



STATE OF MISSOURI
OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION
CONTRACT CHANGE

PROJECT NUMBER 0081801	CHANGE NUMBER 22
CHECK CONTRACT TYPE <input type="checkbox"/> CONSULTANT <input checked="" type="checkbox"/> CONSTRUCTION	

1. GENERAL INFORMATION

PROJECT TITLE Interoperable Communications	NAME OF CONTRACTED FIRM Motorola Solutions, Incorporated
LOCATION Statewide	

2. DESCRIPTION OF CONTRACT CHANGE (attach and note additional description sheets as necessary)

The purpose of this no-cost contract change is to:

- 1) Update the primary contact for Motorola Solutions equipment purchases,
- 2) Correct contract pricing totals for post-warranty maintenance,
- 3) Add firm fixed pricing for contract services,
- 4) Clarify and update firm fixed equipment pricing, which supersedes all pricing in contract changes #8, #12 and #20,
- 5) Extend final acceptance date, and
- 6) Add Winston site antenna move.

This change is intended to allow agencies of the State of Missouri and other Missouri government entities to purchase interoperability communication related equipment and services from Motorola Solutions, Inc. This change provides firm fixed equipment pricing and services discounts, including refurbished radios, until June 30, 2018. Motorola will hold pricing firm until June 30, 2015, after which Motorola & MOSWIN will review and mutually agree upon pricing for the next fiscal year.

Each equipment order must refer to this contract and must specify the contract price for such order. Warranty will commence upon delivery. Payment is due forty-five (45) days after the invoice date. Motorola will send invoices to the parties of the order as the additional subscribers are shipped. There is no additional charge to the State of Missouri for this purchasing option. All subsequent orders will be invoiced separately and delivered directly to the parties placing the order.

A list of interoperable communications equipment and services, a list of discounts by APC code, and cost information for adding additional sites provided by Motorola are attached as a supplemental description to this change order (Attachment A, 44 pages). Any discrepancy between this change order and the attached supporting pages, and any other pricing offered by Motorola, shall be resolved with reference to the pricing contained herein.

For more information concerning Missouri Interoperable Communications, please call the MOSWIN office at 573-522-8092. For 24 hour hotline assistance, call 855-4-MOSWIN. For general information, go to the Department of Public Safety's web page:
<http://dps.mo.gov/dir/programs/intercomm/default.asp>

For specific information about Motorola products, please go to the following link to sign up for a "Motorola Online" account:
<http://businessonline.motorolasolutions.com/>
If new to "Motorola Online", please click the link under the login box for "Sign Up Now". Motorola Solutions primary contact for equipment purchases is:

Sean Kostelnik
Account Executive
Motorola Solutions, Inc.
Phone: 913-213-3486
Email: S.Kostelnik@motorolasolutions.com

(See the forty-four page "Attachment A" for continuation of description)

This Document, when fully executed by both Parties, shall constitute a Notice to Proceed with the Work described in this Change. This Contract Change shall modify the Contract as herein provided and includes all costs and time extensions associated with this Change to the Contract. No requests for additional compensation or time as a result of this Change will be considered.

AUTHORIZING NAME	SIGNATURES	
CONTRACTED FIRM REPRESENTATIVE (PRINT NAME)	SIGNATURE	DATE
Randy Rosetta		4/22/14
FMDC REPRESENTATIVE (PRINT NAME)	SIGNATURE	DATE
Cathy Brown		4/22/14

Attachment A – Change Order #22
Interoperability Communications
Project No. 0081801

Contract Price Adjustments

This is a no-cost change, as the State of Missouri has contract credit remaining from a previous contract adjustment.

Original Contract Amount	\$79,724,096.71
Previous Change Amounts (CO1 - CO21)	\$5,925,307.29
Contract Credit Remaining (CO21)	(\$13,772.10)
Amount This Change (CO22) for Winston Antenna Move and Structural Study	\$7,540.50
New Contract Total	\$85,656,944.50
Contract Credit Remaining (following this change CO22)	(\$6,231.60)

Change Order 19 incorrectly charged the cost of post-warranty maintenance for the NICE Logging Recorder and Storage twice. The Post-Warranty annual cost through June 30, 2018 is hereby modified as follows:

Corrected Year 1 Post-Warranty Amount, includes NICE and Genesis (7/1/14 to 6/30/15)	\$2,261,738.67
Corrected Year 2 Post-Warranty Amount, includes NICE and Genesis (7/1/15 to 6/30/16)	\$2,298,844.00
Corrected Year 3 Post-Warranty Amount, includes NICE and Genesis (7/1/16 to 6/30/17)	\$2,334,674.00
Corrected Year 3 Post-Warranty Amount, includes NICE and Genesis (7/1/17 to 6/30/18)	\$2,371,466.00

Within Attachment A, SUAll costs for 700MHz sites are included. The addition of any VHF sites by the state will not increase the cost for SUAll support.

Completion Date Adjustments

Original Contract Completion Date	7/31/2012
Operational Completion Date	12/31/2012
Final Acceptance Date (per this change order)	6/1/2014

Winston Antenna Move

Motorola will relocate two (2) antennas at the Winston radio site from the North leg of the tower to the West leg per the State's request. The structural study is included in the cost. No coverage testing or predictions are included in this cost. Cost for this service is \$7,540.50.

Attachment A – Change Order #22
Interoperability Communications
Project No. 0081801

Motorola Services Pricing

Motorola Services Pricing Table			
Title	Rate	Rate Type	Description
Motorola Project Management	\$ 1,800.00	Daily	Delivery and Management of Motorola projects
Motorola System Technologist	\$ 1,800.00	Daily	On-site trouble shooting, diagnostics, and optimization of P25 system
Motorola System Engineer	\$ 1,800.00	Daily	Frequency and coverage analysis, programming template input, and system integration
MSS Technician	\$ 180.00	Hourly	Mon-Fri 7am - 5pm/4 hour minimum Callout
MSS Technician	\$ 270.00	Hourly	After hour and weekend/4 hour minimum Callout
MSS Technician	\$ 360.00	Hourly	Holiday/4 hour minimum Callout

Antenna Heights

Motorola will complete all tasks associated with raising the antennas at the following sites by December 31, 2014:

1. Winston
2. Hannibal
3. Stanberry
4. Pineville

Motorola will provide the materials and services to raise the antenna to the heights in the new lease agreements. Assumptions: The state will execute new lease agreements, allowing for the antenna heights to be changed. The new lease agreements will be executed promptly, providing Motorola with a reasonable amount of time to complete the work necessary to move the antennas by the established deadline. Motorola assumes that any tower remediation has been completed to support the new heights and antenna loading proposed in the lease agreements.

DVRS Performance Issues

Motorola will assist the state in the investigation of any DVRS performance issues. If issues arise with DVRS installed by Motorola or a subcontractor of Motorola, a case will be opened and Motorola will be responsible for trouble shooting, resolution and sharing issue and resolution information with the state. If issues arise with DVRS installed by the state, the state will investigate complaints and perform first level trouble shooting on DVRS installed by the state based on previous DVRS trouble shooting experience and technical training provided. In the event that issues on DVRS installed by the state are beyond previous DVRS trouble shooting experiences or fall outside technical training provided, the State will open a case and provide the Motorola service team with the following information on any reported DVRS issue:

Attachment A – Change Order #22
Interoperability Communications
Project No. 0081801

1. Mobile firmware
2. Portable firmware
3. DVRS firmware
4. CPS version
5. DVRS Tweeker version
6. APX mobile codeplug
7. APX portable codeplug
8. DVRS codeplug
9. Vehicle Type
10. Equipment & antenna configuration

Motorola will provide a written report of analysis on each group of files supplied within 10 working days.

Other Items

- Motorola will provide the state a recommendation of best practices for software/firmware version control on subscriber equipment.
- Motorola will identify and rectify any Part 80 Licensing corrections.
- The state will identify a new frequency for either Taum Sauk or Brinktown to resolve the reported interference. Motorola will review the frequency and provide a combiner retune to either Taum Sauk or Brinktown.
- Motorola will obtain the LOC for the Part 22 channel licensed at Bloomfield.

