single Site

Hollywood
800 MHz
SmartZone Simulcast

MCC Dispatch
Sunrise

MCC Dispatch
Pembroke Pines

MCC Dispatch
Coconut Creek
STEP THREE – BUILD NEW SITES

CAD  VPI

MZC Zone Controllers
Network Management
Hosted Master Core

MZC Zone Controllers
Network Management
Broward County Core (x2)
Geographic Diversity)
Sunrise & Coconut Creek

Broward County
800 MHz
SmartZone Simulcast

Ft. Lauderdale
800 MHz
P25 Simulcast

Coral Springs
800 MHz
P25 Simulcast

Plantation
800 MHz
P25 Single Site

Hollywood
800 MHz
SmartZone Simulcast

MCC Dispatch
Sunrise

MCC Dispatch
Pembroke Pines

MCC Dispatch
Coconut Creek
STEP FOUR – REPLACE MICROWAVE

AVIAT Microwave Dual Loop Configuration

Broward County Core (x2) Geographic Diversity) Sunrise and Coconut Creek

MCC Dispatch Sunrise

MCC Dispatch Pembroke Pines

MCC Dispatch Coconut Creek

Broward County
800 MHz SmartZone Simulcast

Ft. Lauderdale
800 MHz P25 Simulcast

Coral Springs
800 MHz P25 Simulcast

Plantation
800 MHz P25 Single Site

Hollywood
800 MHz SmartZone Simulcast
STEP FOUR – PHASED CHANNEL TRANSITION

- **MZC Zone Controllers**
- **Network Management**
- **Hosted Master Core**

- **AVIAT Microwave**
  - **Dual Loop Configuration**

- **Broward County Core (x2)**
  - **Sunrise & Coconut Creek**

- **Sunrise & Coconut Creek**

- **Broward County**
  - **800 MHz SmartZone 700 MHz P25**

- **Ft. Lauderdale**
  - **800 MHz P25 Simulcast**

- **Coral Springs**
  - **800 MHz P25 Simulcast**

- **Plantation**
  - **800 MHz P25 Single Site**

- **Hollywood**
  - **800 MHz SmartZone Simulcast**

**CAD VPI**

**MCC Dispatch**

**Sunrise**

**Pembroke Pines**

**Coconut Creek**
**STEP FOUR – COMPLETE CHANNEL TRANSITION**

- **Broward County**
  - 700 MHz P25 Simulcast

- **Ft. Lauderdale**
  - 800 MHz P25 Simulcast

- **Coral Springs**
  - 800 MHz P25 Simulcast

- **Plantation**
  - 800 MHz P25 Single Site

- **Hollywood**
  - 800 MHz SmartZone Simulcast

- **AVIAT Microwave Dual Loop Configuration**

- **MZC Zone Controllers**
  - Network Management

- **MCC Dispatch**
  - Sunrise
  - Pembroke Pines
  - Coconut Creek

- **Hosted Master Core**

- **Broward County Core (x2) Geographic Diversity**
  - Sunrise & Coconut Creek
STEP FIVE – COMPLETE DC POWER SYSTEMS AT EXISTING SITES

- Ft. Lauderdale: 800 MHz P25 Simulcast
- Coral Springs: 800 MHz P25 Simulcast
- Plantation: 800 MHz P25 Single Site
- Hollywood: 800 MHz SmartZone Simulcast

**AVIAT Microwave Dual Loop Configuration**

- Hosted Master Core
- MZC Zone Controllers
- Network Management
- MCC Dispatch
  - Sunrise
  - Pembroke Pines
  - Coconut Creek

**Broward County Core (x2)**
- Geographic Diversity
- Sunrise and Coconut
STEP SIX – CONNECT MCC DISPATCH CONSOLES TO BROWARD CORES

MZC Zone Controllers
Network Management
Hosted Master Core

MZC Zone Controllers
Network Management
Broward County Core (x2)
Geographic Diversity)
Sunrise and Coconut Creek

Broward County
700 MHz
P25 Simulcast

Ft. Lauderdale
800 MHz
P25 Simulcast

Coral Springs
800 MHz
P25 Simulcast

Plantation
800 MHz
P25 Single Site

Hollywood
800 MHz
SmartZone Simulcast

AVIAT Microwave Dual Loop Configuration

CAD
VPI

MCC Dispatch Sunrise

MCC Dispatch Pembroke Pines

MCC Dispatch Coconut Creek

MCC Dispatch Sunrise

MCC Dispatch Pembroke Pines

MCC Dispatch Coconut Creek
FINAL STEP – UPGRADE SYSTEM AND CONSOLES TO LATEST SYSTEM RELEASE

