



Proposal from COMTRONICS to Lexington-Fayette Urban County Government



RFP #11-2016 In-Building Wireless Bi-Directional Antenna System

Lexington, Kentucky 3/21/2016

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Total proposal cost and detailed pricing breakdown

EXECUTIVE SUMMARY FOR RFP #11-2016 IN-BUILDING WIRELESS BI-DIRECTIONAL AMPLIFIER SYSTEM

COMTRONICS' GOAL IS TO INSTALL AND COMMISSION THE NEW TECHNOLOGY THAT WILL GIVE DESIRED COVERAGE, WHILE KEEPING COSTS DOWN.

- We will install and test the new BDAs in a timely and professional manner.
- We have completed every job we have been awarded on time and under budget.

COMTRONICS' SOLUTION IS TO PROVIDE THE SERVICES AS LAID OUT IN RFP #11-2016 IN-BUILDING WIRELESS BI-DIRECTIONAL AMPLIFIER SYSTEM. WE HAVE THOROUGH KNOWLEDGE OF THIS TYPE OF INSTALLATION, AND ARE CONFIDENT OF OUR SOLUTION.

- Our solution will give 'above and beyond' performance.
- We are a local company with local employees/contractors and will be able to react to issues as they present themselves while keeping costs down. In addition, we are approved on KY state price contract and are involved in other in-building systems within the state.

COMTRONICS' HAS BEEN A 'FIRST CALL' SERVICE PROVIDER FOR MULTIPLE CUSTOMERS IN THE REGION, WHILE EXCEEDING GOALS AND BEATING TIGHT TIMELINES

- We have provided services for ATT/Verizon/Sprint/T-Mobile, MasTec, Bluestream Services, TYCO Electronics, as well as multiple independent customers in the region.
- Comtronics has been selected by these customers based on our past experience and track record of 'getting it done'.



Qualifications and Company Overview

Estimated Cost of Services – \$ 41,837.80

Experts in RF Coverage Extension Solutions

Comtronics Inc., also known as Comtronics Industrial Communication Systems, is a 36 year veteran of the wireless business with a solid reputation as a knowledgeable and reliable supplier of headsets, radios and wireless technology in several vertical markets both locally and nationally, including nuclear, public safety, energy and paper products manufacturing. Our customers include Fortune 500 companies. In 2012, we opened our second location in Northern Kentucky which serves the Cincinnati market. We have also expanded our portfolio into project management of cellular DAS, wireless data networks, access control and rugged computer sales.

Comtronics has done work for ATT/Verizon/Sprint/T-Mobile, MasTec, Bluestream Services, and TYCO Electronics throughout the region. Projects of note include the 700/2100mHz upgrade for ATT at Paul Brown Stadium. The entire Head End remote and to be dismantled and re-built in 4 days, and the entire stadium DAS was upgraded in 2 weeks. The same upgrade was performed at Great American Ball Park just prior to the 2015 All-Stars game. We also built a new construction DAS at Great American Ball Park for Bluestream Services/T-Mobile. All jobs performed on time and within budget.

Cobalt AV offers the newest and most innovative communication products available, always with value and versatility in mind.

Established in 2003, CobaltAV, the house brand of Comtronics Inc., encompasses a complete selection of 2-way radio headsets, audio accessories and peripherals. Our expertise brings you the most cutting edge, innovative, high quality and value priced communication products available from a single source

Contact Details:

Comtronics
2350 Fortune Drive
Lexington, Kentucky 40509

Phone: 859-299-9494
Fax: 859-299-9334
Email: tim.gilliam@comtronicsnow.com
Web: www.comtronicsnow.com

Project Overview and Design Parameters

Comtronics is pleased to submit this proposal for review. As we understand, the project is for Comtronics to install an In-Building Wireless DAS System to provide coverage throughout the LFUCG building at 115 Cisco Road, Lexington, KY. It will encompass capabilities to transmit frequencies laid out in RFP #11-2016, as well as additional bands for future (if needed).

This work will be performed by Comtronics own team, comprised of employees and local contractors.

The SureCall BDAs are a Cellular BDA and a Public Safety BDA. The Cellular BDA (Model SC-Poly1-80) will transmit to 2 separate antennas, and receive its signal from 6 separate donor antennas mounted outside the penthouse. The Public Safety BDA (Model SC-TriPSB-80) will transmit to only one, and its single donor antenna will also be mounted outside the penthouse.