ISSI 8000

PM	\$	14,400.00
ST	\$	14,400.00
ENG	\$	7,200.00
Installation	\$	2,000.00
Documentation	\$	900.00
Total Integration	\$	38,900.00
Total Equipment	\$	225,462.50
Project Total	\$	264,362.50

<u>MODEL #</u>	<u>PRICE</u>	<u>DESCRIPTION</u>
SQM01SUM0227	\$ 21,462.50	ISGW SERVER USED FOR ISSI / CSSI
UA00007AA	\$ -	ISSI.1 TO ISSI 8000 MANUAL ROAMING 10 SIMULTANEOUS TALK GROUP CAP
UA00005AA	\$ 170,000.00	ISSI AUTOMATIC ROAMING 10 SIMULTANEOUS TALK GROUP CAPACITY LICENS
TT1932	\$ 34,000.00	ISG 1000 FIREWALL W/ 2 YR SUPPORT
Total Equipment	\$ 225,462.50	

STANDARDIZED SERVICES	APC	2014	2015	2016	2017
Dispatch Service	006	348.67	359.13	369.91	381.00
Network Monitoring Component	561	3,207.08	3,303.29	3,402.39	3,504.46
Technical Support	772	327.43	337.26	347.37	357.80
Infrastructure Repair	929	3,849.56	3,965.04	4,084.00	4,206.52
Network Preventative Maintenance	769	1,150.44	1,207.96	1,268.36	1,331.78
Total Standardized Services Sale Price		\$ 8,883.19	\$ 9,172.69	\$ 9,472.03	\$ 9,781.56

SUA II Addition Per 700MHz Site	\$ 6,400.00
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Single Channel Add on	Price	Quantity	Description
Project Management	\$ 9,000.00	each	Oversee total project, Adminster all paperwork, Establish and manage schedule, manage all subcontractors, finalize punchlist, ensure total project completion
System Technologist	\$ 3,600.00	each	Oversee all techical aspects of on site work, program and configure equipment, optimize and integrate equipment into existing system, trouble shoot all issues
System Engineer	\$ 3,600.00	each	Run detailed design review, generate cut over plan and Acceptance Test Plan, resovle punch list and assist with documentation
Equipment Installation	\$ 2,880.00	each	Phyiscal installation of all equipment by certified Motorola Service Shop
Documentation	\$ 900.00	each	Updated documentation of new equipment as integrated into system
Total Services	\$ 19,980.00	each	

Equipment Per Site (Maximum)	\$ 52,000.00	Price range for equipment can be anywhere between \$25,000.00 and \$52,000.00 depending on the expansion kit needed, but will not exceed \$52,000.00.
Services Per Site	\$ 19,980.00	
Not to Exceed Total Per Site	\$ 71,980.00	

6 Channel New Site - 700MHz	Price	Quantity	Description
PM	\$ 21,600.00	each	Oversee total project, Adminster all paperwork, Establish and manage schedule, manage all subcontractors, finalize punchlist, ensure total project completion
ST	\$ 18,000.00	each	Oversee all techical aspects of on site work, program and configure equipment, optimize and integrate equipment into existing system, trouble shoot all issues
ENG	\$ 9,000.00	each	Run detailed design review, generate cut over plan and Acceptance Test Plan, resovle punch list and assist with documentation
Factory Staging	\$ 8,100.00	each	Equipment is built and tested to exact specifications on the factory floor prior to shipment
Install - Fixed Equipment	\$ 8,640.00	each	Phyiscal installation of all equipment by certified Motorola Service Shop
Install - Antenna/Line	\$ 25,000.00	each	Phyiscal installation of two antennas and transmission lines
Documentation	\$ 3,000.00	each	Updated documentation of new equipment as integrated into system
Total Services	\$ 93,340.00		

Equipment	\$ 202,612.30
Services Per Site	\$ 93,340.00
Not to Exceed Total Per Site	\$ 295,952.30

Pepro Scout-2 Bay Trailer	\$ 161,160.00	RF SITE ON WHEELS-SCOUT 2-BAY, 45' MAST
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6 Channel New Site - VHF	Price	Quantity	Description
PM	\$ 21,600.00	each	Oversee total project, Adminster all paperwork, Establish and manage schedule, manage all subcontractors, finalize punchlist, ensure total project completion
ST	\$ 18,000.00	each	Oversee all techical aspects of on site work, program and configure equipment, optimize and integrate equipment into existing system, trouble shoot all issues
ENG	\$ 9,000.00	each	Run detailed design review, generate cut over plan and Acceptance Test Plan, resovle punch list and assist with documentation
Factory Staging	\$ 13,000.00	each	Equipment is built and tested to exact specifications on the factory floor prior to shipment
Install - Fixed Equipment	\$ 8,640.00	each	Phyiscal installation of all equipment by certified Motorola Service Shop
Install - Antenna/Line	\$ 25,000.00	each	Phyiscal installation of two antennas and transmission lines
Documentation	\$ 3,000.00	each	Updated documentation of new equipment as integrated into system
Total Services	\$ 98,240.00		

Equipment	\$ 204,391.00
Services Per Site	\$ 98,240.00
Not to Exceed Total Per Site	\$ 302,631.00

Item	Qty	Nomenclature	Description	Unit List Price	Unit Extended	Discount	Unit Discount	Extended Discount
3	1	ISQM01SUM7054	GTR 8000 EXPANDABLE SITE SUBSYSTEM	\$6,000.00	\$6,000.00	25.00%	\$4,500.00	\$4,500.00
3a	1	CA00855AA	ADD: 700/800 MHZ	\$6,300.00	\$6,300.00	25.00%	\$4,725.00	\$4,725.00
3b	1	X306AC	ADD: QTY (6) GTR 8000 BASE RADIOS	\$71,400.00	\$71,400.00	25.00%	\$53,550.00	\$53,550.00
3c	6	X391AE	ENH: ASTRO 25 SITE REPEATER SW	\$10,700.00	\$64,200.00	25.00%	\$8,025.00	\$48,150.00
3d	1	CA00881AA	ADD: CABINET RMC W/ CAPABILITY OF 6	\$700.00	\$700.00	25.00%	\$525.00	\$525.00
3e	1	CA00878AA	ADD: PRIMARY 6 PORT CAVITY COMBINER	\$8,400.00	\$8,400.00	25.00%	\$6,300.00	\$6,300.00
3f	2	CA00303AA	ADD: QTY (1) SITE CONTROLLER	\$5,000.00	\$10,000.00	25.00%	\$3,750.00	\$7,500.00
3g	2	CA02212AA	ASTRO 25 SITE REPEATER SITE CONTROL	\$5,000.00	\$10,000.00	25.00%	\$3,750.00	\$7,500.00
3h	1	CA02224AA	GTR ESS INTEGRATION KIT FOR EXT GGM	\$700.00	\$700.00	25.00%	\$525.00	\$525.00
3i	1	X382AH	ADD: 7.5 FT OPEN RACK, 48RU	\$495.00	\$495.00	25.00%	\$371.25	\$371.25
3j	1	CA00882AA	ADD: 700 MHZ TX FILTER WIPMU	\$1,000.00	\$1,000.00	25.00%	\$750.00	\$750.00
12	1	DLN6566	FRU: 700/800 MHZ XCVR	\$1,200.00	\$1,200.00	25.00%	\$900.00	\$900.00
13	1	DLN6567	FRU: 700/800 MHZ PA	\$1,200.00	\$1,200.00	25.00%	\$900.00	\$900.00
14	1	DLN6569	FRU: GCP 8000/GCM 8000	\$2,500.00	\$2,500.00	25.00%	\$1,875.00	\$1,875.00
15	1	DLN6781	FRU POWER SUPPLY	\$2,200.00	\$2,200.00	25.00%	\$1,650.00	\$1,650.00
2	1	ISQM01SUM0205	GGM 8000 GATEWAY	\$4,200.00	\$4,200.00	25.00%	\$3,150.00	\$3,150.00
2a	1	CA01619AA	ADD: DC POWER	\$-	\$-	25.00%	\$-	\$-
2b	1	CA01618AA	ADD: CONV CHAN GATEWAY	\$2,000.00	\$2,000.00	25.00%	\$1,500.00	\$1,500.00
11	1	ISQM01SUM0205	GGM 8000 GATEWAY	\$4,200.00	\$4,200.00	25.00%	\$3,150.00	\$3,150.00
11a	1	CA01619AA	ADD: DC POWER	\$-	\$-	25.00%	\$-	\$-
4	1	DSTS1008T	SPD, RJ48 & PIN, 10/100 BASE T T5J	\$154.00	\$154.00	15.00%	\$130.90	\$130.90
5	1	DSTSADP	RACK MOUNT GROUND BAR, 19 IN FOR TS	\$88.00	\$88.00	15.00%	\$74.80	\$74.80
6	1	DS428D8301T	TTA, MINI AUTO QUAD, 768-824 MHZ, SINGLE NETWORK, TOWER BOX	\$9,879.00	\$9,879.00	15.00%	\$8,397.15	\$8,397.15
7	1	DS428D8301C110	CONTROL MONITORING UNIT, 768-824 MHZ, 110 VAC	\$2,977.00	\$2,977.00	15.00%	\$2,530.45	\$2,530.45
19	2	DN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2	\$28.50	\$57.00	15.00%	\$24.23	\$48.45
21	280	L3405	AVAT-50 CABLE: 1.58" AVA HELIAX POLY JKT PER FOOT	\$22.50	\$6,300.00	15.00%	\$19.13	\$5,355.00
22	2	DN9383	AL7DF-PSA 1-58" 7-16 DIN FEMALE POSITIVE STOP CONNECTOR	\$178.00	\$356.00	15.00%	\$151.30	\$302.60
23	6	DSSG150682A	SG158-0682A 1-58" SUREGROUND GROUNDING	\$24.00	\$144.00	15.00%	\$20.40	\$122.40
24	2	DSL75GRIP	L7SGRIP 1-58" SUPPORT HOIST GRIP	\$34.00	\$68.00	15.00%	\$28.90	\$57.80
25	1	DSTS40FM8F	RF SPD, 698-2700MHZ DC BLOCK HIGH P	\$125.00	\$125.00	15.00%	\$106.25	\$106.25
26	1	DGSGAKITD	GROUND STRAP KIT - DIN	\$34.00	\$34.00	15.00%	\$28.90	\$28.90
28	2	DN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2	\$28.50	\$57.00	15.00%	\$24.23	\$48.45
31	1	DSAPM7487K2AC	ADVANCED POWER MONITOR, 740-870 MHZ	\$4,696.00	\$4,696.00	15.00%	\$3,991.60	\$3,991.60
32	10	L1700	FSJ1-50A CABLE: 1/4" SUPERFLEX POLY	\$22.50	\$225.00	15.00%	\$19.13	\$191.30
33	2	DN9768	F1PNM-HC 1/4" TYPE N MALE CONNECTOR	\$27.25	\$54.50	15.00%	\$23.16	\$46.33
34	10	L1700	FSJ1-50A CABLE: 1/4" SUPERFLEX POLY	\$22.50	\$225.00	15.00%	\$19.13	\$191.30
35	2	DN9769	F1PNM-HC 1/4" TYPE N MALE CONNECTOR	\$27.25	\$54.50	15.00%	\$23.16	\$46.33
36	1	DN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2	\$28.50	\$28.50	15.00%	\$24.23	\$24.23
43	300	L3617	7/8IN HELIAX VIRTUAL AIR FOAM FILL	\$8.50	\$2,550.00	15.00%	\$7.23	\$2,167.50
44	2	DN1079	78E2NF-M N FEMALE MOT CONNECTOR (MO	\$39.75	\$79.50	15.00%	\$33.79	\$67.58
45	6	DSSG780682A	SG78-0682A GROUNDING KIT FOR 7/8 IN	\$22.50	\$135.00	15.00%	\$19.13	\$114.75
46	2	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP	\$28.50	\$57.00	15.00%	\$24.23	\$48.45
50	6	DSSG120682A	SG12-0682A 1/2IN SURE GROUND GROUND	\$19.00	\$114.00	15.00%	\$16.15	\$96.90
51	2	DSL4SGRIP	L4SGRIP SUPPORT HOIST GRIP 1/2" LDF	\$18.25	\$36.50	15.00%	\$15.51	\$31.03
52	1	DS1090501WA	RF SPD, 700-1000MHZ BROADBAND 12 VD	\$163.00	\$163.00	15.00%	\$138.55	\$138.55
53	1	DS1090501WA	RF SPD, 700-1000MHZ BROADBAND 12 VD	\$163.00	\$163.00	15.00%	\$138.55	\$138.55
54	25	L1700	FSJ1-50A CABLE: 1/4" SUPERFLEX POLY	\$22.25	\$556.25	15.00%	\$19.13	\$478.13
55	2	DN9769	F1PNM-HC 1/4" TYPE N MALE CONNECTOR	\$27.25	\$54.50	15.00%	\$23.16	\$46.33
56	25	L1702	FSJ4-50B CABLE: 1/2" SUPERFLEX POLY	\$5.05	\$126.25	15.00%	\$4.29	\$107.31
57	2	DN9682	F4PNM2-HC 1/2" TYPE N MALE PLATED	\$32.00	\$64.00	15.00%	\$27.20	\$54.40
38	1	DN1088	L4TDM-PSA TYPE N MALE PS FOR 1/2 IN	\$28.50	\$28.50	15.00%	\$24.23	\$24.23
42	2	DN1088	L4TDM-PSA TYPE N MALE PS FOR 1/2 IN	\$28.50	\$57.00	15.00%	\$24.23	\$48.45
48	1	DN1088	L4TDM-PSA TYPE N MALE PS FOR 1/2 IN	\$28.50	\$28.50	15.00%	\$24.23	\$24.23
18	15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX PO	\$3.50	\$52.50	15.00%	\$2.98	\$44.63
20	2	TDN9289	221213 CABLE WRAP WEATHERPROOFING	\$22.00	\$44.00	15.00%	\$18.70	\$37.40
27	25	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX PO	\$3.50	\$87.50	15.00%	\$2.98	\$74.38
30	10	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX PO	\$3.50	\$35.00	15.00%	\$2.98	\$29.75
30a	1	TT05543AA	ADD: 7-16 DIN MALE PS FOR 1/2 IN LD	\$28.50	\$28.50	15.00%	\$24.23	\$24.23
30b	1	TT04967AA	ADD: CONNECTOR ATTACHMENT LDF4 ANTE	\$14.25	\$14.25	15.00%	\$12.11	\$12.11
30c	1	TT05542AA	ADD: 7-16 DIN MALE PS FOR 1/2 IN LD	\$28.50	\$28.50	15.00%	\$24.23	\$24.23
30d	1	TT04936AA	ADD: CONNECTOR ATTACHMENT FEE FOR L	\$14.25	\$14.25	15.00%	\$12.11	\$12.11
37	15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX PO	\$3.50	\$52.50	15.00%	\$2.98	\$44.63
40	5	TDN9289	221213 CABLE WRAP WEATHERPROOFING	\$22.00	\$110.00	15.00%	\$18.70	\$93.50
41	5	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX PO	\$3.50	\$17.50	15.00%	\$2.98	\$14.88
47	300	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX PO	\$3.50	\$1,050.00	15.00%	\$2.98	\$892.50