MZC Zone Controllers
Hosted Master Core

Broward County Core (x2) Geographic Diversity
Sunrise and Coconut Creek

MZC Zone Controllers

Network Management

AVIAT Microwave Dual Loop Configuration

MCC Dispatch Sunrise

MCC Dispatch Pembroke Pines

MCC Dispatch Coconut Creek

Broward County
700 MHz
P25 Simulcast

Ft. Lauderdale
800 MHz
P25 Simulcast

Coral Springs
800 MHz
P25 Simulcast

Plantation
800 MHz
P25 Single Site

Hollywood
800 MHz
SmartZone Simulcast
1. ABILITY OF PROFESSIONAL PERSONNEL

A) Describe the qualifications and relevant experience of key staff that are intended to be assigned to this project. Include Manager and all key staff described. Include the qualifications of consultants’ key staff to be assigned to this project.

Composition of the staff assigned to the proposed project, particularly Manager, Project Engineer, integration team, and any other propos and experience with projects of similar and scope to the system be proposed staff managed/delivered projects of similar complexity? I have the required experience for their role in the project? 5

B) Adequacy of the personnel of the vendor to accomplish the project time. (Is the experience of the project management and proposal the proposed Broward County project?) 5

2. PROJECT APPROACH

A) Completed Compliance Matrix (Appendix A). (Does the vendor indicate compliance with the specifications? Do any clarifications materially alter the intent of the specifications?) 10

B) P25 System (Refer to specifications sections 2, 4, 6, 7, 8, 9, 10) - Does the vendor clearly identify their approach to the project? Have they clearly identified how the design will achieve the County’s coverage and capacity requirements and performance guarantees? Have they identified how the system provides redundancies and eliminates single points of failure? Have they fully detailed the configuration and capabilities of their proposed dispatch console system? Have they provided a cutover strategy that reduces risk? Have they identified interoperability benefits of their system? Have they identified warranty, maintenance, and support programs? Have they provided a detailed project schedule? Have they provided a variety of mobile, portable, and control station radio options for user agencies that provide the desired functionality at various competitive price points? 20

C) Microwave System (Refer to specifications section 3) - Does the vendor clearly identify their approach to the microwave backhaul section? Have they clearly identified how the design will achieve the County’s backhaul bandwidth and interface requirements? Have they provided a dualloop configuration with path studies to validate the feasibility of each path? Have they identified how the system provides redundancies and eliminates single points of failure? Have they provided a cutover strategy that reduces risk? Have they identified warranty, maintenance, and support programs? Have they provided a detailed project schedule? 5

D) Facilities and Infrastructure (Refer to specifications section 5) - Does the vendor clearly identify their approach to the facilities and infrastructure development? Have they clearly identified how the site development schedule will align with the radio and microwave components? Have they considered implications for the existing sites, including shelter space, tower space, power, and HVAC to support both the old and new systems during cutover? Have they identified a strategy for retrofitting existing sites with the required DC power system? 5
3. PAST PERFORMANCE

Describe prime Vendor’s experience on projects of similar nature, scope and duration, along with evidence of satisfactory completion, both on time and within budget, for the past

4. WORKLOAD OF THE FIRM

For the prime Vendor only, list all completed and active projects that Vendor has managed within the past five years. In addition, list all projected projects that Vendor will be working on in the near future. Projected projects will be defined as a project(s) that Vendor is awarded a contract but the Notice to Proceed has not been issued. Identify any projects that Vendor worked on concurrently. Describe Vendor’s approach in managing these projects. Were there or will there be any challenges for any of the listed projects? If so, describe how Vendor dealt or will deal with the projects’ challenges. 5

5. LOCATION

Refer to Location Attestation Form (Evaluator: Reviewer:)

6. PRICING

The Item Response Form must reflect equipment and services as defined in Scope of Services, Exhibit “A”, as instructed on the Item Response Form, directly into BidSync. Points awarded for price will be based on by applying the following formula: (Lowest Proposed Price/ Vendor’s Price) x (Maximum Number of Points for Price) = Price Score 25