Lead Times for equipment

2-4 weeks

Hourly Rates not Covered by this proposal

Comtronics hourly rates for services not covered by this proposal are as follows:

- Field Support Technician: \$85/hr. (4 hours minimum), \$600 daily rate
- Field Support Engineer: \$105/hr., (4 hours minimum), \$800 daily rate
- Repair Services (after warranty expires): \$500 Base evaluation fee. If the customer proceeds with the repair, then the \$500 is subtracted from the overall repair cost. Shipping is not included.
- Phone support: No charge. Technical support line is available Monday through Friday from 8:00 AM to 5:00 PM U.S. Eastern Standard Time.

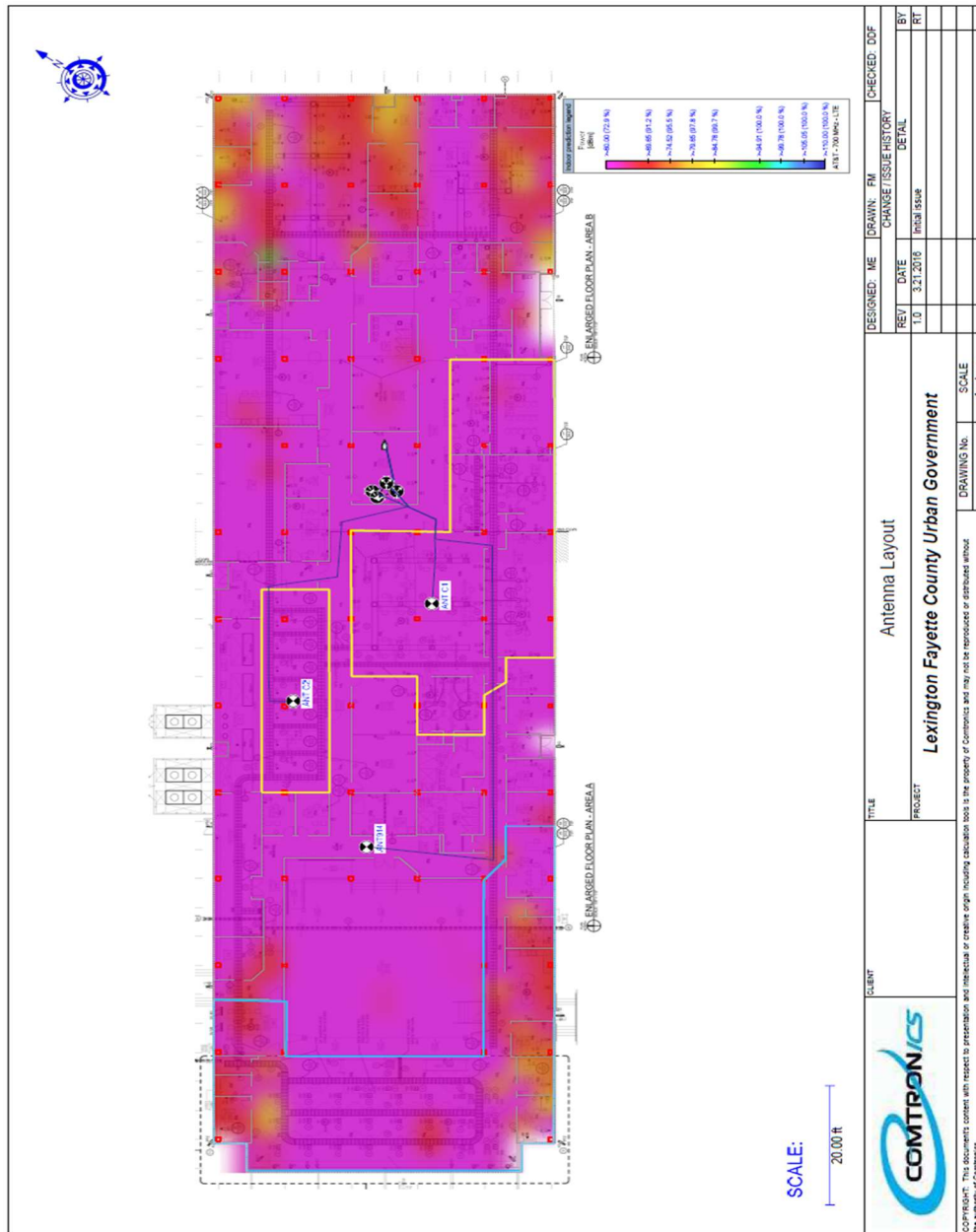
Payment Schedules

- Standard terms & conditions apply
- Yearly payment required for maintenance
- PO required for other services