49	1	DDN1089	L4TNF-PSA TYPE N FEMALE PS FOR 1/2	\$28.50	15.00%	\$24.23	\$24.23
8	1	F4628	GMC PER DEVICE SW LICENSES	\$75.00	15.00%	\$63.75	\$63.75
8a	1	V809	GMC SW LIC PER NFM-RTU I-O	\$240.00	15.00%	\$204.00	\$204.00
8b	6	V843	GMC SW LIC PER GTR8000_MS_BR	\$1,440.00	15.00%	\$1,224.00	\$1,224.00
8c	2	VA00318	GMC SW LIC PER GCP8000_S_CONTR	\$480.00	15.00%	\$408.00	\$408.00
8d	1	VA00300	GMC SW LIC PER RFDS	\$240.00	15.00%	\$204.00	\$204.00
9	1	F2463	RTU PER DEVICE SW LICENSES	\$75.00	15.00%	\$63.75	\$63.75
9a	1	V839	RTU SW LIC PER NFM-RTU I-O	\$110.00	15.00%	\$93.50	\$93.50
9b	6	VA00312	RTU SW LIC PER GTR8000_MS_BR	\$660.00	15.00%	\$561.00	\$561.00
9c	2	VA00318	RTU SW LIC PER GCP8000_S_CONTR	\$480.00	15.00%	\$408.00	\$408.00
9d	1	VA00300	RTU SW LIC PER RFDS	\$240.00	15.00%	\$204.00	\$204.00
10	1	F4544	SITE MANAGER ADVANCED	\$3,000.00	15.00%	\$2,550.00	\$2,550.00
10a	1	V266	ADD: 90VAC TO 260VAC PS TO SM	\$120.00	15.00%	\$102.00	\$102.00
10b	1	VA00872	ADD: SDM ASTRO RTU FW CURR ASTRO RE	\$1,850.00	15.00%	\$1,572.50	\$1,572.50
10c	3	V692	AAD TERM BLCK & CONN WI	\$90.00	15.00%	\$76.50	\$226.50
16	1	DLN6455	CONFIGURATION/SERVICE SOFTWARE	\$25.00	0.00%	\$25.00	\$25.00
1	1	SQM01SUM0239	MASTER SITE CONFIG UPGRADE	\$-	15.00%	\$-	\$-
1a	1	CA00996AL	ADD: NM/ZC LICENSE KEY 7.14	\$1,000.00	15.00%	\$850.00	\$850.00
1b	1	CA00997AL	ADD: UCS LICENSE KEY 7.14	\$1,000.00	15.00%	\$850.00	\$850.00
1c	1	CA02106AA	ASTRO 25 FOMA VOICE SITE	\$17,000.00	15.00%	\$14,450.00	\$14,450.00
17	1	DSCC80708	OMNI CORPORATE COLLINER, 8 DBD, 746-870 MHZ, PIM & 25 KW PIP RATED	\$3,120.00	15.00%	\$2,652.00	\$2,652.00
36	1	DSCC80708	OMNI CORPORATE COLLINER, 8 DBD, 746-870 MHZ, PIM & 25 KW PIP RATED	\$3,120.00	15.00%	\$2,652.00	\$2,652.00
Total Per Site				\$281,503.50	-	\$202,812.30	\$202,812.30

Alternative Antennas

17	1	DSSE414SF3P4LDFPIP	ENC. 4 DIPOLE DIR, 8.0DBD GAIN, LOW PIM, 746-868MHZ, 25 KW PIP RATED	\$2,207.00	15.00%	\$1,875.95	\$1,875.95
36	1	DSSE414SF3P4LDFPIP	ENC. 4 DIPOLE DIR, 8.0DBD GAIN, LOW PIM, 746-868MHZ, 25 KW PIP RATED	\$2,207.00	115.00%	\$1,875.95	\$1,875.95

Services Breakdown for a New 6 Channel 700MHz Site

Project Manager	
Project Admin	1
Customer contract Design Review - Status Meetings	3
Write Contract With Shop and Manager Cold Install	1
Coordinate Antenna and Antenna Line Install	2
Installation/Programing/Configuration Coordination	2
System Optimization - ATP	1
Cutover-Punchlist-Final Documentation	2
Total Effort (Days)	12

System Engineer	
Project Admin	1
Customer Contract Design Review - Status Meetings	2
Installation/Programming/Configuration	1
Cutover-Punchlist-Final Document	1
Total Effort (Days)	5

System Technologist	
Project Admin	1
Installation/Programming/Configuration	5
System Optimization - ATP	1.5
R56 Audit	0.5
Cutover-Punchlist-Final Documentation	2
Total Effort (Days)	10

Building w/ UPS & Propane Generator	TT1000 - MSB, 12' X 16.5' CONCRETE BLDG, INCLS UPS & GENERATOR, FULLY COMPLETE	\$	108,613.00
	Total Equipment	\$	108,613.00
	Total Integration		\$125,710.00
	Project Total	\$	234,323.00

