CS-11-203(3)

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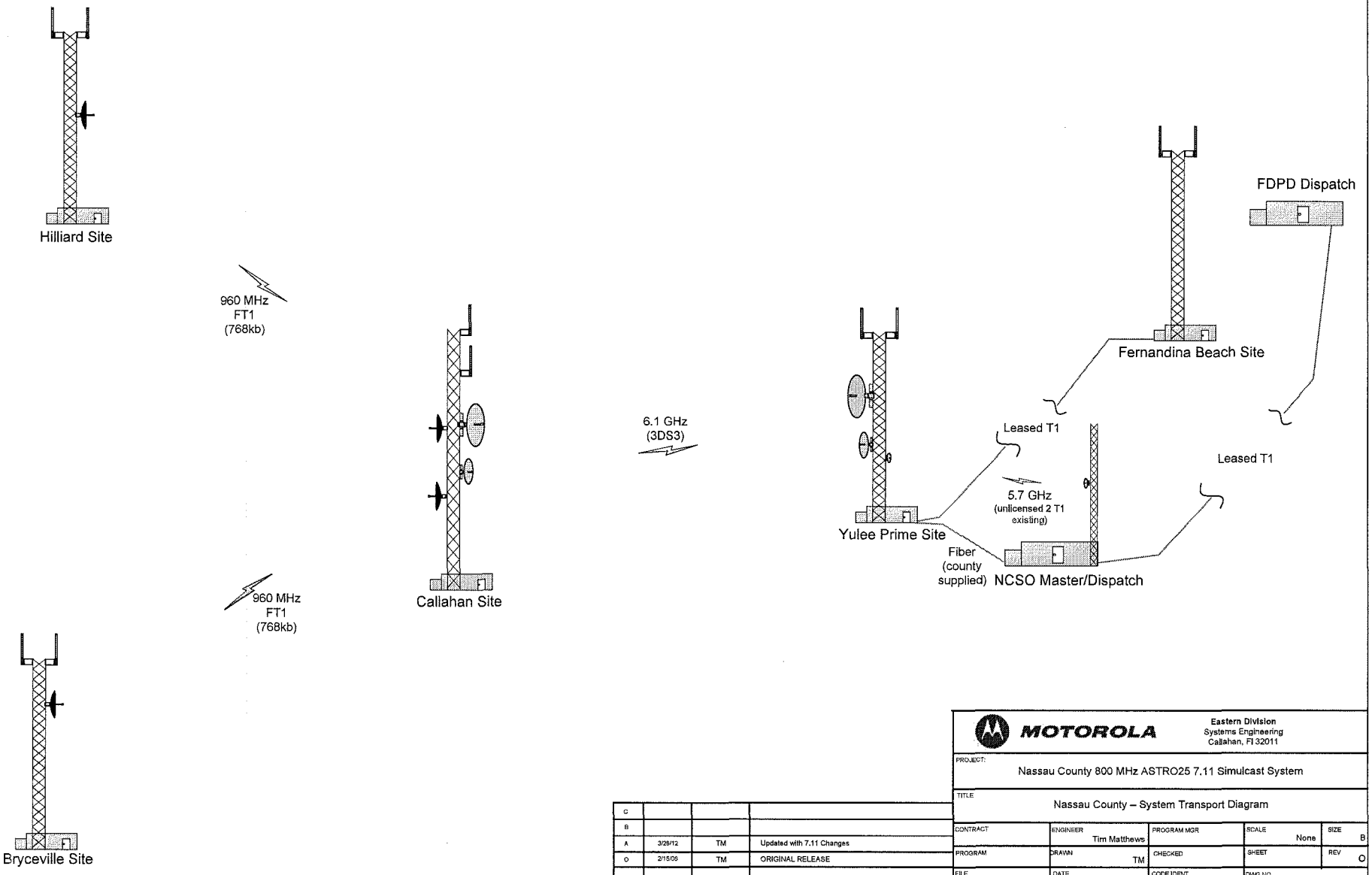


REV	DATE	ENGNR	DESCRIPTION
C			
B			
A	3/28/12	TM	Updated with 7.11 Changes
O	2/15/09	TM	ORIGINAL RELEASE

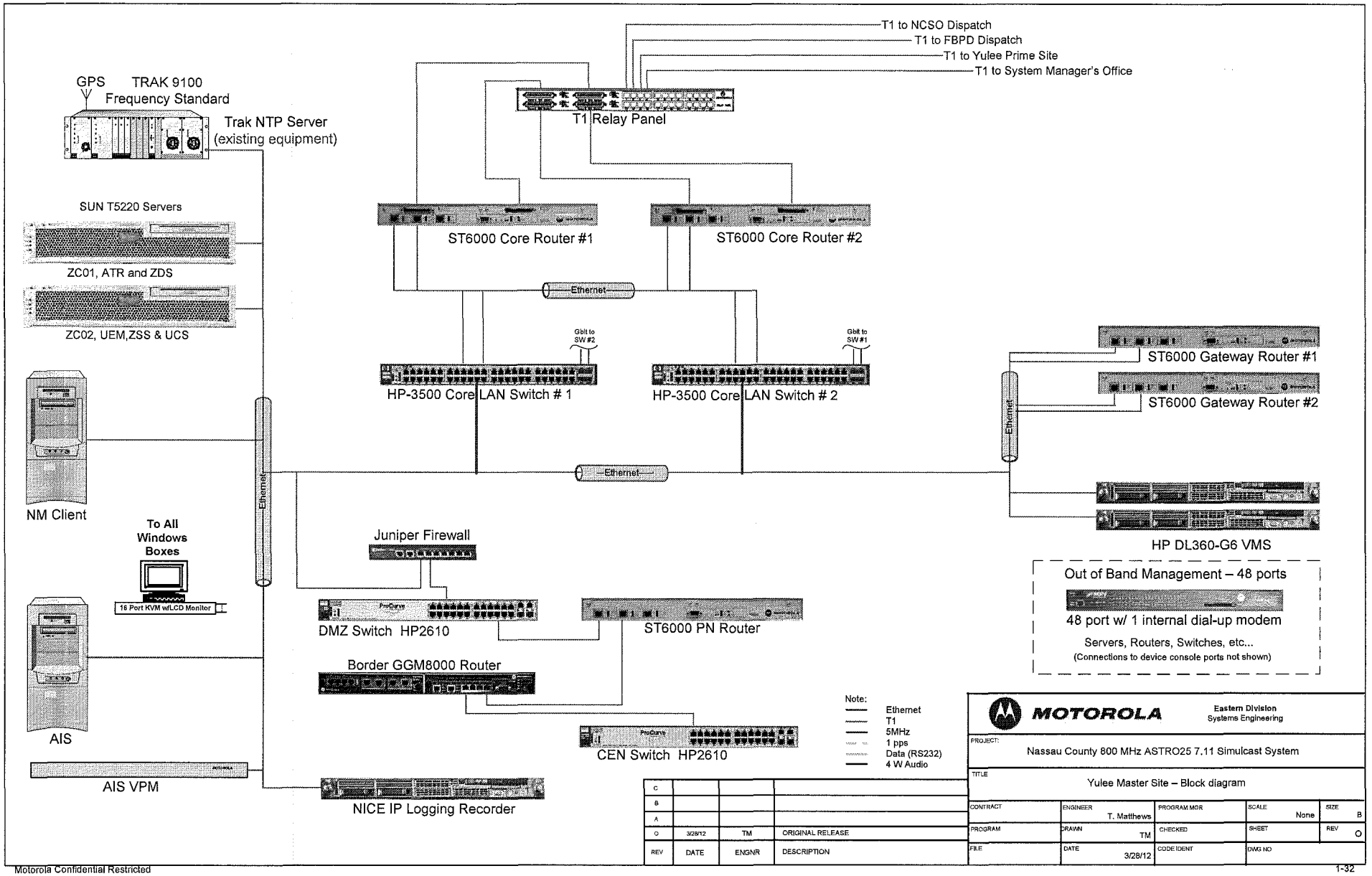
MOTOROLA

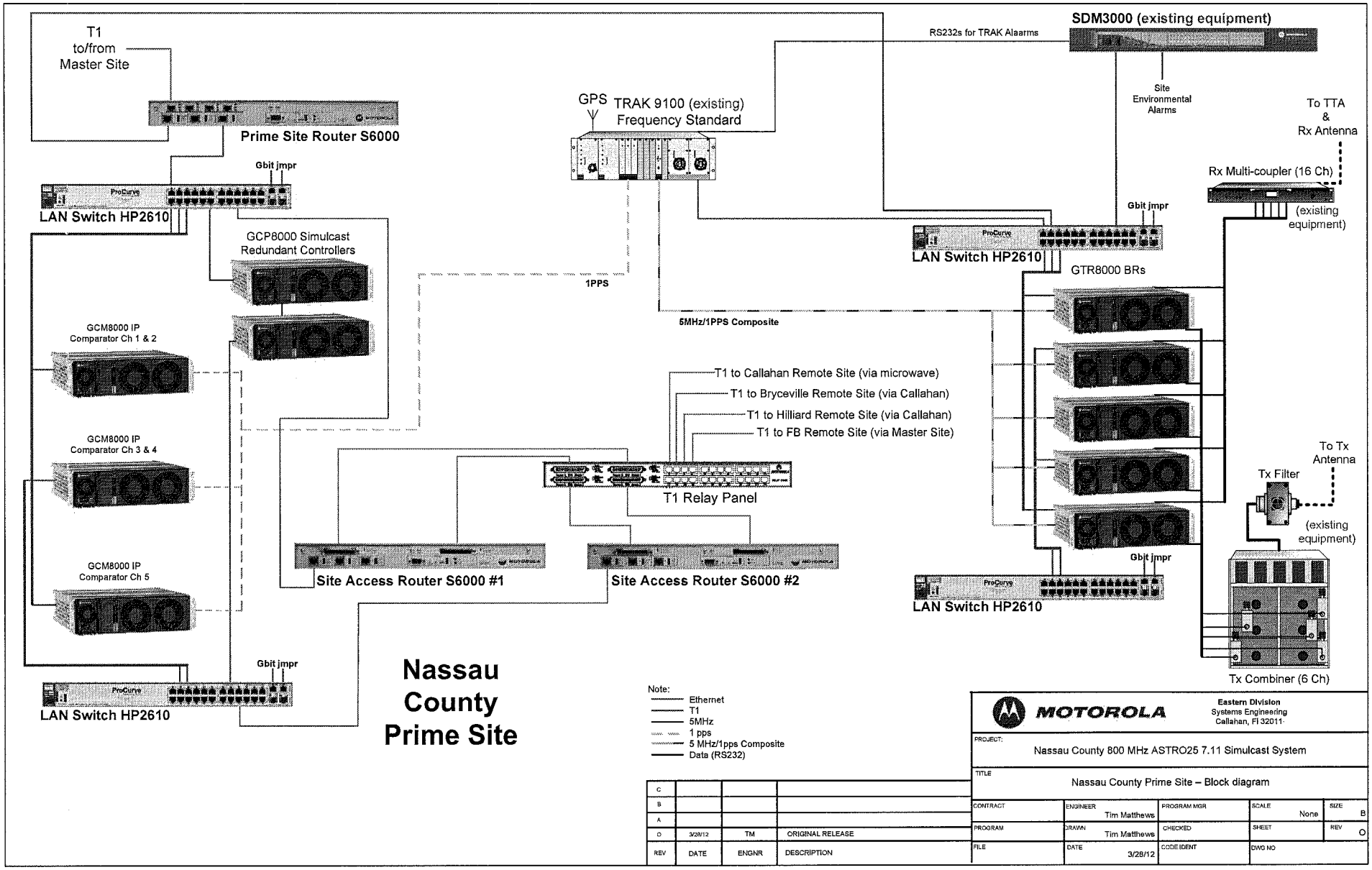
Eastern Division
Systems Engineering
Callahan, Fl 32011

PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System

TITLE: Nassau County – System Transport Diagram

CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	Tim Matthews		None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	TM			O
FILE	DATE	CODE IDENT	DWG NO	
	3/28/12			