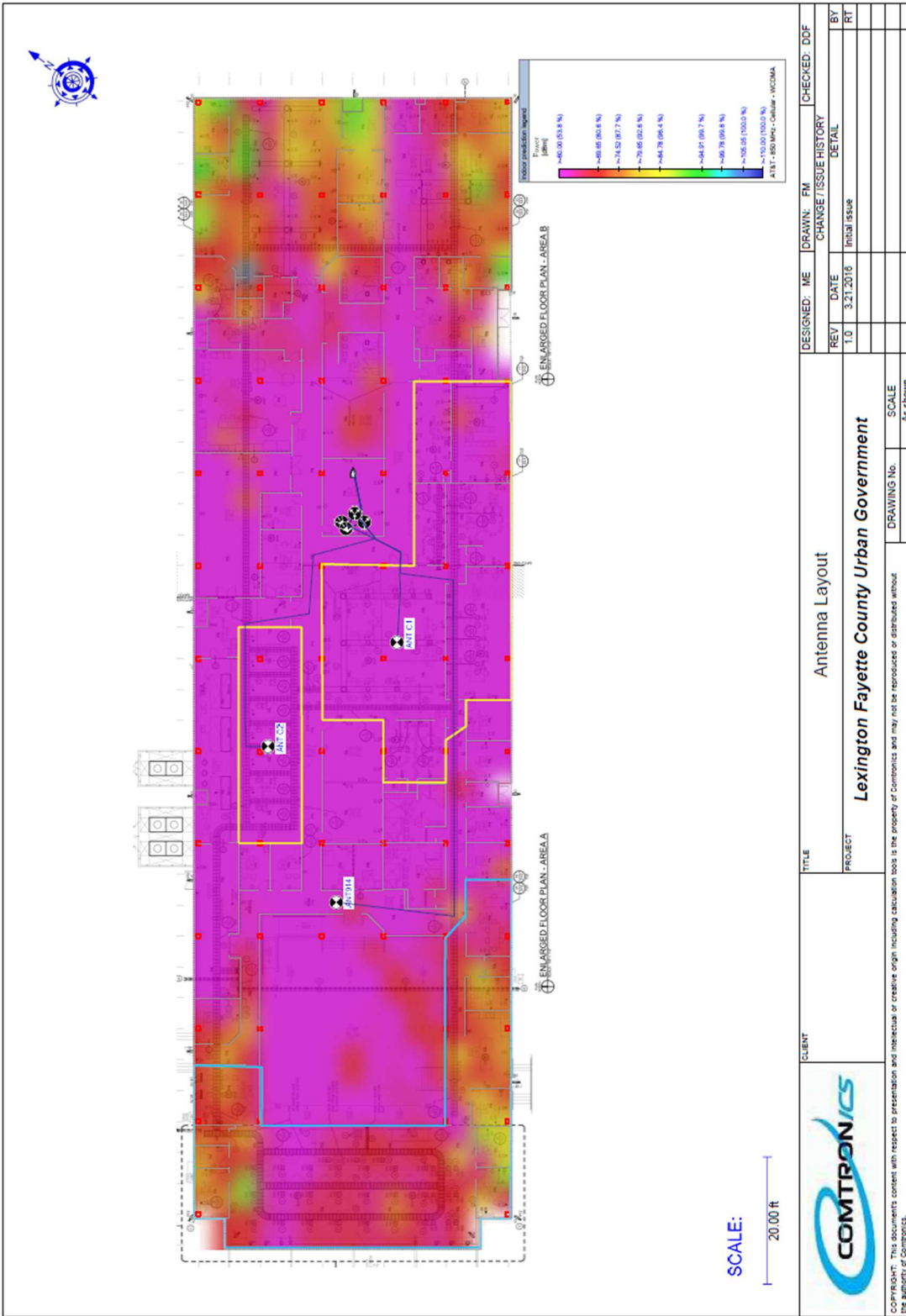
Design and Parameters

Our design allows for 100% coverage of the building at an RSSI of -85dBm. It is comprised of 7 donor antennas (to capture the outdoor carrier signal), 1 Public Safety BDA (Model SC-TriPSB-80), and 1 Cellular BDA (Model SC-Polyl-80). The Public Safety BDA will transmit to one antenna covering all three areas needing coverage per RFP. The Cellular BDA will transmit to 2 antennas covering the 2 specified areas per the RFP.