Project Management		Price
1.1	Manage Installation Resources	\$6,076.00
1.2	Coordinate with Construction Supervisor	
1.3	Integrate Civil Work into overall Installation Plan	
1.4	Track and Report Civil Work Status	
ARCHITECTURAL & ENGINEERING SERVICES		\$17,245.00
A.3.4.2	Construction Drawings	
A.3.1B	Site Design visit	
A.3.8B	Record Drawings	
A.2.1C	Site survey	
A.5.2 B	Construction Material Testing (Concrete, backfill, foundations)	
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing	
SITE PREPARATION		\$17,912.00
1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)	
1.2a	Mobilization and demobilization of crews	
1.3.1 a	Clearing and grubbing of Site compound (Light Clearing- Clear light brush and grub roots)	
1.4.1A	Compound Grading and 10' path around it	
1.5.1	Compound graveling (including weedicide treatment and geotextile fabric installation) inside fence are and 3' perimeter outside fence	
1.7.2	Silt fence	
1.8.1	8' high fencing of compound (including gates and accessories required)	
1.9A	Site touchup and landscaping (fertilize, seed and straw disturbed areas not covered with gravel, usually 10' wide strip around compound)	
SITE COMPONENTS INSTALLATION		\$50,462.00
2.1.1 d	Foundations for TT1000 - 12'x16' Concrete pre-fab Shelter and stoop including excavation, rebar, concrete and gravel backfill.	
2.1.2 a	Foundations for 500 gallon above-ground LPG Fuel tank with 12" perimeter (5'x12'x6") including excavation, rebar, concrete	
2.1.3 e	Foundations for 50KW Propane Generator (SG050 - 1650 lbs with 41"x111" footprint) and 12" wide perimeter and 12" wide perimeter including excavation, rebar, concrete	
2.4 d	Offload and setup TT1000 - 12'x16' Pre-fabricated concrete shelter (40,000 lbs) including installation of loose material with shelter i.e. awnings, door lights etc. Includes startup of lighting, air-conditioning and power distribution.	
2.6 a	Supply and install 500 gallon LP fuel tank (37" dia x 9'11"L x 3'10"H) including all necessary fuel, piping (with trenching up to 50' from generator), regulators, valves, gauges, testing of system for leakages.	
2.6 g	Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank	
2.5 g	Offload and Install 50KW generator and connect to ATS, fuel tank located within 25' feet of the generator	
2.7.1 a	120 / 240 volt, 200 amp, single-phase meter pedestal & hookup for electrical service by the local utility	
2.7.4 a	120 / 240 volt, 200 amp, single-phase underground electrical service including trenching and installation of appropriately sized electrical conductors buried 30 inches below grade from utility meter to the service disconnect located on the building.	
2.8.1 c	Exterior grounding for W/G Bridge, shelter, fuel tank, generator and fence located in an 2500 Sq. Ft. compound per R56	
2.8.2	Megger three point grounding test of the site.	
Construction Supervisor		\$31,695.00
	PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES	
	Under the direction of the Motorola Project Manager, responsibilities of the Construction Manager with respect to the coordination and administration of pre-construction requirements are as follows:	
1.1	Site Appraisals: Assisting Motorola System Engineering in conducting site appraisals for constructability, including accessibility and any potential impediments to site development.	

1.2	Liaison: Consulting, advising, and making recommendations to the Motorola Project Manager on all aspects of planning for the project construction, including site engineering & design, procurement, contractor pre-qualification, construction operations and program services.
1.3	Design Requirements: Review plans and specifications for the purpose of advising the Motorola Project Manager on such factors as construction feasibility and techniques, risk mitigation, possible
1.4	Regulatory Requirements Tracking: Status tracking and reporting with established green, yellow, red flag system to bring immediate attention to a Hold or Denial, that could or does effect Cost: Zoning NEPA / LIMITED NEPA Phase I Environmental Permits
1.5	Procurement: Recommending early purchases and expediting the procurement on long-lead items to ensure timely delivery.
1.6	Administration of Contractor selection process: Coordinating the selection process including: Site Walks Contractor identification, evaluation and clarification. Contractor selection and negotiation.
1.7	Preparedness: Preparation prior to the start of any site / project is required, but shall not be limited to the following: Preliminary schedules for construction and material supply Construction permits and approval process' Underground utility location staking Condition of access / clearing Mobilization date(s)
POST-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES	
	The Construction Manager under the direction of the Motorola Project Manager, is responsible for coordination and management of project construction requirements. In executing this requirement, the Construction Manager shall assume overall responsibility, as indicated, but not limited to the following:
2.1	Work closely with the assigned Architectural & Engineering Firm in developing and reviewing site plans and specifications. See EXHIBIT 18.6 – Example Site Drawings to better understand the level of detail and quality expected.
2.2	Supervising and coordinating the work of contractors. Being available at all times to provide prompt inspection, clarifications and a decision on acceptance when required.
2.3	Assessing and enforcing approved on-site procedures including construction methods, schedules, safety and quality requirements.
2.4	Monitoring, controlling and measuring budgeted costs, resource requirements and schedules with comparisons to actual.
2.5	Reporting progress to the Project Management team to update schedule and cost data.
2.6	Analyzing and evaluating all cost, schedule and progress reports for the project.
2.7	Preparing weekly progress reports addressing work accomplished, potential problems, and recommended solutions.
2.8	Furnishing finance department with information required for accounting records, payroll, inventories of materials and work in progress.
2.9	Advising the Motorola Program Manager on cost and schedule fluctuations, improved / alternative materials and methods, and other matters affecting construction.
2.10	Development of recommendations with justification regarding Change Orders for review and approval by Motorola's Project Manager.
2.11	Maintaining on the job update plans reflecting all changes.
2.12	Assisting in expediting delivery of materials and progress of work.
2.13	Verifying that the contractor's construction materials, installation methods and assumed design parameters are acceptable based on the conditions existing at the site.
2.14	Measuring progress of work and reviewing and authorizing contractor's request for payment.
2.15	Site acceptance testing.
2.16	Coordinating the resolution of punch-list items.
2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship prefabricated Shelter to the Customer Site

\$2,320.00

TOTAL INTEGRATION

\$125,710.00

Building w/ UPS & Propane Generator	TT1004 - MSB, 12' X 10' CONCRETE IR BLDG, INCLS UPS & GENERATOR, FULLY COMPLETE	\$	99,090.00
		Total Equipment \$	99,090.00
		Total Integration \$	122,516.00
		Project Total \$	221,606.00

		Price
Project Management		\$6,076.00
1.1	Manage Installation Resources	
1.2	Coordinate with Construction Supervisor	
1.3	Integrate Civil Work into overall Installation Plan	
1.4	Track and Report Civil Work Status	
ARCHITECTURAL & ENGINEERING SERVICES		\$17,245.00
A.3.4.2	Construction Drawings	
A.3.1B	Site Design visit	
A.3.8B	Record Drawings	
A.2.1C	Site survey	
A.5.2 B	Construction Material Testing (Concrete, backfill, foundations)	
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing	
SITE PREPARATION		\$17,912.00
1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)	
1.2a	Mobilization and demobilization of crews	
1.3.1 a	Clearing and grubbing of Site compound (Light Clearing- Clear light brush and grub roots)	
1.4.1A	Compound Grading and 10' path around it	
1.5.1	Compound graveling (including weedicide treatment and geotextile fabric installation) inside fence are and 3' perimeter outside fence	
1.7.2	Silt fence	
1.8.1	8' high fencing of compound (including gates and accessories required)	
1.9A	Site touchup and landscaping (fertilize, seed and straw disturbed areas not covered with gravel, usually 10' wide strip around compound)	
SITE COMPONENTS INSTALLATION		\$47,354.00
2.1.1 d	Foundations - 12'x10' Concrete pre-fab Shelter and stoop including excavation, rebar, concrete and gravel backfill.	
2.1.2 a	Foundations for 500 gallon above-ground LPG Fuel tank with 12" perimeter (5'x12'x6") including excavation, rebar, concrete	
2.1.3 e	Foundations for 35KW Propane Generator and 12" wide perimeter and 12" wide perimeter including excavation, rebar, concrete	
2.4 d	Offload and setup - 12'x10' Pre-fabricated concrete shelter (30,000 lbs) including installation of loose material with shelter i.e. awnings, door lights etc. Includes startup of lighting, air-conditioning and power distribution.	
2.6 a	Supply and install 500 gallon LP fuel tank (37" dia x 9'11"L x 3'10"H) including all necessary fuel, piping (with trenching up to 50' from generator), regulators, valves, gauges, testing of system for leakages.	
2.6 g	Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank	
2.5 g	Offload and Install 35KW generator and connect to ATS, fuel tank located within 25' feet of the generator	
2.7.1 a	120 / 240 volt, 200 amp, single-phase meter pedestal & hookup for electrical service by the local utility	
2.7.4 a	120 / 240 volt, 200 amp, single-phase underground electrical service including trenching and installation of appropriately sized electrical conductors buried 30 inches below grade from utility meter to the service disconnect located on the building.	
2.8.1 c	Exterior grounding for W/G Bridge, shelter, fuel tank, generator and fence located in an 2500 Sq. Ft. compound per R56	
2.8.2	Megger three point grounding test of the site.	
Construction Supervisor		\$31,695.00
	PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES	
	Under the direction of the Motorola Project Manager, responsibilities of the Construction Manager with respect to the coordination and administration of pre-construction requirements are as follows:	
1.1	Site Appraisals: Assisting Motorola System Engineering in conducting site appraisals for constructability, including accessibility and any potential impediments to site development.	