T1 to NCSO Dispatch
T1 to FBPD Dispatch
T1 to Yulee Prime Site
T1 to System Manager's Office
GPS
TRAK 9100
Frequency Standard
Trak NTP Server
(existing equipment)
T1 Relay Panel
SUN T5220 Servers
ZC01, ATR and ZDS
ZC02, UEM,ZSS & UCS
ST6000 Core Router #1
ST6000 Core Router #2
Ethernet
Gbit to SW #2
Gbit to SW #1
HP-3500 Core LAN Switch # 1
HP-3500 Core LAN Switch # 2
ST6000 Gateway Router #1
ST6000 Gateway Router #2
Ethernet
Ethernet
Ethernet
NM Client
To All Windows Boxes
16 Port KVM w/LCD Monitor
Juniper Firewall
DMZ Switch HP2610
ST6000 PN Router
Border GGM8000 Router
AIS
AIS VPM
CEN Switch HP2610
NICE IP Logging Recorder
HP DL360-G6 VMS
Out of Band Management – 48 ports
48 port w/ 1 internal dial-up modem
Servers, Routers, Switches, etc...
(Connections to device console ports not shown)
Note:
Ethernet
T1
5MHz
1 pps
Data (RS232)
4 W Audio
MOTOROLA
Eastern Division
Systems Engineering
PROJECT:
Nassau County 800 MHz ASTRO25 7.11 Simulcast System
TITLE
Yulee Master Site – Block diagram
CONTRACT
ENGINEER
T. Matthews
PROGRAM MGR
SCALE
None
SIZE
B
PROGRAM
DRAWN
TM
CHECKED
SHEET
REV
O
FILE
DATE
3/28/12
CODE IDENT
DWG NO
C
B
A
O
3/28/12
TM
ORIGINAL RELEASE
REV
DATE
ENGNR
DESCRIPTION



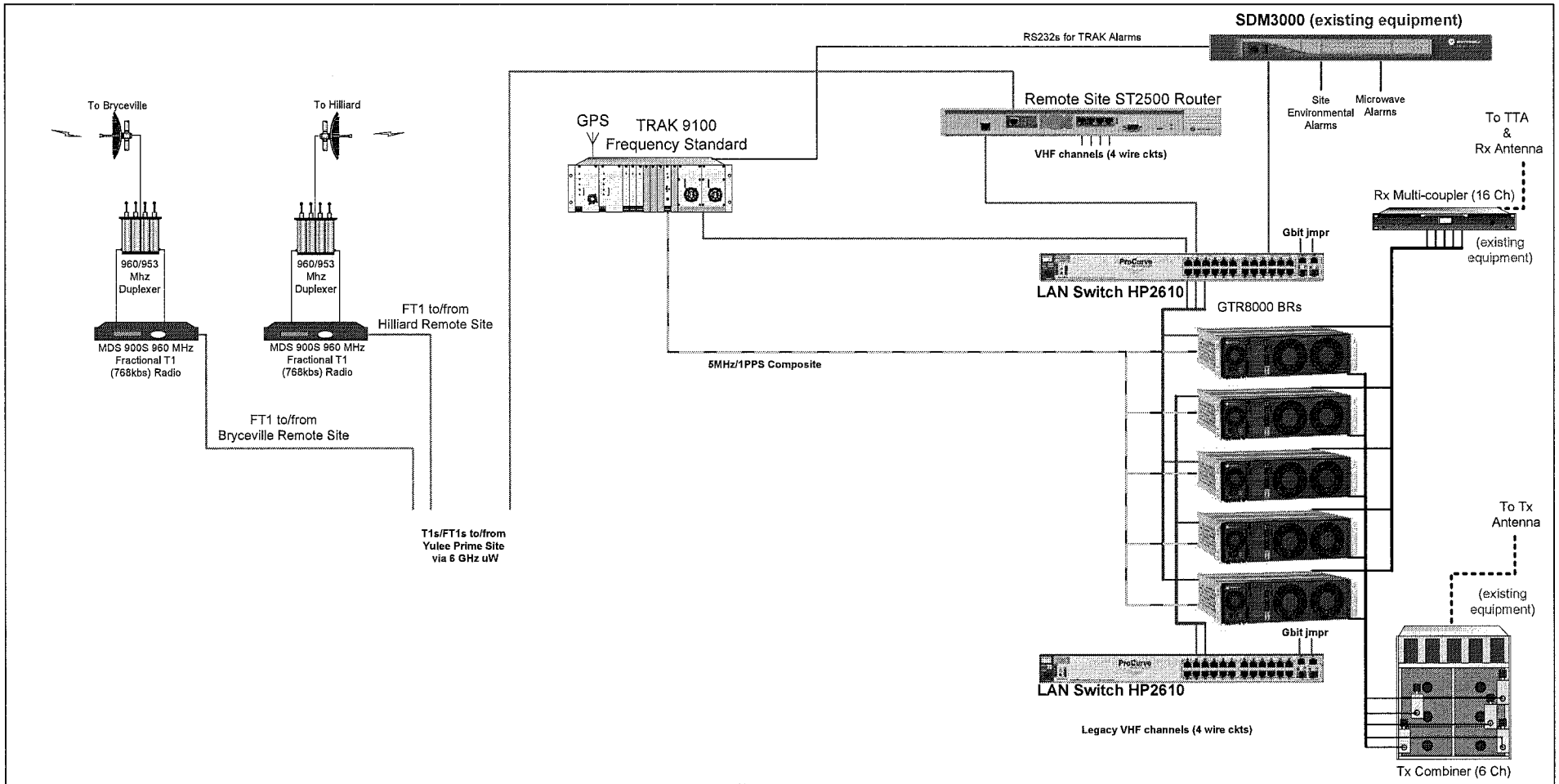
REV	DATE	ENGNR	DESCRIPTION
C			
B			
A			
0	3/28/12	TM	ORIGINAL RELEASE

MOTOROLA
Eastern Division
Systems Engineering
Callahan, Fl 32011

PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System

TITLE: Nassau County Prime Site – Block diagram

CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	Tim Matthews		None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	Tim Matthews			0
FILE	DATE	CODE IDENT	DWG NO	
	3/28/12			



Note:
- Ethernet
- T1
- 5MHz
- 1 pps
- 4W Audio
- Data (RS232)

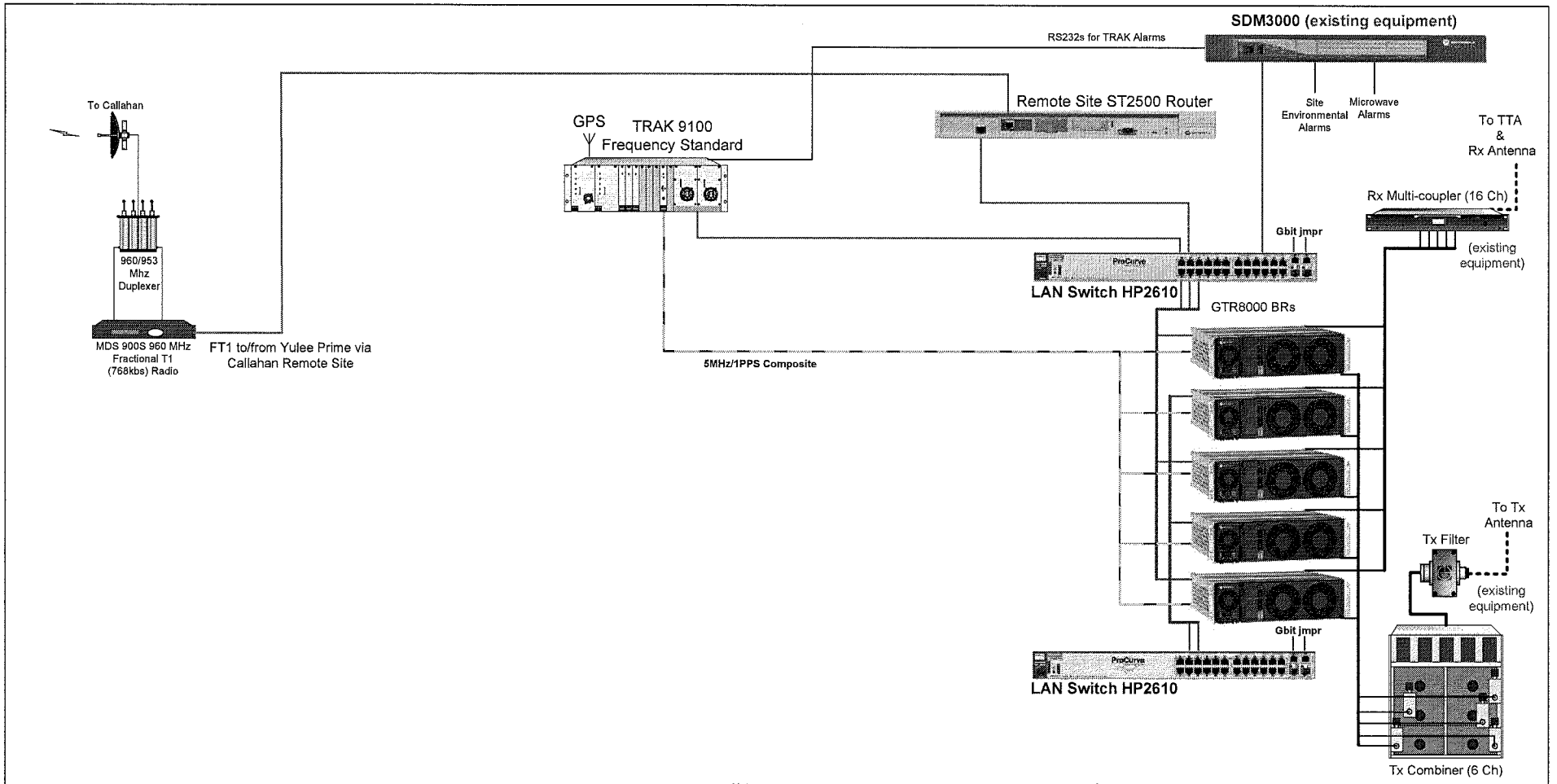
REV	DATE	ENGNR	DESCRIPTION
C			
B			
A			
O	3/28/12	TM	ORIGINAL RELEASE

MOTOROLA
Eastern Division
Systems Engineering
Callahan, Fl 32011

PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System

TITLE: Nassau County Callahan Remote Site – Block diagram

CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	Tim Matthews		None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	TM			O
FILE	DATE	CODE IDENT	DWG NO	
	3/28/12			



Note:
- Ethernet
- T1
- 5MHz
- 1 pps
- 4W Audio
- Data (RS232)

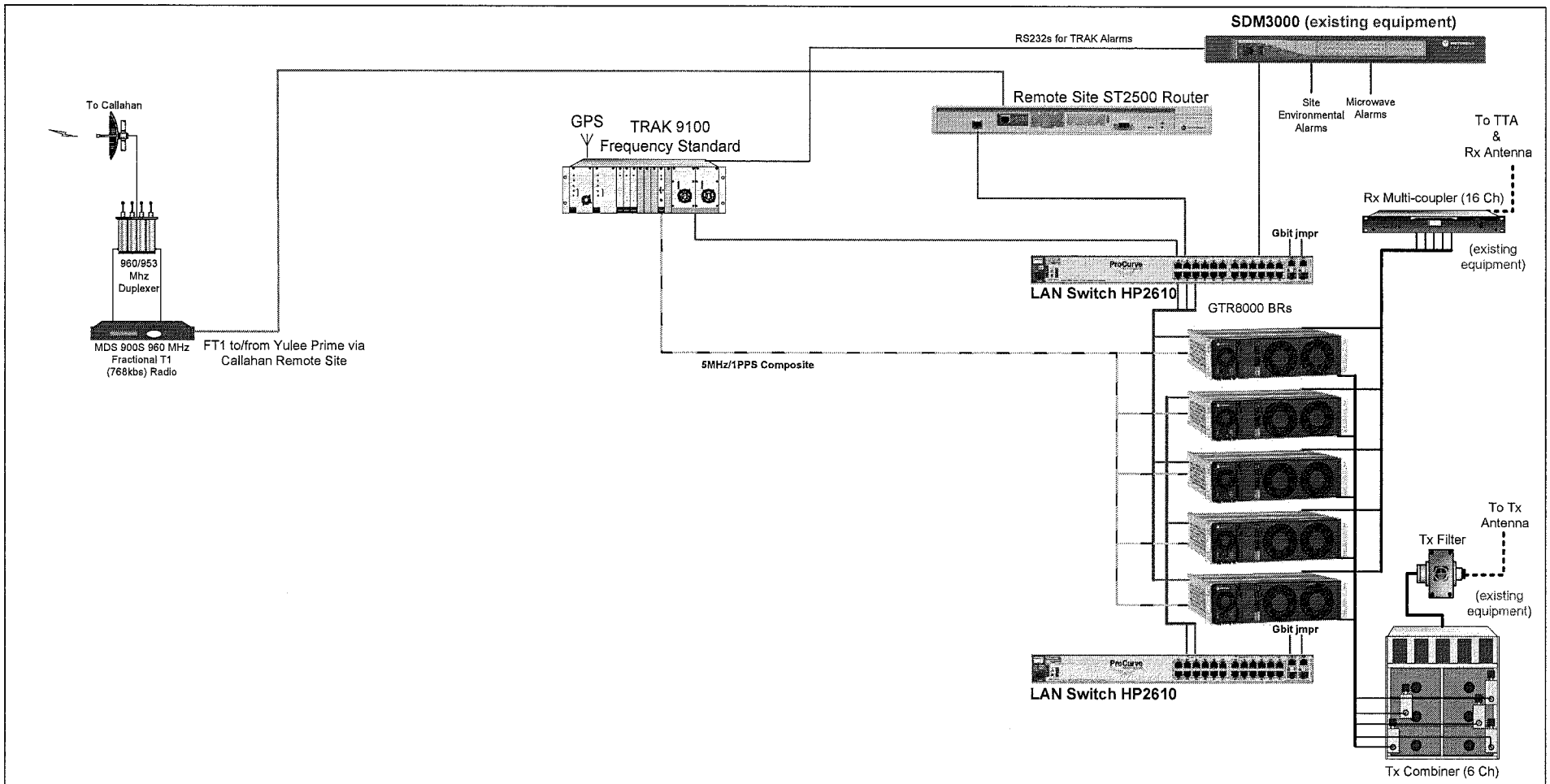
REV	DATE	ENGNR	DESCRIPTION
C			
B			
A			
O	3/28/12	TM	ORIGINAL RELEASE

MOTOROLA
Eastern Division
Systems Engineering
Callahan, Fl 32011

PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System

TITLE: Nassau County Bryceville Remote Site – Block diagram

CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	Tim Matthews		None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	TM			O
FILE	DATE	CODE IDENT	DWG NO	
	3/28/12			