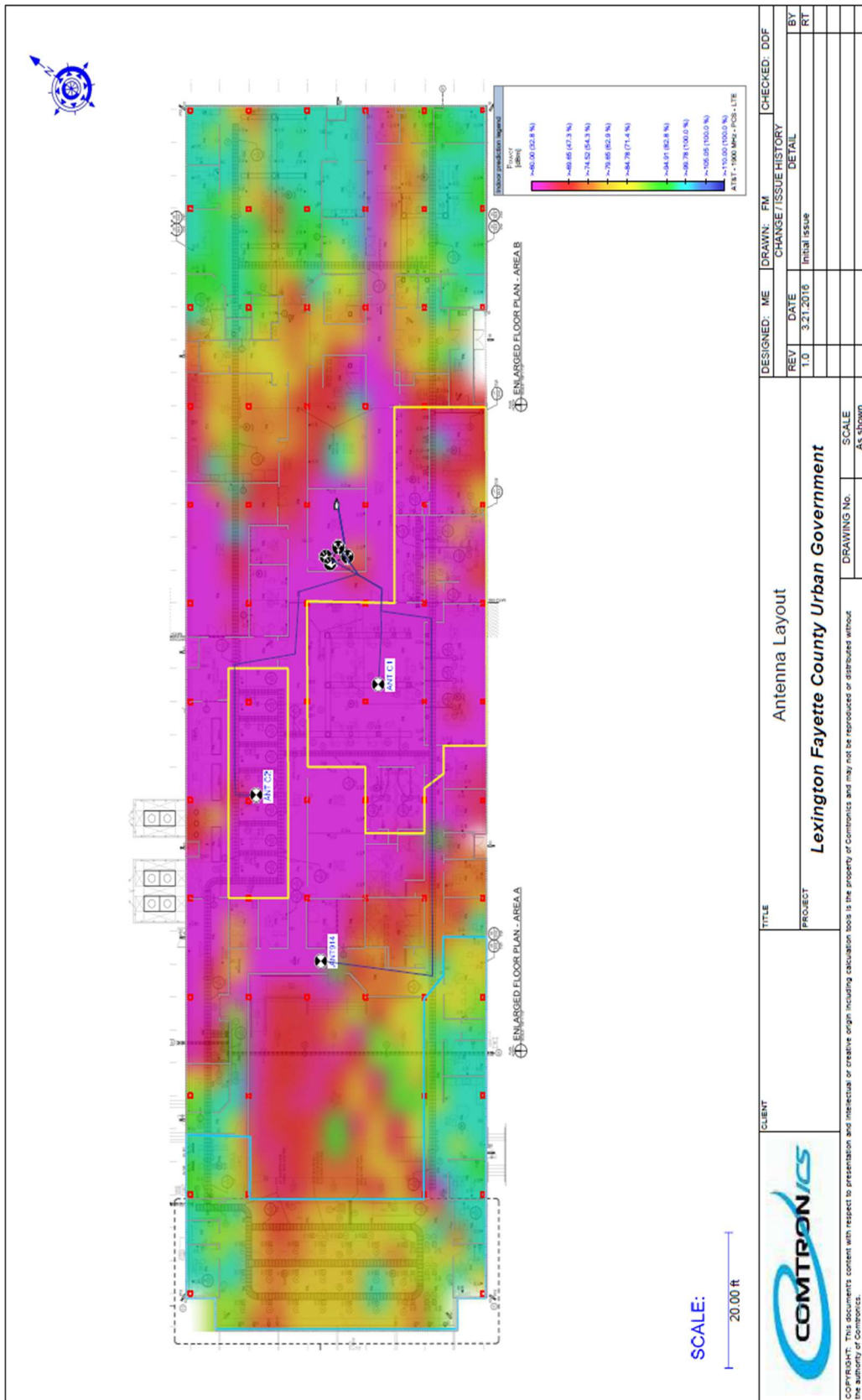
Prediction for Cellular 700 mhz



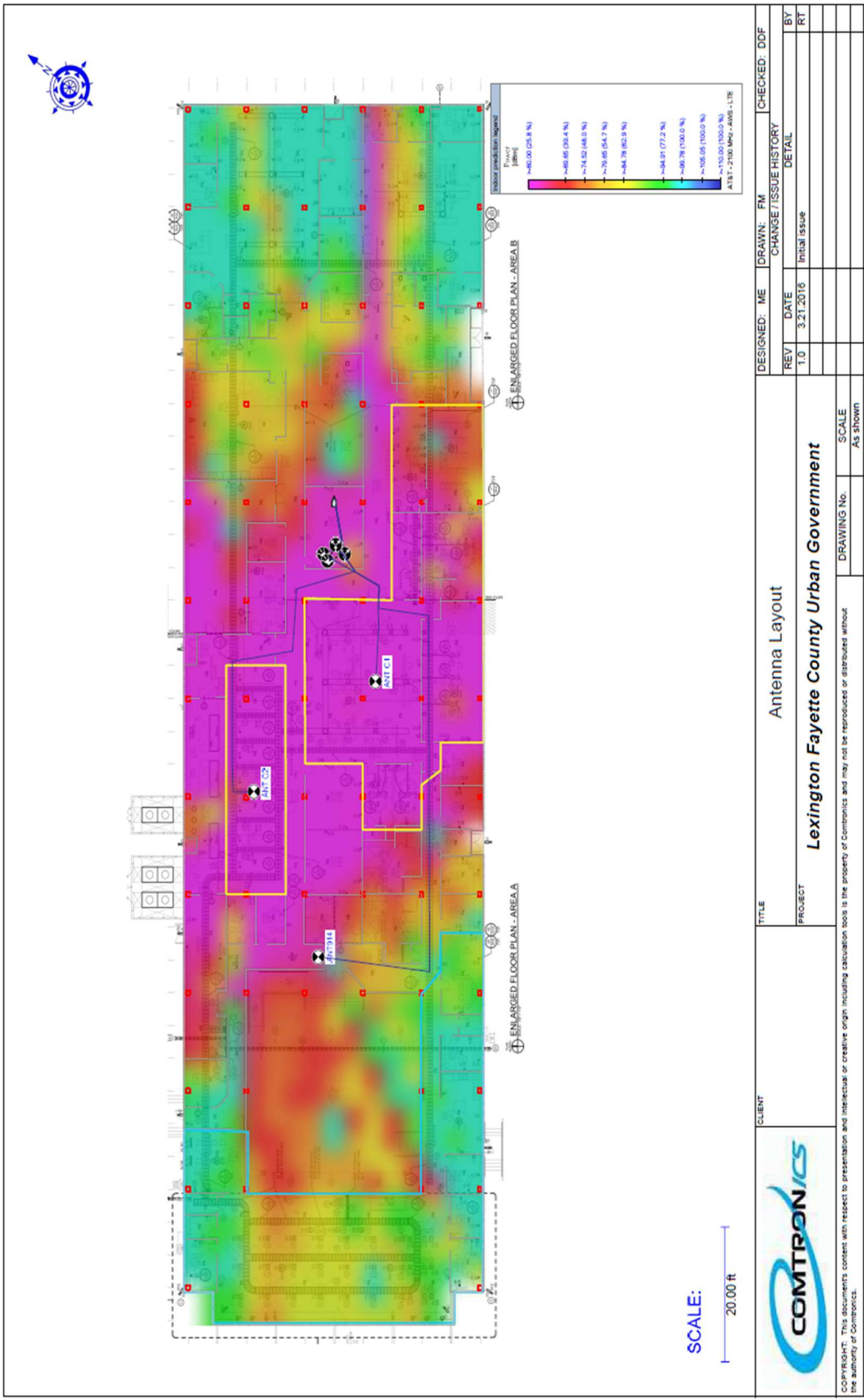
Prediction for Cellular 850mhz



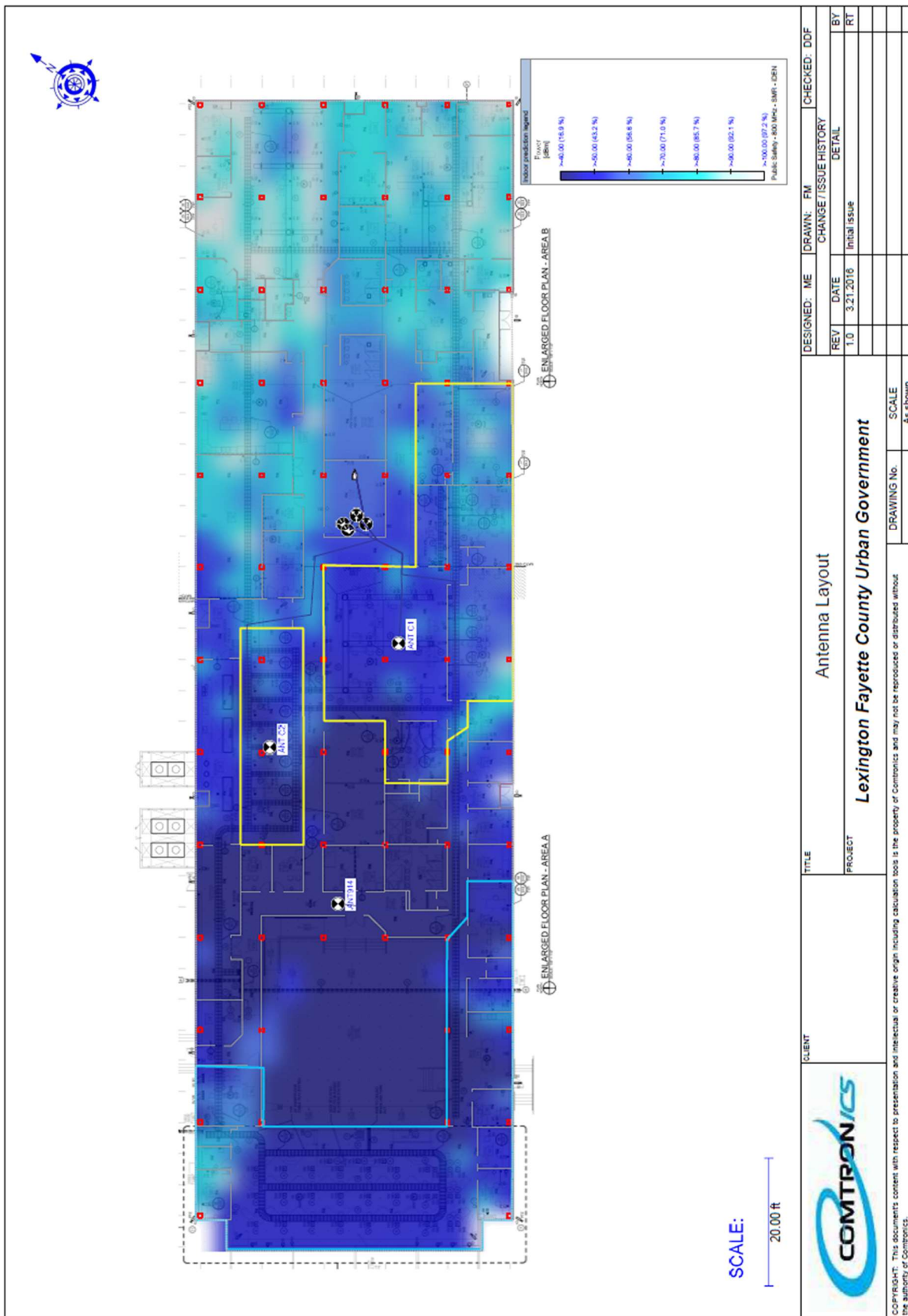
Prediction for Cellular 1900mhz



Prediction for Cellular 2100mhz



Prediction for Public Safety



Madison County In-Building Wireless BDA		Start Date:	April 18, 2016																																	
Comtronics, Inc.																																M a y				
Task	3/1/2016	3/13/2016	Duration (days)	Percent Complete	Date: 4/18 4/19 4/20 4/21 4/22 4/23 4/24 5/2 5/3 5/4 5/5 5/6 5/7 5/8 5/9 5/10 5/11 5/12 5/13 5/14 5/15 5/16 5/17 5/18 5/19 5/20 5/21 5/22 5/23 5/24 5/25 5/26 5/27 5/28 5/29 5/30 5/31 6/1 6/2																															
1.0 Construction	2016-04-18	2016-05-13	26	72.50%	[Gantt chart bars for 1.0 Construction]																															
1.1 Order equipment upon awarding of RFP	2016-04-18	2016-04-19	2	75.00%	[Gantt chart bars for 1.1 Order equipment upon awarding of RFP]																															