1.2	Liaison: Consulting, advising, and making recommendations to the Motorola Project Manager on all aspects of planning for the project construction, including site engineering & design, procurement, contractor pre-qualification, construction operations and program services.
1.3	Design Requirements: Review plans and specifications for the purpose of advising the Motorola Project Manager on such factors as construction feasibility and techniques, risk mitigation, possible
1.4	Regulatory Requirements Tracking: Status tracking and reporting with established green, yellow, red flag system to bring immediate attention to a Hold or Denial, that could or does effect Cost: Zoning NEPA / LIMITED NEPA Phase I Environmental Permits
1.5	Procurement: Recommending early purchases and expediting the procurement on long-lead items to ensure timely delivery.
1.6	Administration of Contractor selection process: Coordinating the selection process including: Site Walks Contractor identification, evaluation and clarification. Contractor selection and negotiation.
1.7	Preparedness: Preparation prior to the start of any site / project is required, but shall not be limited to the following: Preliminary schedules for construction and material supply Construction permits and approval process' Underground utility location staking Condition of access / clearing Mobilization date(s)
	POST-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES
	The Construction Manager under the direction of the Motorola Project Manager, is responsible for coordination and management of project construction requirements. In executing this requirement, the Construction Manager shall assume overall responsibility, as indicated, but not limited to the following:
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2.2	Supervising and coordinating the work of contractors. Being available at all times to provide prompt inspection, clarifications and a decision on acceptance when required.
2.3	Assessing and enforcing approved on-site procedures including construction methods, schedules, safety and quality requirements.
2.4	Monitoring, controlling and measuring budgeted costs, resource requirements and schedules with comparisons to actual.
2.5	Reporting progress to the Project Management team to update schedule and cost data.
2.6	Analyzing and evaluating all cost, schedule and progress reports for the project.
2.7	Preparing weekly progress reports addressing work accomplished, potential problems, and recommended solutions.
2.8	Furnishing finance department with information required for accounting records, payroll, inventories of materials and work in progress.
2.9	Advising the Motorola Program Manager on cost and schedule fluctuations, improved / alternative materials and methods, and other matters affecting construction.
2.10	Development of recommendations with justification regarding Change Orders for review and approval by Motorola's Project Manager.
2.11	Maintaining on the job update plans reflecting all changes.
2.12	Assisting in expediting delivery of materials and progress of work.
2.13	Verifying that the contractor's construction materials, installation methods and assumed design parameters are acceptable based on the conditions existing at the site.
2.14	Measuring progress of work and reviewing and authorizing contractor's request for payment.
2.15	Site acceptance testing.
2.16	Coordinating the resolution of punch-list items.
2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship prefabricated Shelter to the Customer Site

\$2,320.00

Services TOTAL

\$122,602.00

Building w/ UPS & Diesel Generator	TT1000 - MSB, 12' X 16.5' CONCRETE BLDG, INCLS UPS & GENERATOR, FULLY COMPLETE	\$	108,613.00
	TT0004AA - ALT: DIESEL 50KW GENERATOR	\$	3,284.00
		Total Equipment	\$ 111,897.00
		Total Integration	\$ 116,043.00
		Project Total	\$ 227,940.00

Project Management		Price	\$6,076.00
1.1	Manage Installation Resources		
1.2	Coordinate with Construction Supervisor		
1.3	Integrate Civil Work into overall Installation Plan		
1.4	Track and Report Civil Work Status		
ARCHITECTURAL & ENGINEERING SERVICES			\$17,245.00
A.3.4.2	Construction Drawings		
A.3.1B	Site Design visit		
A.3.8B	Record Drawings		
A.2.1C	Site survey		
A.5.2 B	Construction Material Testing (Concrete, backfill, foundations)		
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing		
SITE PREPARATION			\$17,912.00
1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)		
1.2a	Mobilization and demobilization of crews		
1.3.1 a	Clearing and grubbing of Site compound (Light Clearing- Clear light brush and grub roots)		
1.4.1A	Compound Grading and 10' path around it		
1.5.1	Compound graveling (including weedicide treatment and geotextile fabric installation) inside fence are and 3' perimeter outside fence		
1.7.2	Silt fence		
1.8.1	8' high fencing of compound (including gates and accessories required)		
1.9A	Site touchup and landscaping (fertilize, seed and straw disturbed areas not covered with gravel, usually 10' wide strip around compound)		
SITE COMPONENTS INSTALLATION			\$42,236.00
2.1.1 d	Foundations for TT1000 - 12'x16' Concrete pre-fab Shelter and stoop including excavation, rebar, concrete and gravel backfill.		
2.1.3 e	Foundations for 50KW Diesel Generator (SG050 - 1650 lbs with 41"x111" footprint) and 12" wide perimeter and 12" wide perimeter including excavation, rebar, concrete		
2.4 d	Offload and setup TT1000 - 12'x16' Pre-fabricated concrete shelter (40,000 lbs) including installation of loose material with shelter i.e. awnings, door lights etc. Includes startup of lighting, air-conditioning and power distribution.		
2.6 g	Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank		
2.5 g	Offload and Install 50KW generator and connect to ATS, fuel tank located under generator		
2.7.1 a	120 / 240 volt, 200 amp, single-phase meter pedestal & hookup for electrical service by the local utility		
2.7.4 a	120 / 240 volt, 200 amp, single-phase underground electrical service including trenching and installation of appropriately sized electrical conductors buried 30 inches below grade from utility meter to the service disconnect located on the building.		
2.8.1 c	Exterior grounding for W/G Bridge, shelter, fuel tank, generator and fence located in an 2500 Sq. Ft. compound per R56		
2.8.2	Megger three point grounding test of the site.		
Construction Supervisor			\$30,254.00
	PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES		
	Under the direction of the Motorola Project Manager, responsibilities of the Construction Manager with respect to the coordination and administration of pre-construction requirements are as follows:		
1.1	Site Appraisals: Assisting Motorola System Engineering in conducting site appraisals for constructability, including accessibility and any potential impediments to site development.		
1.2	Liaison: Consulting, advising, and making recommendations to the Motorola Project Manager on all aspects of planning for the project construction, including site engineering & design, procurement, contractor pre-qualification, construction operations and program services.		

1.3	Design Requirements: Review plans and specifications for the purpose of advising the Motorola Project Manager on such factors as construction feasibility and techniques, risk mitigation, possible
1.4	Regulatory Requirements Tracking: Status tracking and reporting with established green, yellow, red flag system to bring immediate attention to a Hold or Denial, that could or does effect Cost: Zoning NEPA / LIMITED NEPA Phase I Environmental Permits
1.5	Procurement: Recommending early purchases and expediting the procurement on long-lead items to ensure timely delivery.
1.6	Administration of Contractor selection process: Coordinating the selection process including: Site Walks Contractor identification, evaluation and clarification. Contractor selection and negotiation.
1.7	Preparedness: Preparation prior to the start of any site / project is required, but shall not be limited to the following: Preliminary schedules for construction and material supply Construction permits and approval process' Underground utility location staking Condition of access / clearing Mobilization date(s)
	POST-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES
	The Construction Manager under the direction of the Motorola Project Manager, is responsible for coordination and management of project construction requirements. In executing this requirement, the Construction Manager shall assume overall responsibility, as indicated, but not limited to the following:
2.1	Work closely with the assigned Architectural & Engineering Firm in developing and reviewing site plans and specifications. See EXHIBIT 18.6 – Example Site Drawings to better understand the level of detail and quality expected.
2.2	Supervising and coordinating the work of contractors. Being available at all times to provide prompt inspection, clarifications and a decision on acceptance when required.
2.3	Assessing and enforcing approved on-site procedures including construction methods, schedules, safety and quality requirements.
2.4	Monitoring, controlling and measuring budgeted costs, resource requirements and schedules with comparisons to actual.
2.5	Reporting progress to the Project Management team to update schedule and cost data.
2.6	Analyzing and evaluating all cost, schedule and progress reports for the project.
2.7	Preparing weekly progress reports addressing work accomplished, potential problems, and recommended solutions.
2.8	Furnishing finance department with information required for accounting records, payroll, inventories of materials and work in progress.
2.9	Advising the Motorola Program Manager on cost and schedule fluctuations, improved / alternative materials and methods, and other matters affecting construction.
2.10	Development of recommendations with justification regarding Change Orders for review and approval by Motorola's Project Manager.
2.11	Maintaining on the job update plans reflecting all changes.
2.12	Assisting in expediting delivery of materials and progress of work.
2.13	Verifying that the contractor's construction materials, installation methods and assumed design parameters are acceptable based on the conditions existing at the site.
2.14	Measuring progress of work and reviewing and authorizing contractor's request for payment.
2.15	Site acceptance testing.
2.16	Coordinating the resolution of punch-list items.
2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship prefabricated Shelter to the Customer Site

\$2,320.00

TOTAL INTEGRATION

\$116,043.00

Building w/ UPS & Diesel Generator	TT1004 - MSB, 12' X 10' CONCRETE IR BLDG, INCLS UPS & GENERATOR, FULLY COMPLETE	\$	99,090.00
	TT04004AA - ALT. DIESEL GENERATOR (35KW Generac)	\$	5,923.00
Total Equipment			\$ 105,013.00
Total Integration			\$115,182.00
Project Total			\$ 220,195.00