Note:
- Ethernet
- T1
- 5MHz
- 1 pps
- 4W Audio
- Data (RS232)

REV	DATE	ENGNR	DESCRIPTION
C			
B			
A			
O	3/28/12	TM	ORIGINAL RELEASE

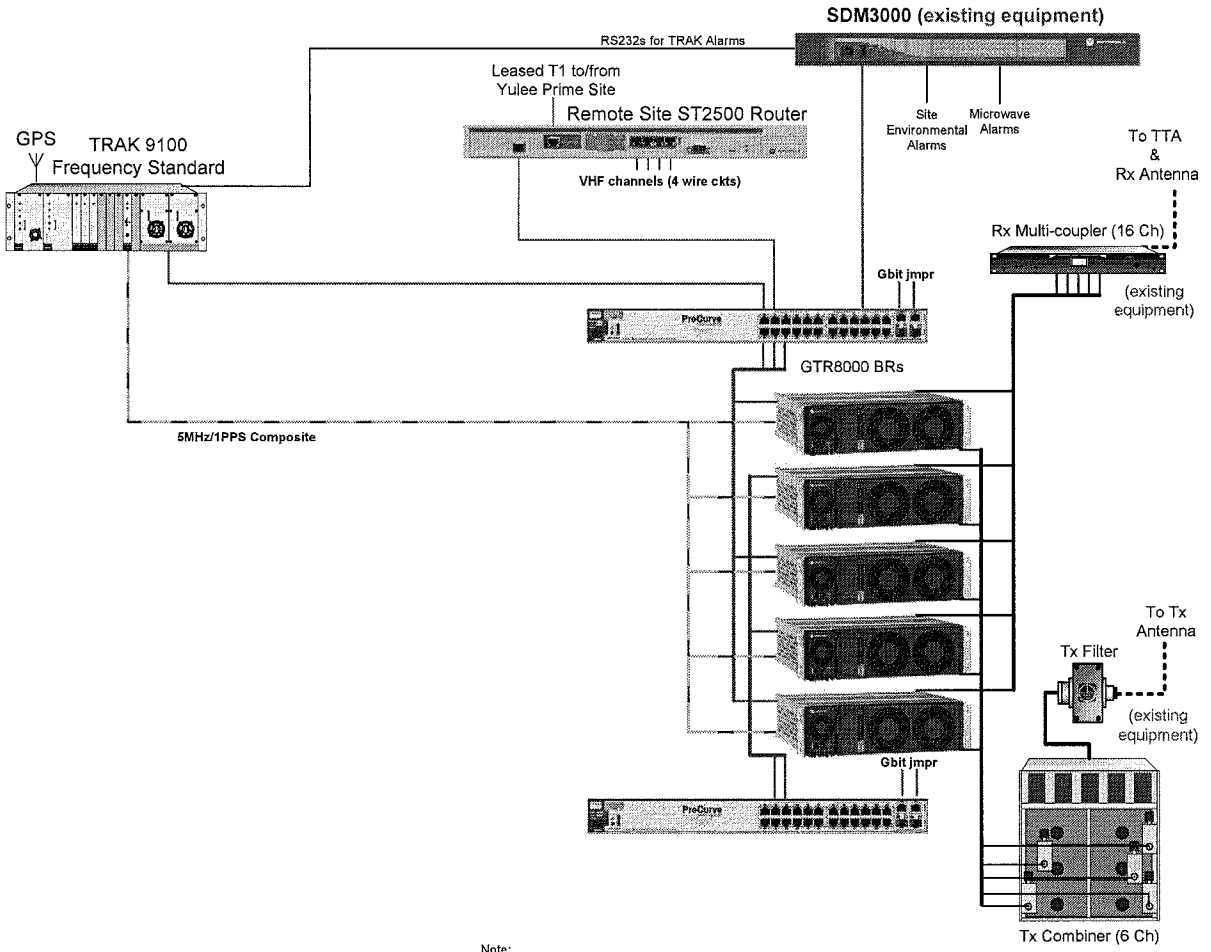
MOTOROLA

Eastern Division
Systems Engineering
Callahan, Fl 32011

PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System

TITLE: Nassau County Hilliard Remote Site – Block diagram

CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	Tim Matthews		None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	TM			O
FILE	DATE	CODE IDENT	DWG NO	
	3/28/12			



Note:
- Ethernet
- T1
- 5MHz
- 1 pps
- 4W Audio
- Data (RS232)

REV	DATE	ENGNR	DESCRIPTION
C			
B			
A	6/22/06	TM	Updated connections
O	2/15/06	TM	ORIGINAL RELEASE

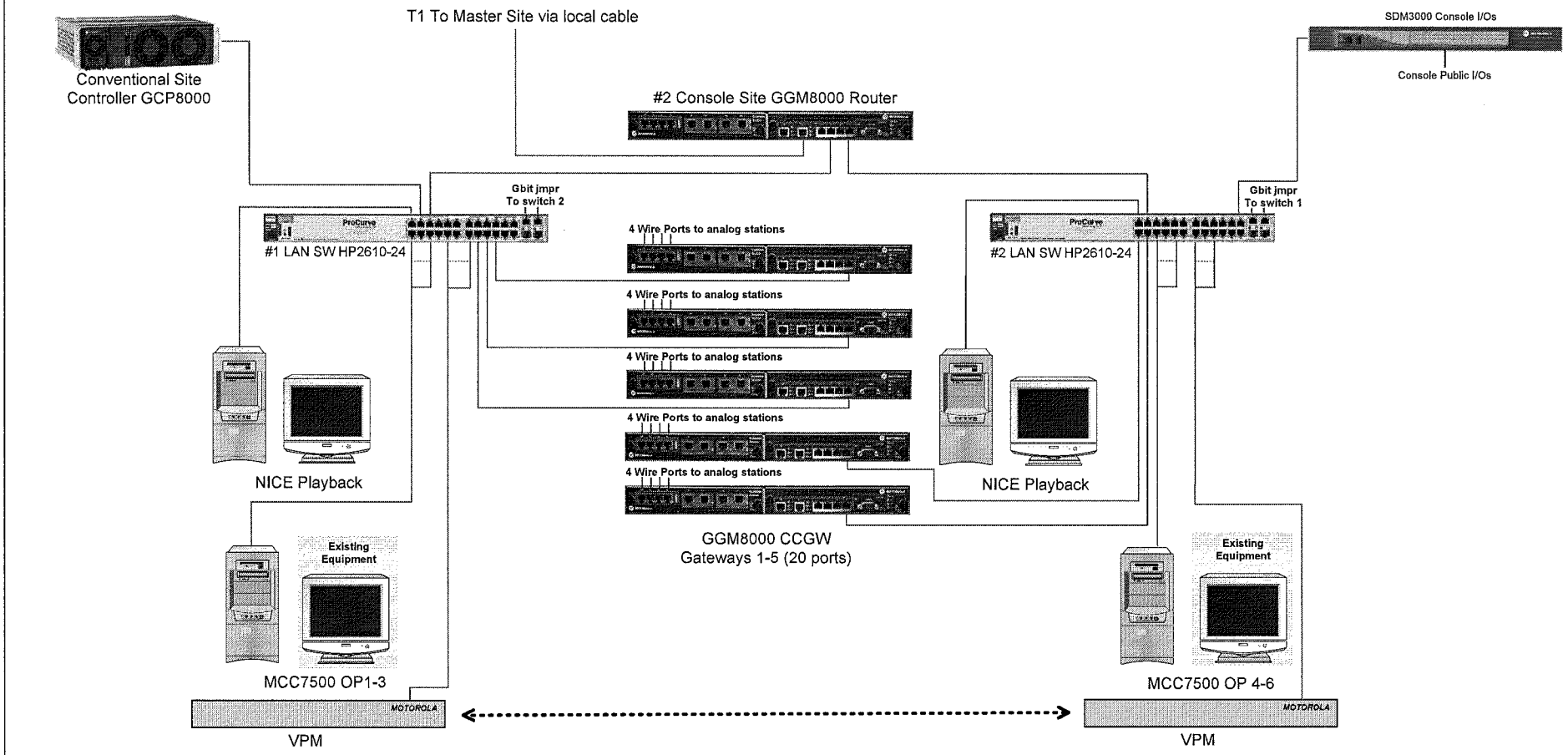
MOTOROLA

Eastern Division
Systems Engineering
Callahan, Fl 32011

PROJECT: Nassau County 800 MHz ASTRO25 Simulcast System

TITLE: Nassau County Fernandina Beach Remote Site -- Block diagram

CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	Tim Matthews	Chuck Peck	None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	Tim Matthews			O
FILE	DATE	CODE IDENT	DWG NO	
	2/15/06			