1.2 Receive equipment and deliver to site	2016-05-02	2016-05-03	2	70.00%	[Gantt chart bars for 1.2 Receive equipment and deliver to site]																															
1.3 Begin installation of equipment and coax	2016-05-04	2016-05-06	2	75.00%	[Gantt chart bars for 1.3 Begin installation of equipment and coax]																															
1.4 Continue Installation	2016-05-09	2016-05-10	3	75.00%	[Gantt chart bars for 1.4 Continue Installation]																															
1.5 Commissioning the BDA System	2016-05-11	2016-05-13	2	75.00%	[Gantt chart bars for 1.5 Commissioning the BDA System]																															
2.0 Testing	2016-05-10	2016-05-11	2	25.00%	[Gantt chart bars for 2.0 Testing]																															
2.1 Sweep testing	2016-05-10	2016-05-11	1	25.00%	[Gantt chart bars for 2.1 Sweep testing]																															
3.0 Closeout Process	2016-05-16	2016-05-17	2	25.00%	[Gantt chart bars for 3.0 Closeout Process]																															
3.1 Prepare Closeout Documentation	2016-05-16	2016-05-17	2	25.00%	[Gantt chart bars for 3.1 Prepare Closeout Documentation]																															

System Warranty Information

- 2-year Manufacturer Warranty less Force majeure.

Attachment B – Pricing Sheets

LFUCG - Cellular BDA SYSTEM PRICE SHEET				
Line #	Item	Qty.	Price Per Unit	Subtotal
3.1.1	Installation of BDA System	1	\$ 6057	\$ 6057
3.1.3	Provide Bi-Directional Amplifier	1	\$ 3429	\$ 9486
3.1.3	Internal Antenna and or Radiating Cable	1	\$ 85.72	\$ 9572.72
3.1.3	Connectors, Cable Jumpers, transport coax	1	\$ 1474	\$ 11045.72
3.1.3	Mounting Hardware	1	\$ 944.58	\$ 11990.30
3.1.3	Install Internal System Grounding per Motorola R56	1	\$ 1750.48	\$ 13740.78
3..1.6	Required Equipment Enclosure	1		
3.1.8	Donor antenna, transmission lines, surge protection devices and antenna mounts	1	\$ 3060.36	\$ 16801.14
3.1.8	Grounding to the building ground system	1	\$ 847.68	\$ 17648.82
3.2.1	Test Plan	1	\$ 1328.57	\$ 18977.39