		Price
Project Management		\$6,076.00
1.1	Manage Installation Resources	
1.2	Coordinate with Construction Supervisor	
1.3	Integrate Civil Work into overall Installation Plan	
1.4	Track and Report Civil Work Status	
ARCHITECTURAL & ENGINEERING SERVICES		\$17,245.00
A.3.4.2	Construction Drawings	
A.3.1B	Site Design visit	
A.3.8B	Record Drawings	
A.2.1C	Site survey	
A.5.2 B	Construction Material Testing (Concrete, backfill, foundations)	
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing	
SITE PREPARATION		\$17,912.00
1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)	
1.2a	Mobilization and demobilization of crews	
1.3.1 a	Clearing and grubbing of Site compound (Light Clearing- Clear light brush and grub roots)	
1.4.1A	Compound Grading and 10' path around it	
1.5.1	Compound graveling (including weedicide treatment and geotextile fabric installation) inside fence are and 3' perimeter outside fence	
1.7.2	Silt fence	
1.8.1	8' high fencing of compound (including gates and accessories required)	
1.9A	Site touchup and landscaping (fertilize, seed and straw disturbed areas not covered with gravel, usually 10' wide strip around compound)	
SITE COMPONENTS INSTALLATION		\$41,375.00
2.1.1 d	Foundations - 12'x10' Concrete pre-fab Shelter and stoop including excavation, rebar, concrete and gravel backfill.	
2.1.3 e	Foundations for 35KW Diesel Generator and 12" wide perimeter and 12" wide perimeter including excavation, rebar, concrete	
2.4 d	Offload and setup - 12'x10' Pre-fabricated concrete shelter (30,000 lbs) including installation of loose material with shelter i.e. awnings, door lights etc. Includes startup of lighting, air-conditioning and power distribution.	
2.6 g	Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank	
2.5 g	Offload and Install 35KW generator and connect to ATS, fuel tank located under generator	
2.7.1 a	120 / 240 volt, 200 amp, single-phase meter pedestal & hookup for electrical service by the local utility	
2.7.4 a	120 / 240 volt, 200 amp, single-phase underground electrical service including trenching and installation of appropriately sized electrical conductors buried 30 inches below grade from utility meter to the service disconnect located on the building.	
2.8.1 c	Exterior grounding for W/G Bridge, shelter, fuel tank, generator and fence located in an 2500 Sq. Ft. compound per R56	
2.8.2	Megger three point grounding test of the site.	
Construction Supervisor		\$30,254.00
	PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES	
	Under the direction of the Motorola Project Manager, responsibilities of the Construction Manager with respect to the coordination and administration of pre-construction requirements are as follows:	
1.1	Site Appraisals: Assisting Motorola System Engineering in conducting site appraisals for constructability, including accessibility and any potential impediments to site development.	
1.2	Liaison: Consulting, advising, and making recommendations to the Motorola Project Manager on all aspects of planning for the project construction, including site engineering & design, procurement, contractor pre-qualification, construction operations and program services.	

1.3	Design Requirements: Review plans and specifications for the purpose of advising the Motorola Project Manager on such factors as construction feasibility and techniques, risk mitigation, possible
1.4	Regulatory Requirements Tracking: Status tracking and reporting with established green, yellow, red flag system to bring immediate attention to a Hold or Denial, that could or does effect Cost: Zoning NEPA / LIMITED NEPA Phase I Environmental Permits
1.5	Procurement: Recommending early purchases and expediting the procurement on long-lead items to ensure timely delivery.
1.6	Administration of Contractor selection process: Coordinating the selection process including: Site Walks Contractor identification, evaluation and clarification. Contractor selection and negotiation.
1.7	Preparedness: Preparation prior to the start of any site / project is required, but shall not be limited to the following: Preliminary schedules for construction and material supply Construction permits and approval process' Underground utility location staking Condition of access / clearing Mobilization date(s)
	POST-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES
	The Construction Manager under the direction of the Motorola Project Manager, is responsible for coordination and management of project construction requirements. In executing this requirement, the Construction Manager shall assume overall responsibility, as indicated, but not limited to the following:
2.1	Work closely with the assigned Architectural & Engineering Firm in developing and reviewing site plans and specifications. See EXHIBIT 18.6 – Example Site Drawings to better understand the level of detail and quality expected.
2.2	Supervising and coordinating the work of contractors. Being available at all times to provide prompt inspection, clarifications and a decision on acceptance when required.
2.3	Assessing and enforcing approved on-site procedures including construction methods, schedules, safety and quality requirements.
2.4	Monitoring, controlling and measuring budgeted costs, resource requirements and schedules with comparisons to actual.
2.5	Reporting progress to the Project Management team to update schedule and cost data.
2.6	Analyzing and evaluating all cost, schedule and progress reports for the project.
2.7	Preparing weekly progress reports addressing work accomplished, potential problems, and recommended solutions.
2.8	Furnishing finance department with information required for accounting records, payroll, inventories of materials and work in progress.
2.9	Advising the Motorola Program Manager on cost and schedule fluctuations, improved / alternative materials and methods, and other matters affecting construction.
2.10	Development of recommendations with justification regarding Change Orders for review and approval by Motorola's Project Manager.
2.11	Maintaining on the job update plans reflecting all changes.
2.12	Assisting in expediting delivery of materials and progress of work.
2.13	Verifying that the contractor's construction materials, installation methods and assumed design parameters are acceptable based on the conditions existing at the site.
2.14	Measuring progress of work and reviewing and authorizing contractor's request for payment.
2.15	Site acceptance testing.
2.16	Coordinating the resolution of punch-list items.
2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship prefabricated Shelter to the Customer Site

\$2,320.00

Services TOTAL

\$115,182.00

Propane Generator	DSSG0350DVP - Generac 35 KW/LP Vapor/1 Phase	\$	21,656.00
ATS	DSGTS200ID - Generac 200 Amps/1Phase	\$	2,854.00
Surge Protection	DS570SA16FNRJ1S - Liebert Indoor - 120/240V 1-PH Type 1 surge protector	\$	2,295.00
		Total Equipment	\$ 26,805.00
		Total Integration	\$ 61,242.00
		Project Total	\$ 88,047.00

Price

\$2,025.00

Project Management	
1.1	Manage Installation Resources
1.2	Coordinate with Construction Supervisor
1.3	Integrate Civil Work into overall Installation Plan
1.4	Track and Report Civil Work Status

ARCHITECTURAL & ENGINEERING SERVICES

\$8,653.00

EXISTING TOWER SITES

A.3.4C	Construction Drawings for existing tower with existing room improvements
A.3.1B	ADD: Site Design visit
A.3.8B	ADD: Record Drawings
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing

SITE PREPARATION

\$4,727.00

1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
1.2a	Mobilization and demobilization of crews

0 SUBTOTAL

SITE COMPONENTS INSTALLATION

\$18,833.00

2.1.2 a	Foundations for 500 gallon above-ground LPG Fuel tank with 12" perimeter (5'x12'x6") including excavation, rebar, concrete
2.1.3 c	Foundations for 35KW Propane Generator and 12" wide perimeter including excavation, rebar, concrete
2.6 a	Supply and install 500 gallon LP fuel tank (37" dia x 9'11"L x 3'10"H) including all necessary fuel, piping (with trenching up to 50' from generator), regulators, valves, gauges, testing of system for leakages.
2.6 g	Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank
2.5 c	Offload and Install 35 KW generator and connect to ATS, fuel tank located within 25' feet of the generator
2.8.1 c	Exterior grounding for W/G Bridge, shelter, fuel tank, generator and fence located in an 2500 Sq. Ft. compound per R56

SECTION 5 : TENANT IMPROVEMENT

\$4,644.00

5.1.6	Install automatic transfer switch and connect to generator, electric main and connect to alarm panel
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Construction Supervisor

\$21,610.00

PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES	
	Under the direction of the Motorola Project Manager, responsibilities of the Construction Manager with respect to the coordination and administration of pre-construction requirements are as follows:
1.1	Site Appraisals: Assisting Motorola System Engineering in conducting site appraisals for constructability, including accessibility and any potential impediments to site development.
1.2	Liaison: Consulting, advising, and making recommendations to the Motorola Project Manager on all aspects of planning for the project construction, including site engineering & design, procurement, contractor pre-qualification, construction operations and program services.
1.3	Design Requirements: Review plans and specifications for the purpose of advising the Motorola Project Manager on such factors as construction feasibility and techniques, risk mitigation, possible