Note:
- Ethernet
- T1
- 4W Audio

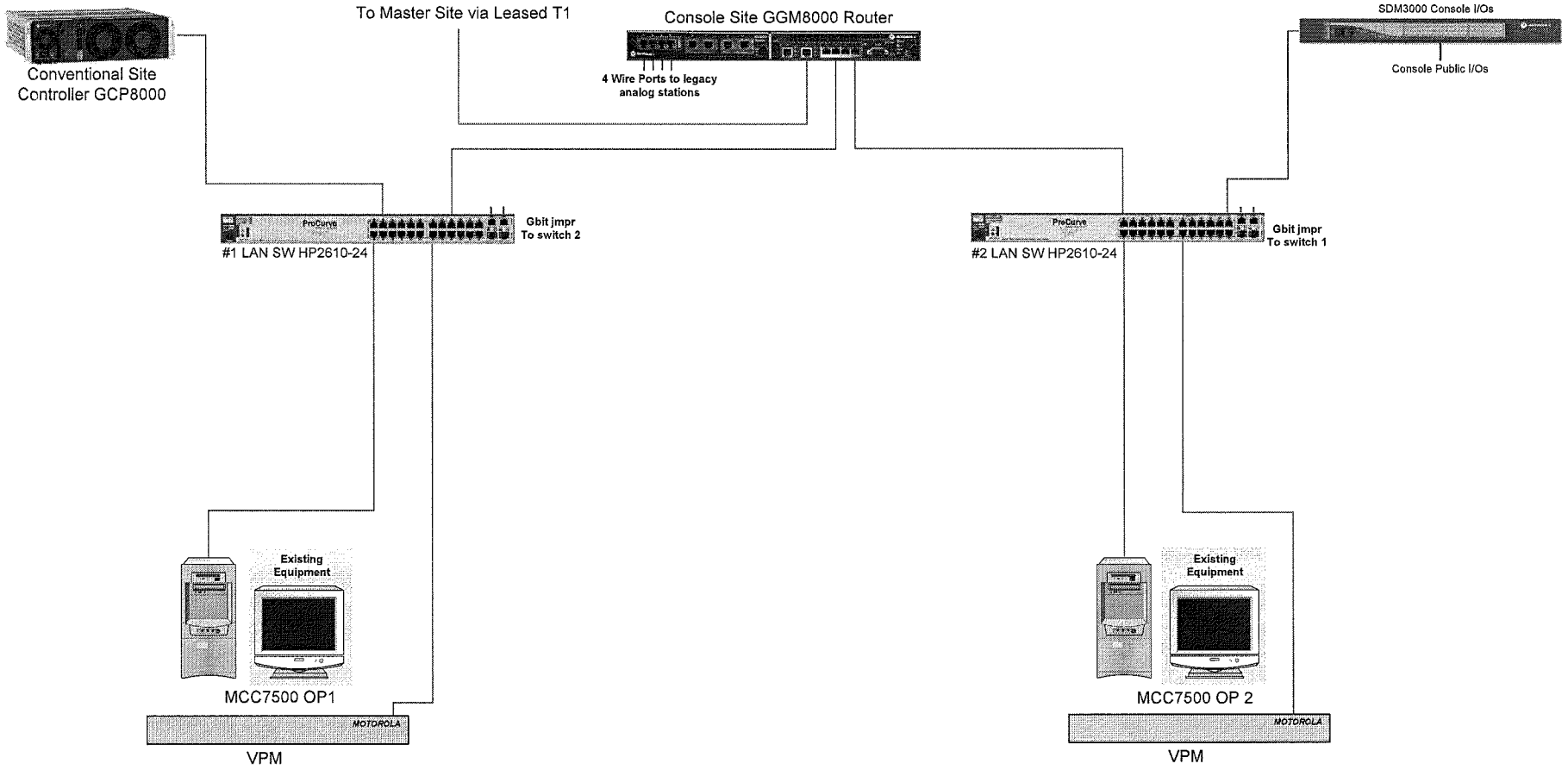
REV	DATE	ENGNR	DESCRIPTION
C			
B			
A			
O	3/28/12	TM	ORIGINAL RELEASE

MOTOROLA — Eastern Division, Systems Engineering

PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System

TITLE: NCSO Consoles – Block diagram

CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	T. Matthews		None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	TM			O
FILE	DATE	CODE IDENT	DWG NO	
	3/28/12			



REV	DATE	ENGNR	DESCRIPTION
C			
B			
A			
0	3/28/12	TM	ORIGINAL RELEASE

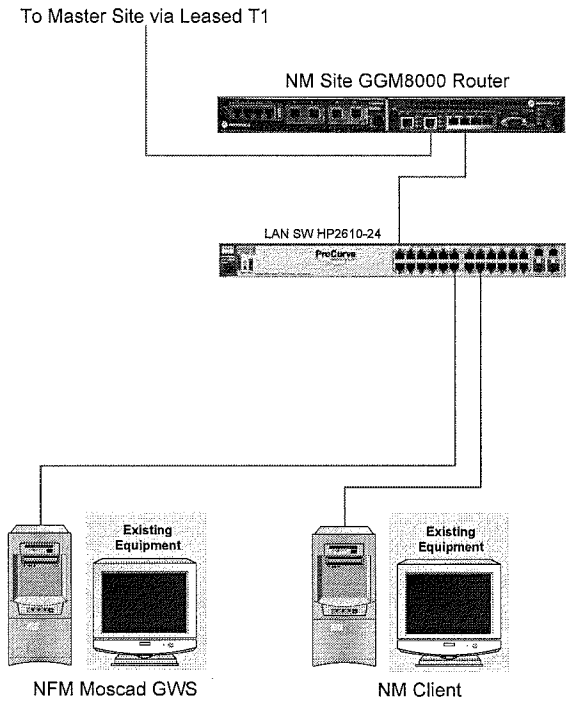
MOTOROLA

Eastern Division
Systems Engineering
Callahan, Fl 32011

PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System

TITLE: Fernandina Beach PD Consoles – Block diagram

CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	Tim Matthews		None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	TM			0
FILE	DATE	CODE IDENT	DWG NO	
	3/28/12			



Note:
- Ethernet
- T1
- 4W Audio

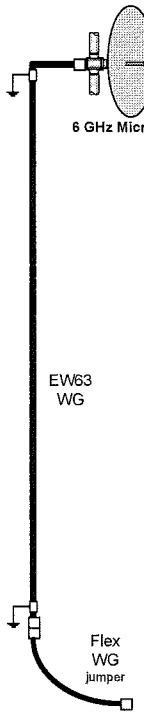
REV	DATE	ENGNR	DESCRIPTION
C			
B			
A			
O	3/28/12	TM	ORIGINAL RELEASE

MOTOROLA — Eastern Division, Systems Engineering

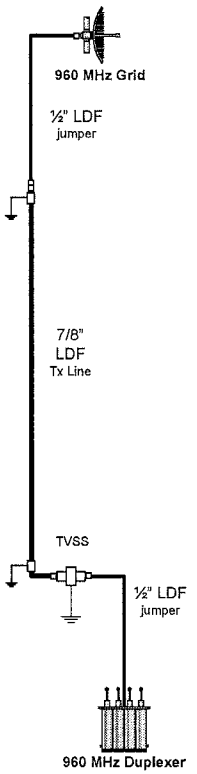
PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System

TITLE: System Manager Office – Block diagram

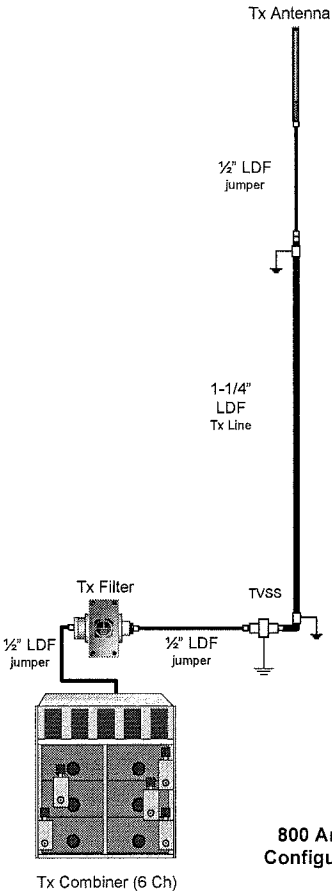
CONTRACT	ENGINEER	PROGRAM MGR	SCALE	SIZE
	T. Matthews		None	B
PROGRAM	DRAWN	CHECKED	SHEET	REV
	TM			O
FILE	DATE	CODE/IDENT	DWG NO	
	3/28/12			

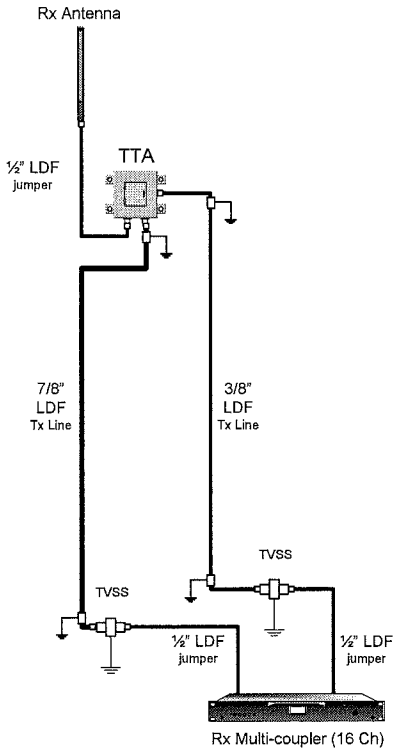


6 GHz Antenna Network Configuration – All Sites



960 Antenna Network Configuration – All Sites





800 Antenna Network Configuration – All Sites

All Existing – for information only

Note:
- Ground Kits @ top & bottom + every 75'
- Tx Filter not used @ Callahan

REV	DATE	ENGNR	DESCRIPTION
C			
B			
A			
O	2/15/06	TM	ORIGINAL RELEASE

MOTOROLA

Eastern Division
Systems Engineering
Callahan, Fl 32011

PROJECT: Nassau County 800 MHz ASTRO25 7.11 Simulcast System				
TITLE: Nassau County - Site Antenna Network Diagram				
CONTRACT	ENGINEER: Tim Matthews	PROGRAM MGR	SCALE: None	SIZE: B
PROGRAM	DRAWN: Tim Matthews	CHECKED	SHEET	REV: O
FILE	DATE: 2/15/06	CODE IDENT	DWG NO	

Section 2. Software Maintenance Options Pricing

County Request: Pricing for all software maintenance options (SUA, SMA, etc.)

2.1 Software Maintenance/System Upgrades

Due to normal advancements in technology, individual components within the ASTRO 25 platform will require periodic update and replacement to mitigate network vulnerabilities and address technology obsolescence. As with IT computing platforms and other enterprise business systems, the pace of technology obsolescence is primarily driven by commercial OEM products that change more frequently and transition into declining levels of support and availability. Consequently, systems without a plan for regular updates can become increasingly difficult and expensive to repair and may also become more vulnerable to security attacks. Additionally, non-current systems may not be able to take advantage of advancements in technology which may provide enhanced features and performance, and may limit the ability to expand. Regular system updates ensure commercial software remains within the OEM support coverage and can also provide operational enhancements of previously purchased features.

Motorola's offers three different levels of software support to keep your system up-to-date.

2.1.1 Software Maintenance Agreement

The Motorola Software Maintenance Agreement (SMA) complements the lifecycle of the ASTRO 25 system by providing periodic software updates which safeguard and enhance the operation, and extend the lifespan of the system. SMA provides system release software for Motorola and third-party infrastructure products, radio subscriber units (if purchased), product programming software as well as commercial OS patch updates. Additionally, Motorola integrates third-party OEM updates and pre-tests and certifies functionality and compatibility, mitigating risk of interference to the system operation. Updated commercial and open source software incorporates the latest advancements in third-party technology and provides improvement in network security. SMA provides not only a simple approach to updating the system, but also up to 80% cost savings compared to individual procurement of software updates. The fixed price annual subscription provides an approach for consistent budget planning and cost containment against unexpected changes. SMA is a flexible lifecycle

management solution that allows the system owner to implement updates on their own schedule and incur hardware and implementation services expense at the time of upgrade.

- **Major Release (system release)** – Includes third-party software and Motorola system software updates which provide enhancements to existing features and addition of significant new features which are available for purchase. Additionally, included are updates to Motorola subscriber programming software. Motorola subscriber software updates available as an option.

2.1.2 System Upgrade Agreement

The ASTRO 25 Platform is an integrated end-to-end solution designed for delivery of mission-critical land mobile radio services. The foundation of the ASTRO 25 platform is an information technology (IT) based core which incorporates a hybrid composition of commercial off-the-shelf IT components, specialized radio frequency (RF) components and software designed to comply with standards-based specifications. To ensure the highest level of operation, allow for system expansion, provide maximum lifespan and protect the initial capital investment in the system, regular update and replacement of individual software and hardware components is required.

The Motorola System Upgrade Agreement (SUA) is comprehensive approach to technology refreshment of the ASTRO 25 system, incorporating both software and hardware updates aligned with the platform lifecycle roadmap. The SUA is a complete package of hardware, software and implementation services required to update the ASTRO 25 system on an *annual basis* to a level consistent the latest systems leaving the factory.

- **Major Release (system release)** – Includes third-party software and Motorola system software updates which provide enhancements to existing features and addition of significant new features which are available for purchase. Additionally, included are updates to Motorola subscriber programming software. Motorola subscriber software updates available as an option.
- **Hardware Refresh** – Version updates and/or replacements for Motorola field replaceable unit (FRU) hardware and third-party networking and computing hardware. (Replacement of legacy product platforms such as QUANTAR base stations, CENTRACOM dispatch consoles excluded.)
- **Implementation Services** – Technical support and operational resources such as field engineering, system technologist, project management and local service shop resources to provide end-to-end design, on-site implementation, and project management services.

2.1.3 System Upgrade Agreement II (SUA II)

For system owners that prefer to upgrade their system on a less frequent basis, the SUA II is available at a lower cost, providing one system release upgrade *every two years* (SUA II combines features of two releases in a single upgrade jump). For owners that are committed to upgrading their system on a regular basis, SUA provides a consistent budgeting solution that provides complete coverage.