3.3	Acceptance Testing	1	\$ 2000	\$ 20977.39
3.5.1	Support and Maintenance	1	\$ 680	\$ 21657.39
3.6.1	Two Year Warranty	1		

LEXINGTON POLICE - PUBLIC SAFETY BDA SYSTEM PRICE SHEET				
Line #	Item	Qty.	Price Per Unit	Subtotal
4.1.1	Installation of BDA System	1	\$ 6057	\$ 6057
4.1.4	Provide Bi-Directional Amplifier	1	\$ 3429	\$ 9486
4.1.4	Internal Antenna and or radiating cable	1	\$ 42.86	\$ 9528.86
4.1.4	Connectors, Cable Jumpers, transport coax	1	\$ 737	\$ 10265.86
4.1.4	Mounting Hardware	1	\$ 473	\$ 10738.86
4.1.4	Install Internal System Grounding per Motorola R56 and Surge Suppression	1	\$ 875.24	\$ 11814.10
4.1.6	Required Equipment Enclosure	1	\$ 3200	\$ 14814.10
4.1.8	Grounding to the building ground system	1	\$ 510.06	\$ 15324.16
4.1.9	Donor antenna, transmission lines, surge protection devices and antenna mounts	1	\$ 847.68	\$ 16171.84
4.2	Test Plan	1	\$ 1328.57	\$ 17500.41
4.3	Acceptance Testing	1	\$ 2000	\$ 19500.41
4.5	Support and Maintenance	1	\$ 680	\$ 20180.41
4.61	Two Year Warranty	1		