1.4	Regulatory Requirements Tracking: Status tracking and reporting with established green, yellow, red flag system to bring immediate attention to a Hold or Denial, that could or does effect Cost: Zoning NEPA / LIMITED NEPA Phase I Environmental Permits
1.5	Procurement: Recommending early purchases and expediting the procurement on long-lead items to ensure timely delivery.
1.6	Administration of Contractor selection process: Coordinating the selection process including: Site Walks Contractor identification, evaluation and clarification. Contractor selection and negotiation.
1.7	Preparedness: Preparation prior to the start of any site / project is required, but shall not be limited to the following: Preliminary schedules for construction and material supply Construction permits and approval process' Underground utility location staking Condition of access / clearing Mobilization date(s)
	POST-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES
	The Construction Manager under the direction of the Motorola Project Manager, is responsible for coordination and management of project construction requirements. In executing this requirement, the Construction Manager shall assume overall responsibility, as indicated, but not limited to the following:
2.1	Work closely with the assigned Architectural & Engineering Firm in developing and reviewing site plans and specifications. See EXHIBIT 18.6 – Example Site Drawings to better understand the level of detail and quality expected.
2.2	Supervising and coordinating the work of contractors. Being available at all times to provide prompt inspection, clarifications and a decision on acceptance when required.
2.3	Assessing and enforcing approved on-site procedures including construction methods, schedules, safety and quality requirements.
2.4	Monitoring, controlling and measuring budgeted costs, resource requirements and schedules with comparisons to actual.
2.5	Reporting progress to the Project Management team to update schedule and cost data.
2.6	Analyzing and evaluating all cost, schedule and progress reports for the project.
2.7	Preparing weekly progress reports addressing work accomplished, potential problems, and recommended solutions.
2.8	Furnishing finance department with information required for accounting records, payroll, inventories of materials and work in progress.
2.9	Advising the Motorola Program Manager on cost and schedule fluctuations, improved / alternative materials and methods, and other matters affecting construction.
2.10	Development of recommendations with justification regarding Change Orders for review and approval by Motorola's Project Manager.
2.11	Maintaining on the job update plans reflecting all changes.
2.12	Assisting in expediting delivery of materials and progress of work.
2.13	Verifying that the contractor's construction materials, installation methods and assumed design parameters are acceptable based on the conditions existing at the site.
2.14	Measuring progress of work and reviewing and authorizing contractor's request for payment.
2.15	Site acceptance testing.
2.16	Coordinating the resolution of punch-list items.
2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship Generator to the Customer Site

\$750.00

Services TOTAL

\$61,242.00

Propane Generator	DSQT025SAVP - Generac 25 KW/LP Vapor/1 Phase	\$	17,032.30
ATS	DSOTEC125ID - Onan 125 Amps/1Phase	\$	3,910.00
Surge Protection	DS570SA16FNRJ1S - Liebert Indoor - 120/240V 1-PH Type 1 surge protector	\$	2,295.00
		Total Equipment	\$ 23,237.30
		Total Integration	\$ 60,735.00
		Project Total	\$ 83,972.30

Price

Project Management		\$2,025.00
1.1	Manage Installation Resources	
1.2	Coordinate with Construction Supervisor	
1.3	Integrate Civil Work into overall Installation Plan	
1.4	Track and Report Civil Work Status	
ARCHITECTURAL & ENGINEERING SERVICES		\$8,635.00
EXISTING TOWER SITES		
A.3.4C	Construction Drawings for existing tower with existing room improvements	
A.3.1B	ADD: Site Design visit	
A.3.8B	ADD: Record Drawings	
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing	
SITE PREPARATION		\$4,727.00
1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)	
1.2a	Mobilization and demobilization of crews	
0	SUBTOTAL	
SITE COMPONENTS INSTALLATION		\$18,833.00
2.1.2 a	Foundations for 500 gallon above-ground LPG Fuel tank with 12" perimeter (5'x12'x6") including excavation, rebar, concrete	
2.1.3 c	Foundations for 25KW Propane Generator (SG020 - 1650 lbs with 36"x75" footprint) and 12" wide perimeter including excavation, rebar, concrete	
2.6 a	Supply and install 500 gallon LP fuel tank (37" dia x 9'11"L x 3'10"H) including all necessary fuel, piping (with trenching up to 50' from generator), regulators, valves, gauges, testing of system for leakages.	
2.6 g	Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank	
2.5 c	Offload and Install 25 KW generator and connect to ATS, fuel tank located within 25' feet of the generator	
2.8.1 c	Exterior grounding for W/G Bridge, shelter, fuel tank, generator and fence located in an 2500 Sq. Ft. compound per R56	
SECTION 5 : TENANT IMPROVEMENT		\$4,644.00
5.1.6	Install automatic transfer switch and connect to generator, electric main and connect to alarm panel	
Construction Supervisor		\$21,610.00
PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES		
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1.4	Regulatory Requirements Tracking: Status tracking and reporting with established green, yellow, red flag system to bring immediate attention to a Hold or Denial, that could or does effect Cost: Zoning NEPA / LIMITED NEPA Phase I Environmental Permits
1.5	Procurement: Recommending early purchases and expediting the procurement on long-lead items to ensure timely delivery.
1.6	Administration of Contractor selection process: Coordinating the selection process including: Site Walks Contractor identification, evaluation and clarification. Contractor selection and negotiation.
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2.15	Site acceptance testing.
2.16	Coordinating the resolution of punch-list items.
2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship Generator to the Customer Site

\$750.00

TOTAL INTEGRATION

\$61,224.00

Diesel Generator	DSSD035ODDL - Generac 35 KW/Diesel/1 Phase	\$	28,127.00
ATS	DSGTS200ID - Generac 200 Amps/1Phase	\$	2,854.00
Surge Protection	DS570SA16FNRJ1S - Liebert Indoor - 120/240V 1-PH Type 1 surge protector	\$	2,295.00

Total Equipment \$ 33,276.00

Total Integration \$55,246.00

Project Total \$ 88,522.00

Price

\$2,025.00

Project Management	
1.1	Manage Installation Resources
1.2	Coordinate with Construction Supervisor
1.3	Integrate Civil Work into overall Installation Plan
1.4	Track and Report Civil Work Status

ARCHITECTURAL & ENGINEERING SERVICES

\$8,635.00

EXISTING TOWER SITES	
A.3.4C	Construction Drawings for existing tower with existing room improvements
A.3.1B	ADD: Site Design visit
A.3.8B	ADD: Record Drawings
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing

SITE PREPARATION

\$4,727.00

1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
1.2a	Mobilization and demobilization of crews
0	SUBTOTAL

SITE COMPONENTS INSTALLATION

\$12,855.00

2.1.3 c	Foundations for 35KW Diesel Generator
2.6 g	Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank
2.5 c	Offload and Install 35 KW generator and connect to ATS, fuel tank located under generator
2.8.1 c	Exterior grounding for W/G Bridge, shelter, fuel tank, generator and fence located in an 2500 Sq. Ft. compound per R56

SECTION 5 : TENANT IMPROVEMENT

\$4,644.00

5.1.6	Install automatic transfer switch and connect to generator, electric main and connect to alarm panel
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Construction Supervisor

\$21,610.00

PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES	
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1.4	Regulatory Requirements Tracking: Status tracking and reporting with established green, yellow, red flag system to bring immediate attention to a Hold or Denial, that could or does effect Cost: Zoning NEPA / LIMITED NEPA Phase I Environmental Permits

1.5	Procurement: Recommending early purchases and expediting the procurement on long-lead items to ensure timely delivery.
1.6	Administration of Contractor selection process: Coordinating the selection process including: Site Walks Contractor identification, evaluation and clarification. Contractor selection and negotiation.
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2.15	Site acceptance testing.
2.16	Coordinating the resolution of punch-list items.
2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship Generator to the Customer Site

\$750.00

Services TOTAL

\$55,246.00

Diesel Generator	DSSD025ODDL - Generac 25 KW/Diesel/1 Phase	\$	26,540.00
ATS	DSGTS200ID - Generac 200 Amps/1Phase	\$	2,854.00
Surge Protection	DS570SA16FNRJ1S - Liebert Indoor - 120/240V 1-PH Type 1 surge protector	\$	2,295.00
		Total Equipment	\$ 31,689.00
		Total Integration	\$ 55,246.00
		Project Total	\$ 86,935.00

Price
\$2,025.00

Project Management	
1.1	Manage Installation Resources
1.2	Coordinate with Construction Supervisor
1.3	Integrate Civil Work into overall Installation Plan
1.4	Track and Report Civil Work Status
ARCHITECTURAL & ENGINEERING SERVICES	
EXISTING TOWER SITES	
A.3.4C	Construction Drawings for existing tower with existing room improvements
A.3.1B	ADD: Site Design visit
A.3.8B	ADD: Record Drawings
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing
SITE PREPARATION	
1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
1.2a	Mobilization and demobilization of crews
0	SUBTOTAL
SITE COMPONENTS INSTALLATION	
2.1.3 c	Foundations for 25KW Diesel Generator
2.6 g	Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank
2.5 c	Offload and Install 25 KW generator and connect to ATS, fuel tank located under generator
2.8.1 c	Exterior grounding for W/G Bridge, shelter, fuel tank, generator and fence located in an 2500 Sq. Ft. compound per R56
SECTION 5 : TENANT IMPROVEMENT	
5.1.6	Install automatic transfer switch and connect to generator, electric main and connect to alarm panel
Construction Supervisor	
PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES	
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\$8,635.00

\$4,727.00

\$12,855.00

\$4,644.00

\$21,610.00

1.5	Procurement: Recommending early purchases and expediting the procurement on long-lead items to ensure timely delivery.
1.6	Administration of Contractor selection process: Coordinating the selection process including: Site Walks Contractor identification, evaluation and clarification. Contractor selection and negotiation.
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2.15	Site acceptance testing.
2.16	Coordinating the resolution of punch-list items.
2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship Generator to the Customer Site

\$750.00

TOTAL INTEGRATION \$55,246.00

UPS

DS917012D4N0006 - Eaton 9170 Double Conversion12 slot cabinet (10 used) 12.5 KW with 6 min runtime