SUA ensures the ASTRO 25 system functions at the highest level of operation, allows for system expansion and feature enhancement, and maximizes the lifespan of the investment. System release updates provides access to the latest standard and optional features (optional features may require an additional fee for licensing and hardware) available and also allows for system expansion (i.e. expansion of RF sites, dispatch positions, data sub-systems, network management positions, etc.).Software and hardware updates, to platform components, ensure availability of repair services support and may also provide increased capacity and processing capability. Professional implementation services guarantee live system upgrades are performed with minimal interruption to system operation with minimal reliance on owner resources.

- **Major Release (system release)** – Includes third-party software and Motorola system software updates which provide enhancements to existing features and addition of significant new features which are available for purchase. Additionally, included are updates to Motorola subscriber programming software. Motorola subscriber software updates available as an option.
- **Hardware Refresh** – Version updates and/or replacements for Motorola field replaceable unit (FRU) hardware and third-party networking and computing hardware. (Replacement of legacy product platforms such as QUANTAR base stations, CENTRACOM dispatch consoles excluded.)
- **Implementation Services** – Technical support and operational resources such as field engineering, system technologist, project management and local service shop resources to provide end-to-end design, on-site implementation, and project management services.

2.2 Software Maintenance/System Upgrade Pricing

System Upgrade Options	Year 2 ($)
Software Maintenance Agreement (SMA)	**71,800**
System Upgrade Agreement II (SUA II)	**219,600**
System Upgrade Agreement (SUA)	**342,800**

SUA II Pricing while at A7.11:

	Oct 2012- Approx Start	Upgrade to 7.13		
Lifecycle Products (NSAD)	**2013**	**2014**	**2015**	**2016**
System Upgrade Agreement II (SUA II)	219,600	222,500	225,500	228,600

After completion of A7.13 Upgrade (service automation labor savings applied):

	A7.13			
Lifecycle Products (NSAD)	**2015**	**2016**	**2017**	**2018**
System Upgrade Agreement II (SUA II)	159,400	160,500	161,600	162,700

Section 3. Services Pricing

County Request: Pricing for all service offerings (individually priced)

3.1 Optional Post-Warranty Maintenance

As Motorola's continuing commitment to supporting your system, warranty services can be extended after the first year to provide maintenance and service support in future years. Any service can be tailored to your specific needs and budget. The continuation of these services beyond the warranty year will help ensure maximum system uptime as well as maintaining the highest level of system performance.

Table 3-1: Post Warranty Maintenance (Optional) Upon 7.11 Upgrade

Post-Warranty Maintenance	Year 2 ($)
Dispatch/Call Management Service	7,952.00
Network and Security Monitoring	37,794.00
Security Update Service	19,968.00
Technical Support	28,452.00
OnSite Infrastructure Response	63,895.00
Infrastructure Repair with Advanced Replacement	46,619.00
Total System Maintenance	**204,680.00**[1]
3rd Party NICE Maintenance	
NICE Logging 24*7 Gold Package	12,500.00
Total including NICE	**217,180.00**

[1] A $7,500.00 increase will apply to Year 3. Subsequent years, please average a CPI increase between 3-5% to the yearly amount. If the County adds or subtracts any new equipment or software, the maintenance contract will be adjusted accordingly.

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Section 4. Upgrade Cost with MCC 7500 Consoles

County Request: Upgrade cost for 7.4 to 7.11 to include MCC 7500 consoles

4.1 Pricing

Description	Price ($)
System Total after City of Jacksonville/Motorola P25 Contract Discounts Applied	**1,644,867.00**[1]
Customer Loyalty Discount for System as Proposed and Contract Execution Prior to April 27, 2012	*(82,243.00)*
Customer Sale Price	**1,562,624.00**

[1] Above price valid only with Life Cycle Support subscription.

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Section 5. Upgrade Cost with MCC 7500 Consoles and GCM 8000 Comparators

County Request: Upgrade cost for 7.4 to 7.11 to include MCC 7500 consoles and GCM 8000 comparators

5.1 Pricing

Description	Price ($)
System Total after City of Jacksonville/Motorola P25 Contract Discounts Applied	1,786,841.10[1]
Customer Loyalty Discount for System as Proposed and Contract Execution Prior to April 27, 2012	***(135,091.00)***
Customer Sale Price	1,651,750.10

[1] In addition to City of Jacksonville/ Motorola Contract Discounts, a substantial discount of $488,435.50 was applied to the Equipment List Total. Therefore, above price valid only with Life Cycle Support subscription.

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5.2 Detailed Equipment List

BLOCK	APC	QTY	NOMENCLATURE	DESCRIPTION	UNIT LIST (DUP)	EXT LIST (DUP)	APPLIED	EXT LIST
NMS/ZC	877	0	SQM01SUM0199	MASTER SITE CONFIGURATION	$ -	$-	20%	$-
NMS/ZC	424	1	CA01428AD	ADD: 7.11 ZC/NM HW 24 SITES OR LESS	$ 40,000.00	$40,000.00	20%	$32,000.00
NMS/ZC	424	1	CA01429AD	ADD: 7.11 REDUNDANT HW 24 SITE/LESS	$ 40,000.00	$40,000.00	20%	$32,000.00
NMS/ZC	424	1	CA01770AA	ADD: DUAL COMMON PLATFORM HARDWARE MAX 24 SITES	$ 40,000.00	$40,000.00	20%	$32,000.00
NMS/ZC	424	1	CA01784AA	ADD: STORAGE DEVICE	$ 6,280.00	$6,280.00	20%	$5,024.00
NMS/ZC	877	0	CA01472AA	ADD: WINDOWS SUPPLEMENTAL FULL CONFIG	$ -	$-	20%	$-
NMS/ZC	877	0	QA01205AA	ENH: ASTRO 25 WITH IV&D	$ 50,000.00	$-	20%	$-
NMS/ZC	877	0	CA01209AB	ENH: ASTRO 25 IV&D SITE	$ 25,000.00	$-	20%	$-
NMS/ZC	877	0	CA01223AA	ADD: HIGH AVAILABILITY ZC LICENSE	$ 10,000.00	$-	20%	$-
NMS/ZC	877	0	CA01720AA	ADD: ANTI-VIRUS SERVICE (SERVERS)	$ 1,000.00	$-	20%	$-
NMS/ZC	877	0	CA01723AA	ADD: BASELINE BACK UP	$ 500.00	$-	20%	$-
NMS/ZC	877	0	CA01208AA	ENH: 500 RADIO USER LICENSES	$ 5,000.00	$-	20%	$-
NMS/ZC	877	0	CA01588AA	ADD: ANTI-VIRUS SERVICE	$ 500.00	$-	20%	$-
NMS/ZC	877	0	Z13AG	ENH: UNIFIED NETWORK CONFIGURATOR (UNC)	$ 20,000.00	$-	20%	$-
NMS/ZC	877	0	Z802AF	ENH: USER CONFIGURATION MANAGER (UCM)	$ 5,000.00	$-	20%	$-
NMS/ZC	877	0	CA01224AB	ENH: UNIFIED EVENT MANAGER (UEM)	$ 20,000.00	$-	20%	$-
NMS/ZC	877	0	CA01453AA	ADD: FLEXIBLE AIR TRAFFIC INFORMATION ACCESS	$ 17,000.00	$-	20%	$-
NMS/ZC	772	1	ZA00103AA	ENH: TECHNICAL ASSISTANCE, TEN HOURS	$ 3,000.00	$3,000.00	0%	$3,000.00
NMS/ZC	877	0	D980AU	ADD: CADI SOFTWARE OPTION	$ 45,000.00	$-	20%	$-
NMS/ZC	772	1	ZA00104AA	ENH: TECHNICAL ASSISTANCE, FORTY HRS	$ 12,000.00	$12,000.00	0%	$12,000.00
NMS/ZC	877	0	D52AJ	ENH: ZONEWATCH	$ 20,000.00	$-	20%	$-
NMS/ZC	877	0	DA00148AG	ENH: ZONE HISTORICAL REPORTS	$ 5,000.00	$-	20%	$-
NMS/ZC	877	0	ZA00149AD	ENH: DYNAMIC REPORTS	$ 8,000.00	$-	20%	$-
NMS/ZC	877	0	Z801AM	ENH: RADIO CONTROL MANAGER	$ 15,000.00	$-	20%	$-
NMS/ZC	877	0	ZA00151AG	ENH: AFFILIATION USER REPORTS	$ 7,000.00	$-	20%	$-
NMS/ZC	877	0	CA01238AA	ENH: EMAIL ALARM NOTIFICATIONS	$ 5,000.00	$-	20%	$-
NMS/ZC	382	0	CA01884AA	ADD: MOSCAD NFM AND LICENSES	$ 28,453.00	$-	10%	$-
NMS/ZC	877	2	CA01225AB	ENH: MCC 7500 CONSOLE LICENSES (QTY 5)	$ 5,000.00	$10,000.00	20%	$8,000.00
NMS/ZC	469	1	F4544	SITE MANAGER ADVANCED	$ 3,000.00	$3,000.00	10%	$2,700.00
NMS/ZC	469	1	V266	ADD: 90VAC TO 260VAC PS TO SM	$ 120.00	$120.00	10%	$108.00
NMS/ZC	469	0	VA00220	SDM3000 NETWORK TRANSLATOR ASTRO F/W FOR A7.11	$ 3,850.00	$-	10%	$-
NM_CLIENT	708	1	TT2311	Z400 HIGH TIER WITH WINDOWS 7 (64-BIT) NON-RETURNABLE	$ 5,950.00	$5,950.00	10%	$5,355.00
NM_CLIENT	877	0	T7702	ASTRO 7.11 CLIENT APPLICATION SOFTWARE	$ 700.00	$-	20%	$-
NM_CLIENT	708	1	TT2311	Z400 HIGH TIER WITH WINDOWS 7 (64-BIT) NON-RETURNABLE	$ 5,950.00	$5,950.00	10%	$5,355.00

BLOCK	APC	QTY	NOMENCLATURE	DESCRIPTION	UNIT LIST (DUP)	EXT LIST (DUP)	APPLIED	EXT LIST
NM_CLIENT	877	0	T7702	ASTRO 7.11 CLIENT APPLICATION SOFTWARE	$ 700.00	$-	20%	$-
NM_CLIENT	708	0	DDN9657	CRYSTAL REPORTS 2008 (VISTA COMPATIBLE ;FOR A7.5 & BEYOND)	$ 994.00	$-	10%	$-
NM_NETWORK	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
NM_NETWORK	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
NM_NETWORK	147	1	CLN1836	2610-24 ETHERNET SWITCH	$ 2,250.00	$2,250.00	20%	$1,800.00
NM_NETWORK	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
NM_NETWORK	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
AUTHEN	708	0	TT1969	RSA AUTH. MGMT V. 6.1 WITH 25 CLIENT ACCESS LICENSES	$ 6,669.00	$-	10%	$-
AUTHEN	708	0	TT04523AA	ADD: RSA ACE SERVER MAINTENANCE FOR 25 CLIENT ACCESS LICENSES	$ -	$-	10%	$-
AUTHEN	708	1	DDN8653	RSA 5 YEAR HARD TOKEN (INCLUDES 5 TOKENS)	$ 400.00	$400.00	10%	$360.00
AUTHEN	708	1	TT2022	LX4000T 8 PORT TERMINAL SERVER, NO DIAL-UP MODEM INCLD.	$ 2,700.00	$2,700.00	10%	$2,430.00
OSH	877	0	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG	$ 50.00	$-	20%	$-
CNI	147	2	CLN1836	2610-24 ETHERNET SWITCH	$ 2,250.00	$4,500.00	20%	$3,600.00
CNI	147	1	ST6000	S6000 MNR MULTI-PROTOCOL ROUTER	$ 15,995.00	$15,995.00	20%	$12,796.00
CNI	147	1	ST6017B	S6000 4 PORT ULTRAWAN II MODULE	$ 3,000.00	$3,000.00	20%	$2,400.00
CNI	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
CNI	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
SRC	147	1	SQM01SUM0189	SRC7500 SWG ROUTING CENTER	$ 1,000.00	$1,000.00	20%	$800.00
SRC	147	1	CA01420AA	ADD: DUAL CORE LAN 1-24 SITES	$ 13,900.00	$13,900.00	20%	$11,120.00
SRC	147	1	CA01345AA	ADD: DUAL GATEWAY ROUTERS STANDARD	$ 31,400.00	$31,400.00	20%	$25,120.00
SRC	147	1	CA01425AA	ADD: RED CORE ROUTER 1-24 SITES CWR	$ 70,000.00	$70,000.00	20%	$56,000.00
RACK	509	2	TRN7343	SEVEN AND A HALF FOOT RACK	$ 495.00	$990.00	20%	$792.00
SOFTWARE	430	0	DVN4046	MASTER SYSTEM KEY STARTER KIT	$ 500.00	$-	0%	$-
SPARES	877	1	DLN6699	SUN NETRA T5220 SERVER WITHOUT SOFTWARE	$ 30,000.00	$30,000.00	20%	$24,000.00
SPARES	147	1	ST5100	MNR ASTRO/SMARTZONE SOFTWARE UPGRADE	$ 500.00	$500.00	20%	$400.00
SPARES	147	1	ST6202	SRC 24 PORT T1/E1EXP II	$ 75,000.00	$75,000.00	20%	$60,000.00
SOFTWARE	509	0	DLN6455R	CONFIGURATION/SERVICE SOFTWARE	$ 25.00	$-	0%	$-
SOFTWARE	708	0	T7398	SYMANTEC AV UPGRADE MEDIA	$ 20.00	$-	10%	$-
SOFTWARE	877	0	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG	$ 50.00	$-	20%	$-
MOSCAD	382	0	F5567	SDM3000 BUILDER SOFTWARE FOR A7.11	$ 800.00	$-	10%	$-
MOSCAD	469	0	FVN5888	SDM3000 ASTRO F/W FOR A7.11	$ 1,850.00	$-	10%	$-
MOSCAD	382	0	F5567	MOSCAD NFM LEGACY PACKAGE FOR A7.11	$ 800.00	$-	10%	$-
LAN Switch	147	17	CLN1836	2610-24 ETHERNET SWITCH	$ 2,250.00	$38,250.00	20%	$30,600.00
GWS_CLIENT	708	1	TT2311	Z400 HIGH TIER WITH WINDOWS 7 (64-BIT) NON-RETURNABLE	$ 5,950.00	$5,950.00	10%	$5,355.00
GWS_CLIENT	708	0	TT2177	INTOUCH RUNTIME 60K TAG W/O-I/O, V10.1, LIC ONLY	$ 8,700.00	$-	10%	$-

BLOCK	APC	QTY	NOMENCLATURE	DESCRIPTION	UNIT LIST (DUP)	EXT LIST (DUP)	APPLIED	EXT LIST
GWS_CLIENT	708	0	DDN9979	SYMANTEC ENDPOINT PROTECTION V11.0 CORP ED LIC & MEDIA SINGLE COPY	$ 75.00	$-	10%	$-
SPARES	147	1	TYN4003	FRU: GGM 8000 E&M DSP MODULE	$ 1,200.00	$1,200.00	20%	$960.00
CCGW	147	0	ST2513	S2500 ANALOG CONV TO IP IF KIT	$ 800.00	$-	20%	$-
ROUTER	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
ROUTER	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
ROUTER	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
ROUTER	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
ROUTER	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
ROUTER	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
ROUTER	147	1	CA01618AA	ADD: CONV CHAN GATEWAY	$ 2,000.00	$2,000.00	20%	$1,600.00
Test Eq	209	1	SVC03SVC0138	SUBSCRBR DIAG 800 BAND 9600	$ 49,900.00	$49,900.00	0%	$49,900.00
AIS	443	1	B1905	MCC 7500 ASTRO 25 SOFTWARE	$ 250.00	$250.00	20%	$200.00
AIS	443	1	B1933	MOTOROLA VOICE PROCESSOR MODULE	$ 11,920.00	$11,920.00	20%	$9,536.00
AIS	443	1	CA00288AB	ADD: MCC 7500 ARCHIVING INTERFACE SERVER SOFTWARE LICENSE	$ 15,060.00	$15,060.00	20%	$12,048.00
AIS	443	1	CA00147AF	ADD: MCC 7500 SECURE OPERATION	$ 3,250.00	$3,250.00	20%	$2,600.00
AIS	443	1	CA00143AC	ADD: DES-OFB ALGORITHM	$ 750.00	$750.00	20%	$600.00
AIS	443	1	CA00245AA	ADD: ADP ALGORITHM	$ 300.00	$300.00	20%	$240.00
AIS	443	1	CA00140AA	ADD: AC LINE CORD, NORTH AMERICAN	$ -	$-	20%	$-
AIS	708	1	DDN9979	SYMANTEC ENDPOINT PROTECTION V11.0 CORP ED LIC & MEDIA SINGLE COPY	$ 75.00	$75.00	10%	$67.50
AIS	708	1	TT2312	Z400 MID TIER WITH WINDOWS 7 (64-BIT) NON-RETURNABLE	$ 3,000.00	$3,000.00	10%	$2,700.00
LOG_REC	229	1	TT1092	MCC 7500 30 SIMULTANEOUS CALL IP RECORDER	$ 84,000.00	$84,000.00	10%	$75,600.00
LOG_REC	229	1	TT05599AA	ADD: IP LOGGING RECORDER FOR USE ON 7.11 SYSTEMS	$ -	$-	10%	$-
LOG_REC	207	1	DDN9748	19 INCH BLACK SHELF	$ 249.00	$249.00	10%	$224.10
AIS	708	1	DDN9979	SYMANTEC ENDPOINT PROTECTION V11.0 CORP ED LIC & MEDIA SINGLE COPY	$ 75.00	$75.00	10%	$67.50
RACK	509	1	TRN7343	SEVEN AND A HALF FOOT RACK	$ 495.00	$495.00	20%	$396.00
LOG_REC	708	2	TT2313	Z400 LOW TIER WITH WINDOWS 7 (64-BIT) NON-RETURNABLE	$ 2,550.00	$5,100.00	10%	$4,590.00
LOG_REC	041	2	DDN9992	HP LE1901W 19 INCH WIDE LCD MONITOR	$ 250.00	$500.00	10%	$450.00
LOG_REC	877	2	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG	$ 50.00	$100.00	20%	$80.00
LOG_REC	229	1	DDN9694	ADDL INFORM RECON CONCUR USER LIC	$ 2,642.00	$2,642.00	10%	$2,377.80
LOG_REC	708	2	DDN9979	SYMANTEC ENDPOINT PROTECTION V11.0 CORP ED LIC & MEDIA SINGLE COPY	$ 75.00	$150.00	10%	$135.00
OP_POSIT	443	1	B1905	MCC 7500 ASTRO 25 SOFTWARE	$ 250.00	$250.00	20%	$200.00
OP_POSIT	443	6	B1933	MOTOROLA VOICE PROCESSOR MODULE	$ 11,920.00	$71,520.00	20%	$57,216.00
OP_POSIT	443	6	CA01642AA	ADD: MCC 7500 BASIC CONSOLE FUNCTIONALITY SOFTWARE LICENSE	$ 12,000.00	$72,000.00	20%	$57,600.00
OP_POSIT	443	6	CA01643AA	ADD: MCC 7500 TRUNKING OPERATION LICENSE	$ 5,000.00	$30,000.00	20%	$24,000.00
OP_POSIT	443	6	CA00147AF	ADD: MCC 7500 SECURE OPERATION	$ 3,250.00	$19,500.00	20%	$15,600.00

BLOCK	APC	QTY	NOMENCLATURE	DESCRIPTION	UNIT LIST (DUP)	EXT LIST (DUP)	APPLIED	EXT LIST
OP_POSIT	443	6	CA00143AC	ADD: DES-OFB ALGORITHM	$ 750.00	$4,500.00	20%	$3,600.00
OP_POSIT	443	6	CA00245AA	ADD: ADP ALGORITHM	$ 300.00	$1,800.00	20%	$1,440.00
OP_POSIT	443	6	CA00140AA	ADD: AC LINE CORD, NORTH AMERICAN	$ -	$-	20%	$-
OP_POSIT	443	6	CA00635AN	ENH: MCC 7500 PROMOTION - CENTRACOM TRADE-IN	$ (5,000.00)	$(30,000.00)	0%	$(30,000.00)
OP_POSIT	708	6	TT2312	Z400 MID TIER WITH WINDOWS 7 (64-BIT) NON-RETURNABLE	$ 3,000.00	$18,000.00	10%	$16,200.00
OP_POSIT	877	6	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG	$ 50.00	$300.00	20%	$240.00
OP_POSIT	443	12	B1912	MCC SERIES DESKTOP SPEAKER	$ 450.00	$5,400.00	20%	$4,320.00
OP_POSIT	443	6	B1914	MCC SERIES DESKTOP GOOSENECK MICROPHONE	$ 250.00	$1,500.00	20%	$1,200.00
OP_POSIT	443	12	B1913	MCC SERIES HEADSET JACK	$ 200.00	$2,400.00	20%	$1,920.00
OP_POSIT	708	6	DSTWIN6328A	PROVIDES ONE DUAL PEDAL FOOTSWITCH FOR USE WITH MOTOROLA MCC 7500 DISP	$ 273.00	$1,638.00	10%	$1,474.20
OP_POSIT	708	6	DDN9979	SYMANTEC ENDPOINT PROTECTION V11.0 CORP ED LIC & MEDIA SINGLE COPY	$ 75.00	$450.00	10%	$405.00
OP_POSIT	229	6	DDN9617	SW BASED DUAL IRR USB HASP WITH LICENSE FOR XP / VISTA	$ 2,648.00	$15,888.00	10%	$14,299.20
OP_POSIT	708	6	DDN6493	SOUND CARD AUDIGY SE	$ 159.00	$954.00	10%	$858.60
OP_POSIT	708	6	CDN6673	CREATIVE LABS INSPIRE A60	$ 46.00	$276.00	10%	$248.40
SWITCH	147	2	CLN1836	2610-24 ETHERNET SWITCH	$ 2,250.00	$4,500.00	20%	$3,600.00
ROUTER	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
ROUTER	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
AUX_IO	469	1	F4543	SITE MANAGER BASIC	$ 1,855.00	$1,855.00	10%	$1,669.50
AUX_IO	469	1	VA00222	SDM3000 MCC7500 AUX IO F/W FOR A7.11	$ 175.00	$175.00	10%	$157.50
AUX_IO	469	1	V266	ADD: 90VAC TO 260VAC PS TO SM	$ 120.00	$120.00	10%	$108.00
AUX_IO	469	3	V592	AAD TERM BLCK & CONN WI	$ 90.00	$270.00	10%	$243.00
GCP8000	112	1	T7038	GCP 8000 SITE CONTROLLER	$ 3,000.00	$3,000.00	20%	$2,400.00
GCP8000	112	1	CA00303AA	ADD: QTY (1) SITE CONTROLLER	$ 5,000.00	$5,000.00	20%	$4,000.00
GCP8000	112	1	X153AW	ADD: RACK MOUNT HARDWARE	$ 50.00	$50.00	20%	$40.00
GCP8000	595	1	CA01136AA	ADD: MCC 7500 CONVEN SITE OPER	$ 4,000.00	$4,000.00	20%	$3,200.00
CCGW	147	5	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$21,000.00	20%	$16,800.00
CCGW	147	5	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
CCGW	147	5	CA01618AA	ADD: CONV CHAN GATEWAY	$ 2,000.00	$10,000.00	20%	$8,000.00
SPARES	708	1	TT2312	Z400 MID TIER WITH WINDOWS 7 (64-BIT) NON-RETURNABLE	$ 3,000.00	$3,000.00	10%	$2,700.00
SPARES	147	1	CLN1836	2610-24 ETHERNET SWITCH	$ 2,250.00	$2,250.00	20%	$1,800.00
OP_POSIT	443	1	B1905	MCC 7500 ASTRO 25 SOFTWARE	$ 250.00	$250.00	20%	$200.00
OP_POSIT	443	2	B1933	MOTOROLA VOICE PROCESSOR MODULE	$ 11,920.00	$23,840.00	20%	$19,072.00
OP_POSIT	443	2	CA01642AA	ADD: MCC 7500 BASIC CONSOLE FUNCTIONALITY SOFTWARE LICENSE	$ 12,000.00	$24,000.00	20%	$19,200.00
OP_POSIT	443	2	CA01643AA	ADD: MCC 7500 TRUNKING OPERATION LICENSE	$ 5,000.00	$10,000.00	20%	$8,000.00
OP_POSIT	443	2	CA00147AF	ADD: MCC 7500 SECURE OPERATION	$ 3,250.00	$6,500.00	20%	$5,200.00
OP_POSIT	443	2	CA00143AC	ADD: DES-OFB ALGORITHM	$ 750.00	$1,500.00	20%	$1,200.00

BLOCK	APC	QTY	NOMENCLATURE	DESCRIPTION	UNIT LIST (DUP)	EXT LIST (DUP)	APPLIED	EXT LIST
OP_POSIT	443	2	CA00245AA	ADD: ADP ALGORITHM	$ 300.00	$600.00	20%	$480.00
OP_POSIT	443	2	CA00140AA	ADD: AC LINE CORD, NORTH AMERICAN	$ -	$-	20%	$-
OP_POSIT	443	2	CA00635AN	ENH: MCC 7500 PROMOTION - CENTRACOM TRADE-IN	$ (5,000.00)	$(10,000.00)	0%	$(10,000.00)
OP_POSIT	708	2	TT2312	Z400 MID TIER WITH WINDOWS 7 (64-BIT) NON-RETURNABLE	$ 3,000.00	$6,000.00	10%	$5,400.00
OP_POSIT	877	2	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG	$ 50.00	$100.00	20%	$80.00
SURGE	207	0	DSSL120	SPD, TYPE 3, 120VAC, 15A PLUG-IN WITH 15A SIMPLEX OUTLET	$ 180.00	$-	10%	$-
OP_POSIT	443	4	B1912	MCC SERIES DESKTOP SPEAKER	$ 450.00	$1,800.00	20%	$1,440.00
OP_POSIT	443	2	B1914	MCC SERIES DESKTOP GOOSENECK MICROPHONE	$ 250.00	$500.00	20%	$400.00
OP_POSIT	443	4	B1913	MCC SERIES HEADSET JACK	$ 200.00	$800.00	20%	$640.00
OP_POSIT	708	2	DSTWIN6328A	PROVIDES ONE DUAL PEDAL FOOTSWITCH FOR USE WITH MOTOROLA MCC 7500 DISP	$ 273.00	$546.00	10%	$491.40
OP_POSIT	708	2	DDN9979	SYMANTEC ENDPOINT PROTECTION V11.0 CORP ED LIC & MEDIA SINGLE COPY	$ 75.00	$150.00	10%	$135.00
OP_POSIT	229	2	DDN9617	SW BASED DUAL IRR USB HASP WITH LICENSE FOR XP / VISTA	$ 2,648.00	$5,296.00	10%	$4,766.40
OP_POSIT	708	2	DDN6493	SOUND CARD AUDIGY SE	$ 159.00	$318.00	10%	$286.20
OP_POSIT	708	2	CDN6673	CREATIVE LABS INSPIRE A60	$ 46.00	$92.00	10%	$82.80
SWITCH	147	2	CLN1836	2610-24 ETHERNET SWITCH	$ 2,250.00	$4,500.00	20%	$3,600.00
ROUTER	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
ROUTER	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
ROUTER	147	1	CA01618AA	ADD: CONV CHAN GATEWAY	$ 2,000.00	$2,000.00	20%	$1,600.00
AUX_IO	469	1	F4543	SITE MANAGER BASIC	$ 1,855.00	$1,855.00	10%	$1,669.50
AUX_IO	469	1	VA00222	SDM3000 MCC7500 AUX IO F/W FOR A7.11	$ 175.00	$175.00	10%	$157.50
AUX_IO	469	1	V266	ADD: 90VAC TO 260VAC PS TO SM	$ 120.00	$120.00	10%	$108.00
AUX_IO	469	3	V592	AAD TERM BLCK & CONN WI	$ 90.00	$270.00	10%	$243.00
GCP8000	112	1	T7038	GCP 8000 SITE CONTROLLER	$ 3,000.00	$3,000.00	20%	$2,400.00
GCP8000	112	1	CA00303AA	ADD: QTY (1) SITE CONTROLLER	$ 5,000.00	$5,000.00	20%	$4,000.00
GCP8000	112	1	X153AW	ADD: RACK MOUNT HARDWARE	$ 50.00	$50.00	20%	$40.00
GCP8000	595	1	CA01136AA	ADD: MCC 7500 CONVEN SITE OPER	$ 4,000.00	$4,000.00	20%	$3,200.00
CCGW	147	1	SQM01SUM0205	GGM 8000 GATEWAY	$ 4,200.00	$4,200.00	20%	$3,360.00
CCGW	147	1	CA01616AA	ADD: AC POWER	$ -	$-	20%	$-
CCGW	147	1	CA01618AA	ADD: CONV CHAN GATEWAY	$ 2,000.00	$2,000.00	20%	$1,600.00
RACK	509	1	TRN7343	SEVEN AND A HALF FOOT RACK	$ 495.00	$495.00	20%	$396.00
GCM8000	112	1	T7321	GCM 8000 COMPARATOR	$ 3,000.00	$3,000.00	20%	$2,400.00
GCM8000	112	2	CA01183AA	ADD: GCM 8000 COMPARATOR	$ 5,000.00	$10,000.00	20%	$8,000.00
GCM8000	595	2	CA01185AA	ADD: IP BASED MULTISITE OPERATION	$ 9,000.00	$18,000.00	20%	$14,400.00
GCM8000	112	1	X153AW	ADD: RACK MOUNT HARDWARE	$ 50.00	$50.00	20%	$40.00
GCM8000	112	1	T7321	GCM 8000 COMPARATOR	$ 3,000.00	$3,000.00	20%	$2,400.00
GCM8000	112	2	CA01183AA	ADD: GCM 8000 COMPARATOR	$ 5,000.00	$10,000.00	20%	$8,000.00

BLOCK	APC	QTY	NOMENCLATURE	DESCRIPTION	UNIT LIST (DUP)	EXT LIST (DUP)	APPLIED	EXT LIST
GCM8000	595	2	CA01185AA	ADD: IP BASED MULTISITE OPERATION	$ 9,000.00	$18,000.00	20%	$14,400.00
GCM8000	112	1	X153AW	ADD: RACK MOUNT HARDWARE	$ 50.00	$50.00	20%	$40.00
GCM8000	112	1	T7321	GCM 8000 COMPARATOR	$ 3,000.00	$3,000.00	20%	$2,400.00
GCM8000	112	1	CA01183AA	ADD: GCM 8000 COMPARATOR	$ 5,000.00	$5,000.00	20%	$4,000.00
GCM8000	595	1	CA01185AA	ADD: IP BASED MULTISITE OPERATION	$ 9,000.00	$9,000.00	20%	$7,200.00
GCM8000	112	1	X153AW	ADD: RACK MOUNT HARDWARE	$ 50.00	$50.00	20%	$40.00
GTR8000	112	1	T7140	G-SERIES SOFTWARE UPGRADE	$ -	$-	20%	$-
GTR8000	595	25	CA01195AA	ADD: IP BASED MULTISITE BASE RADIO SOFTWARE UPGRADE	$ 5,300.00	$132,500.00	20%	$106,000.00
GCP8000	112	1	T7140	G-SERIES SOFTWARE UPGRADE	$ -	$-	20%	$-
GCP8000	595	2	CA01196AA	ADD: IP BASED MULTISITE SITE CONTROLLER SOFTWARE UPGRADE	$ 20,650.00	$41,300.00	20%	$33,040.00
								$ 1,063,714.10
							SMA	287,200.00
							Subtotal	1,350,914.10
							Total Services	435,927.00
							Subtotal	1,786,841.10
							System Discount order by April 27, 2012	(135,091.00)
							System Total	1,651,750.10

Section 6. Service Statements of Work

County Request: SOW documents for all maintenance and software services offered

Motorola has provided sample Statements of Work on the following pages.

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Statement of Work
ASTRO® 25 Network & Security Monitoring, Pre-Tested Software Subscription, OnSite Infrastructure Response and Dispatch Service

Overview: Network & Security Monitoring is a bundled service offering that provides Network Monitoring, Security Monitoring, Pre-Tested Software Subscription (PTSS), Dispatch and OnSite Infrastructure Response services to the Customer. This service is applicable only for the following system types: ASTRO 25 current shipping System Release and three prior System Releases.

Definitions

Terms that are capitalized but not defined in this Statement of Work shall have the definition given to such terms in the Service Terms and Conditions, the Communications System Agreement or other applicable agreement. The following terms have the following meanings:

- Non-Motorola Software: Software whose copyright is owned by a party other than Motorola or its affiliated company, including but not limited to the anti-virus definitions, operating system software patches and signature files that will be pre-tested pursuant to this Statement of Work.
- Supported System Release: Pre-Tested Software Subscription supports the current ASTRO 25 6.X and 7.X System Releases and 3 previous System Releases.

1.0 Description of Services

ASTRO 25 Network & Security Monitoring includes the monitoring of radio system infrastructure as well as monitoring and managing the Motorola security equipment present on the Customer's System. Monitoring security equipment requires Customer to purchase a Core Security Management Server with Customer's System. Motorola will monitor Elements of a System for Events, as set forth in the Monitored Elements Table below.

When the Motorola System Support Center (SSC) detects an Event, trained technologists will acknowledge the Event, run remote diagnostic routines, and initiate an appropriate Response. Appropriate responses could include, but are not limited to, continuing to monitor the Event for further development, attempting remote Restoral, or transferring the Event by opening a Case for dispatch of a Servicer. If dispatched, the Servicer will respond at the Customer location based on pre-defined Severity Levels set forth in the Severity Definitions Table and Response times set forth in the On-Site Response Time Table in order to Restore the System.

Pre-Tested Software Subscription provides the latest anti-virus definitions, intrusion detection sensor (IDS) signature updates (ONLY for IDS supplied to Customer by Motorola), Microsoft and Solaris operating system security patches that have been pre-tested on a Motorola test system to verify compatibility with the ASTRO 25 System.

Motorola will proactively manage the security Elements present on the System as needed to mitigate the risk of vulnerability such as a virus, worm or other intrusive attack on the System. This may include periodically deploying the latest release of pre-tested anti-virus definitions to the anti-virus management server and updating the intrusion detection sensor signature files on the network barrier (ONLY for IDS supplied to Customer by Motorola and if present on the System) as determined by Motorola. Motorola will also modify intrusion sensor settings and update firewall settings as determined by Motorola and will notify Customer of such modifications.

Motorola will provide Case Management as set forth herein. The SSC maintains contact with the on-site Servicer until System Restoral occurs and Case is closed. The SSC will Continuously track and manage Case activity from open to close through an automated Case tracking process. This Case management allows Motorola to provide activity and performance reports as well as ensures timely resolution of issues.

The terms and conditions of this Statement of Work (SOW) are an integral part of Motorola's Service Terms and Conditions or other applicable Agreement(s) to which it is attached and made a part thereof by this reference.

2.0 Motorola has the following responsibilities:

2.1. Provide dedicated Connectivity through a private network connection necessary for monitoring ASTRO 25 System. The Connectivity Matrix set forth below further describes the Connectivity options.
2.2. If determined necessary by Motorola, provide Motorola owned equipment for monitoring ASTRO 25 System elements. If Motorola installs or replaces Motorola owned equipment, the type of equipment and location installed is listed in the Motorola Owned & Supplied Equipment Table.
2.3. Verify Connectivity and Event monitoring prior to System Acceptance or Start Date.
2.4. Coordinate with Customer to maintain Motorola service authentication credentials.
2.5. Continuously receive service requests.
2.6. Perform Continuous monitoring of System Elements as set forth in the Monitored Elements Table.
2.7. Interpret System Events and determine appropriate Response. An appropriate Response could include the following actions: notify customer of activity, continue monitoring the Event for further development, review System log files or transfer the Event information via a Case for dispatch of a Servicer.
2.8. Respond in accordance to pre-defined Response times upon receipt from Customer of Customer managed passwords required for proper access to the Customer's System.
2.9. Remotely access the Customer's System to perform remote diagnostics as permitted by Customer pursuant to section 3.1.
2.10. Attempt remote Restoral, as appropriate. Some System functions may be disrupted as necessary to maintain System integrity until further validation of the Event occurs. This may include shutting down applications, applying security tools, resetting box, or instructing Servicer to reload applications and operating system software as necessary.
2.11. Create a Case as necessary when service requests are received. Gather information to perform the following:
    2.11.1. Characterize the issue
    2.11.2. Determine a plan of action
    2.11.3. Assign and track the Case to resolution.
2.12. Dispatch a Servicer, as required, by Motorola standard procedures and provide necessary Case information collected in section 2.11.
2.13. Ensure the required personnel have access to Customer information as needed.
2.14. Disable and enable System devices, as necessary, for Servicers.
2.15. Servicer will perform the following on-site:
    2.15.1. Run diagnostics on the Infrastructure or FRU.
    2.15.2. Replace defective Infrastructure or FRU, as applicable. Customer, Servicer or Motorola may provide Infrastructure or FRU.
    2.15.3. Provide materials, tools, documentation, physical planning manuals, diagnostic/test equipment and any Security requirements necessary to perform the Maintenance service.
    2.15.4. If a third party Vendor is needed to Restore the System, the Servicer may accompany that Vendor onto the Customer's premises.
2.16. Verify with Customer that Restoration is complete or System is functional, if required by Customer's repair Verification preference described in the Customer Support Plan required by section 3.6. If Verification by Customer cannot be completed within 20 minutes of Restoration, the Case will be closed and the Servicer will be released.
2.17. Escalate the Case to the appropriate party upon expiration of a Response time.
2.18. Close the Case upon receiving notification from Customer or Servicer, indicating the Case is resolved.
2.19. Notify Customer of Case Status, as described in the Customer Support Plan by section 3.6 at the following Case levels:
    2.19.1. Open and closed; or
    2.19.2. Open, assigned to the Servicer, arrival of the Servicer on site, deferred or delayed, closed.
2.20. Obtain anti-virus definitions for the Microsoft Windows platform, intrusion detection sensor (IDS) signatures for Motorola supplied IDS, Microsoft and Solaris operating system security patches/updates, as available, from Motorola selected commercial suppliers.

2.21. Evaluate anti-virus definitions classified as Category 4 (Severe, difficult to contain) and Category 5 (Very Severe, very difficult to contain) by Motorola selected commercial supplier to determine if a high-priority release is required. Motorola in its discretion will determine the urgency of the update based on the impact to the System.

2.22. Test anti-virus definitions, intrusion detection sensor signatures for Motorola supplied IDS, Microsoft and Solaris operating system security patches/updates by deploying them on a dedicated test System with the standard supported configurations, which include Motorola's then current approved cohabitated applications for current System Release and three previous System Releases.

2.23. Confirm that tested anti-virus definitions, intrusion detection sensor signatures for Motorola supplied IDS, and operating system security patches/updates do not degrade or compromise System functionality on dedicated test System within the standard supported configurations.

2.24. Address issues identified during testing to support functionality under the procedures specified in 2.22 above by working with Motorola selected commercial supplier or Motorola product development engineering team.

2.25. Deploy pre-tested updates weekly to anti-virus management server and intrusion detection sensor for Motorola supplied IDS (if present on the System) upon successful completion of the weekly test cycle to be completed one week after release by commercial supplier unless an issue is detected or as determined necessary by Motorola. High-priority anti-virus definition releases identified in 2.21 will be made available within 24 hours of commercial supplier release or at Motorola's discretion.

2.26. Notify Customer when anti-virus definition updates and intrusion detection sensor signatures have been deployed on Customer system.

2.27. Release and notify Customer when Microsoft and Solaris operating system security patches/updates are certified and available with instructions for obtaining patch for Customer deployment on the Customer system. Microsoft operating system security updates will be released monthly as available from Motorola selected commercial supplier upon successful completion of monthly test cycle. Solaris operating system security patches will be released quarterly upon successful completion of quarterly test cycle or at Motorola's discretion.

2.28. Maintain annual Customer licenses for anti-virus definitions and intrusion detection sensor signatures for IDS supplied to Customer by Motorola with Motorola selected commercial supplier.

2.29. Provide the following reports, as applicable:

- 2.29.1. Case activity reports to Customer.
- 2.29.2. Network Security Monitoring Service reports for Customer System(s).
- 2.29.3. Network Activity/Availability Reports

2.30. Apply additional support charges above and beyond the contracted service agreements that may apply if it is determined that System faults were caused by the Customer making changes to critical System parameters.

3.0 Customer has the following responsibilities:

3.1. Allow Motorola Continuous remote access to obtain System availability, performance and configuration data.

3.2. Allow Motorola to access System if firewall has been installed; provide permanent/dedicated access for SNMP traps (outbound) and ZDS polling (inbound).

3.3. Provide continuous utility service to any Motorola equipment installed or utilized at Customer's premises to support delivery of the Service.

3.4. Maintain and manage any equipment outside of the System.

3.5. Deploy pre-tested operating system software patches on the System.

3.6. Provide Motorola with pre-defined Customer information and preferences prior to Start Date necessary to complete Customer Support Plan.

- 3.6.1. Provide 7/24 security contact and escalation list
- 3.6.2. Case notification preferences and procedures
- 3.6.3. Repair Verification preference and procedure
- 3.6.4. Database and escalation procedure forms.
- 3.6.5. Submit changes in any information supplied in the Customer Support Plan to the Customer Support Manager.

3.7. Provide the following information when initiating a service request:
  3.7.1. Assigned System ID number
  3.7.2. Problem description and site location
  3.7.3. Other pertinent information for Motorola to open a Case.
3.8. Provide all Customer managed passwords required to access the Customer's System to Motorola upon request or when opening a Case to request service support or enable Response to a technical issue.
3.9. Notify the SSC when Customer performs any activity that impacts the System. (Activity that impacts the System may include, installing software or hardware upgrades, performing upgrades to the network, or taking down part of the System to perform maintenance.)
3.10. As necessary, upgrade System to Supported System Release as specified in paragraph 2.22.
3.11. Allow Servicers access to Equipment (including any Connectivity or monitoring equipment) if remote service is not possible.
3.12. Allow Servicers access to remove Motorola owned server upon cancellation of service as set forth in paragraph 2.2.
3.13. Supply Infrastructure or FRU, as applicable, in order for Motorola to Restore the System as set forth in paragraph 2.15.2.
3.14. Maintain and store in an easily accessible location System backups and any/all Software needed to Restore the System.
3.15. Verify with the SSC that Restoration is complete or System is functional, if required by the Repair Verification Preference provided by Customer in accordance with section 3.6.3.
3.16. Comply with the terms of the applicable license agreements between Customer and the Non-Motorola Software copyright owners.
3.17. Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide the services described in this SOW.

4.0 WARRANTIES AND DISCLAIMER:

Motorola warrants that its services will be free of defects in materials and workmanship for a period of ninety (90) days following completion of the service. Your sole remedies are to require Motorola to re-perform the affected service or at Motorola's option to refund, on a pro-rata basis, the service fees paid for the affected service.

During the applicable Warranty Period, Motorola warrants that the tested anti-virus definitions, intrusion detection sensor signatures, and operating system security updates/patches do not degrade or compromise System functionality, and that after incorporation of the tested Software updates, the System Software, when used properly and in accordance with the Documentation, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Software. Product and Software documentation that specifies technical and performance features and capabilities, and the user, operation and training manuals for the Software (including all physical or electronic media upon which this information is provided) are collectively referred to as "Documentation." Whether a defect occurs will be determined solely with reference to the Documentation. Motorola does not warrant that Customer's use of the Software or Products will be uninterrupted or error-free or that the Software or the Products will meet Customer's particular requirements.

MOTOROLA DISCLAIMS ALL OTHER WARRANTIES WITH RESPECT TO PRE-TESTED ANTI-VIRUS DEFINITIONS, OPERATING SYSTEM SOFTWARE PATCHES, AND INTRUSION DETECTION SENSOR SIGNATURE FILES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. FURTHER, MOTOROLA DISCLAIMS ANY WARRANTY CONCERNING THE NON-MOTOROLA SOFTWARE AND DOES NOT GUARANTEE THAT CUSTOMER'S SYSTEM WILL BE ERROR-FREE OR IMMUNE TO VIRUSES OR WORMS AS A RESULT OF THESE SERVICES.

Severity Definitions Table

Severity Level	Problem Types
Severity 1	▪ Response is provided Continuously ▪ Major System failure ▪ 33% of System down ▪ 33% of Site channels down ▪ Site Environment alarms (smoke, access, temp, AC power) as determined by SSC. ▪ This level is meant to represent a major issue that results in an unusable system, sub-system, Product, or critical features from the Customer's perspective. No Work-around or immediate solution is available.
Severity 2	▪ Response during Standard Business Day ▪ Significant System Impairment not to exceed 33% of system down ▪ System problems presently being monitored ▪ This level is meant to represent a moderate issue that limits a Customer's normal use of the system, sub-system, product, or major non-critical features from a Customer's perspective
Severity 3	▪ Response during Standard Business Day ▪ Intermittent system issues ▪ Information questions ▪ Upgrades/Preventative maintenance ▪ This level is meant to represent a minor issue that does not preclude use of the system, sub-system, product, or critical features from a Customer's perspective. It may also represent a cosmetic issue, including documentation errors, general usage questions, recommendations for product enhancements or modifications, and scheduled events such as preventative maintenance or product/system upgrades.

On-Site Response Time Table (Customer's Response Time Classification is designated in the Service Agreement).

Severity Level	Standard Response Time	Premier Response Time	Limited Response Time	Restoral	Off Deferral
Severity 1	Within 4 hours from receipt of Notification Continuously	Within 2 hours from receipt of Notification Continuously	Within 4 hours from receipt of Notification Standard Business Day	8 hours	Time provided by Servicer *
Severity 2	Within 4 hours from receipt of Notification Standard Business Day	Within 4 hours from receipt of Notification Standard Business Day	Within 4 hours from receipt of Notification Standard Business Day	8 hours	Time provided by Servicer *
Severity 3	Within 24 hours from receipt of Notification Standard Business Day	Within 24 hours from receipt of Notification Standard Business Day	Within 24 hours from receipt of Notification Standard Business Day	48 hours	Time provided by Servicer *

- Please note these are Standard Commitment times. The commitment times should be based on the Customers Support Plan.
- Provide update **before** the specific contractual commitments come due.

* Note: Provide update to System Support Center **before** Deferral time comes due.

Connectivity Matrix

Private Network Connection IP VPN (All Customers)	**Public Internet Connection IP VPN (Option Available only to Customers outside of the US)**
Standard solution for real-time Connectivity	Non-standard solution for real-time Connectivity
Dedicated bandwidth configuration provided to monitor Customers	No dedicated bandwidth provided to monitor Customers
Protected from unauthorized intrusion	Low risk of unauthorized intrusion
Encryption Available	Encryption Available
Connectivity available through Motorola	Customer provides Connectivity to the internet via an internet service provider selected by Customer

Motorola Owned & Supplied Equipment Table

Equipment Type	**Location Installed**
Firewall/Router	Master Site
System Support Server	Master Site for each Zone

Monitored Elements Table
(Listed by Technology)

System Type	Equipment
ASTRO 25 (release 7.x)	Packet Routing Network; Zone Controllers; Database Server; FullVision Server; Zone Statistical Server; Air Traffic Router; System Statistics Server; User Configuration Server; Packet Data Gateway Server; PBX; Interconnect Server; Motorola Gold Elite Gateway (MGEG); AEB; CEB; Conventional Channel Gateway (CCGW); Simulcast RF Site (Site Controllers, Comparators, Stations); Intelli Repeater RF Site (Stations); Intelli Site Repeater RF Site (Site Controllers, Stations); Core, Exit, Gateway, Peripheral, Border, and Site routers, HP Switches master, prime, console and repeater sites switches, GGSN; CWR MOSCAD Overlay (TenSr, Station, Channel Banks, TRAK GPS, Site Power, Microwave) **DOES NOT INCLUDE MONITORING OF ANY MOSCAD ALARM POINTS THAT DO NOT DIRECTLY IMPACT THE PERFORMANCE OF THE RADIO NETWORK. DOES NOT INCLUDE MONITORING OF ANYTHING OUTSIDE OF THE RADIO NETWORK UNLESS SPECIFICALLY STATED**
ASTRO 25 (release 6.3 – 6.9)	Nortel; Packet Routing Network; Zone Controllers; Database Server; FullVision Server; Zone Statistical Server; Air Traffic Router; System Statistics Server; User Configuration Server; Packet Data Gateway Server; PBX; Interconnect Server; Motorola Gold Elite Gateway (MGEG); AEB; CEB; ARCADACS Cross Connect Switch; Simulcast RF Site (Site Controllers, Comparators, Stations); Intelli Repeater RF Site (Stations);Intelli Site Repeater RF Site (Site Controllers, Stations); MOSCAD Overlay (TenSr, Station, Channel Banks, TRAK GPS, Site Power, Microwave) **DOES NOT INCLUDE MONITORING OF ANY MOSCAD ALARM POINTS THAT DO NOT DIRECTLY IMPACT THE PERFORMANCE OF THE RADIO NETWORK. DOES NOT INCLUDE MONITORING OF ANYTHING OUTSIDE OF THE RADIO NETWORK UNLESS SPECIFICALLY STATED.**
Security Elements (Monitoring and managing Security Elements is dependent on Customer purchasing Core Security Management Server as Equipment with the Customer System)	Core Security Management Server; Firewall; Intrusion Detection Sensors; Anti-virus Management application; Authentication Management application; Centralized Logging Server