\$ 21,386.00

Total Equipment \$ 21,386.00

Total Integration \$ 31,369.00

Project Total \$ 52,755.00**Price****\$2,025.00**

Project Management	
1.1	Manage Installation Resources
1.2	Coordinate with Construction Supervisor
1.3	Integrate Civil Work into overall Installation Plan
1.4	Track and Report Civil Work Status
ARCHITECTURAL & ENGINEERING SERVICES	
EXISTING TOWER SITES	
A.3.1B	ADD: Site Design visit
A.3.2B	ADD: Lease exhibit/Site Sketch
	Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing
SITE PREPARATION	
1.1a	Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
1.2a	Mobilization and demobilization of crews
TENANT IMPROVEMENT	
5.1.2A	100A Breaker panel with capacity for 20 circuits
5.1.3 a	Install 15A breakers in the panel and wire to simplex outlets located on an average within 35 cable feet
5.1.4 B	Install new single phase Uninterruptible Power Supply (UPS) equipment (10 to 20 KVA), make before break switch, transformer, 100 Amp disconnect, wire output to breakers and connect to alarm punch block
Construction Supervisor	
PRE-AWARD CONSTRUCTION MANAGER RESPONSIBILITIES	
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\$6,861.00**\$2,753.00****\$7,455.00****\$11,525.00**

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2.17	Coordinating the preparation and review of contractor submittals e.g. as-built drawings, lien releases etc.
Freight	
1.1	Ship UPS to the Customer Site

\$750.00

TOTAL INTEGRATION

\$31,369.00

Product Brief

MSB

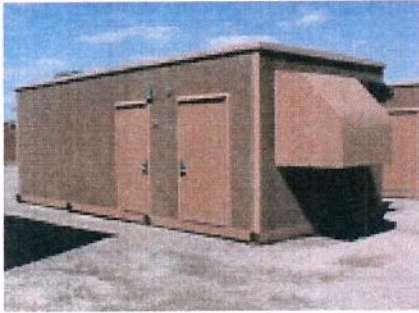
**Motorola Standard
Buildings**



MOTOROLA
intelligence everywhere™



quality enclosures



As the world moves into the wireless age, the reliability of wireless systems to provide dependable communications during normal and emergency situations has become a crucial need of wireless customers. A key ingredient for ensuring reliability is

the environment in which the equipment is installed. To improve the uptime for equipment operation and enhance the life of equipment, it is imperative that the following aspects be carefully considered in the design of the equipment enclosure:

- It is properly designed for the electrical requirements of the proposed equipment;
- The equipment can be installed in the most efficient configuration while meeting the manufacturer recommendations;
- Optimal equipment environmental conditions (heating, ventilation and air-conditioning - HVAC) within the enclosure can be consistently maintained;
- Backup power sources, such as Uninterruptible Power supply (UPS), DC Power plant and generators have been correctly sized to handle the designed equipment loads;
- Alarming capabilities have been adequately designed for diagnosing and alerting failures of critical components;
- Grounding and Transient Voltage Surge Suppression (TVSS) systems have been designed to provide protection from high voltage anomalies; and
- Cable entry and routing facilities have been properly designed for the proposed equipment inter-connections

Equipment enclosures designed to meet the foregoing requirements would help enhance system performance and reliability for the fixed equipment by minimizing downtime due to equipment malfunction and susceptibility to lightning. Also, customers can realize savings in maintenance expenditures due to lower requirement for service and spares.

To provide its customers with an enclosure that meets the foregoing requirements, Motorola has developed high quality Motorola Standard Buildings (MSB) keeping the Motorola's equipment needs in mind.

STANDARDS

In order to provide internal guidelines and requirements for the installation of communications equipment, infrastructure and facilities, Motorola has developed "Quality Standards for Fixed Network Equipment Installations", also known as R56. The R56 Standards form the minimum standards that Motorola considers are required to provide the expected system performance, reliability and equipment longevity.

The MSB equipment enclosure design meets the Motorola's R56 standards, and the equipment layout and component design follows the recommended equipment installation standards. Moreover, the cabling facilities, backup power sources, grounding, receptacles, and surge suppression have been pre-planned with location of Motorola equipment in mind. As a result the MSB equipment enclosure provides optimum environment for housing the Fixed Network Equipment.



Interior view

FLOOR PLAN

Motorola's Site Design Team worked with its Core Engineering Group (CEG) and Customer Center for Systems Integration (CCSI) to develop the standard racking configurations that would allow equipment to be installed in most efficient manner.

Standard equipment layouts have been designed to help ensure interior space can be optimally utilized and equipment can be placed on the floor plan in the most optimum configuration, while meeting Motorola's R56 and equipment installation standards.

ELECTRICAL CONFIGURATION

To determine the power requirements, the electrical design for each MSB enclosure is based on the load calculations for the system configuration that has been designed for each building type. Accommodations have been made in the design for up to 20% growth in future power requirements.



Typical electrical power wall

In order to prevent a differential ground potential between different grounding points in the building, components have been arranged in such a way that the conductors entering into the building are close to the main ground bar. This will

facilitate single point grounding of the building equipment. Also, building electrical entry points have been protected with appropriate surge protection to protect the equipment from outside surges and spikes.



In order to allow easy distribution of electrical power to the equipment, individual load distribution centers have been planned for each row of equipment. This allows easy identification of the breakers for powering off the equipment during repair or maintenance (above left). For convenient powering of the equipment, individual receptacles with dedicated circuits have been installed in a raceway system above the equipment racks (above right).

BACKUP POWER

Depending on the power requirements of each equipment configuration, backup power sources have been designed to allow uninterrupted operation of the critical equipment. This has been accomplished with an Uninterruptible Power Supply (UPS) that instantaneously picks up the equipment load in case of power failure. The UPS carries the load until a stable source of power is available.

Double conversion type UPSs have been used to supply properly regulated and filtered AC power for the critical loads. The UPSs have built in static bypass switches as well as over-current protection to provide maximum system reliability. Single phase UPSs have been provided for buildings that have power requirements less than 40KW. These UPSs are scalable



Uninterruptible Power Supply(s)

power handling. UPSs come with a field startup by a factory trained technician after the building has been installed.

Each building configuration has been sized with an outdoor standby generator based on the selected equipment load configuration. Each generator is also supplied with an automatic transfer switch to allow switching of power to generator power in case of utility power failure. Generators come with field startup by a factory trained technician after the building has been installed.

and provide parallel redundancy for a fault-tolerant network of power protection. Three phase UPSs used for larger loads (greater than 30KW), provide efficient



Indoor Generator Room (optional)

As a space saving option, MSB enclosures with power requirements up to 24KW can also be configured with an AC PowerPac that combines UPS, Emergency Back-up Power, and a sophisticated control and communication system with a high capacity fuel tank (up to 14 days runtime) in a single enclosure allowing the replacement of the UPS, emergency back-up generator, fuel tank and automatic transfer switch.



AC PowerPac (optional)

BENEFITS TO CUSTOMER

- **ALL-INCLUSIVE PACKAGE:** The MSB enclosure includes completely designed systems for generator, UPS, Automatic Transfer Switch, HVAC, power distribution, grounding and electrical distribution for the selected equipment configuration. As a result, the MSB enclosure provides a complete solution for equipment requirements of the communications system.
- **RAPID DEPLOYMENT:** Construction and design drawings for the MSB enclosure have already been designed and drafted by building manufacturers. These drawings have also been pre-approved to meet state building codes, thereby reducing the custom design drawing drafting, approval and state certification process (typically 3-4 weeks).
- **READY FOR EQUIPMENT:** Building systems have been pre-designed with Motorola's equipment needs in mind. While the site is getting ready for the building installation, the fixed network equipment can be installed in the MSB enclosure at the building manufacturing plant. As a result, when this building is installed at the site, the equipment is ready for optimization. This can save 2-3 weeks of field installation time for each site.
- **CONVENIENT LOCATIONS:** MSB enclosures have been designed with the cooperation of four leading prefabricated building manufacturers in the US. Building manufacturing plants are typically located close to customer locations, cutting down on freight costs and providing prompt warranty support.
- **COST EFFECTIVE SOLUTION:** Because of Motorola's relationships with its vendors and standardization of designs, MSB enclosures offer a significant cost reduction for Motorola and its customers.
- **QUALITY CONSTRUCTION:** MSB enclosures are manufactured to meet Motorola's R56 Quality Standards and therefore ensure that customers receive a quality product to house its fixed equipment.

STANDARD BUILDING FEATURES

- **DESIGN LOAD:** Floor: 300 psf. and concentrated floor load 2800 pounds over any 2.5 square foot area., Roof: 150 psf., Walls: 150 mph
- **SEISMIC DESIGN:** Group 1 – Category D of International Building Code (IBC)
- **BULLETPROOFING:** Exterior walls/roof – Ballistics tested for UL-752 Level 4 D (High Powered Rifle – 30.06 – point blank range)
- **FIRE RATING:** Exterior walls/roof – 2 hr. fire rated
- **INSULATION:** Walls: R-11, Ceiling: R-19
- **SURGE PROTECTION:** Type 1A and Type 2 surge protection for main electrical power and primary surge protection for control wiring to tower lights and generator.
- **EXTERIOR OUTLETS:** (1) 20A GFI duplex mounted between the air conditioners and (1) by door.
- **EMERGENCY LIGHTING:** (1) Twin bulb with battery exit sign located over doorway.
- **EXTERIOR LIGHTING:** Security: (1) 100W incandescent with photo-cell on switch.
- **ALARMS:** Smoke, Power Fail, High/Low temp, intrusion, tower lights, HVAC, TVSS, Generator, Automatic Transfer Switch and UPS alarms on dry terminal 66 block with amphenol connector
- **GROUNDING:** Single point interior ground system with perimeter ground. All grounding meets or exceeds Motorola's R56 specifications.
- **CABLE LADDER:** 24" wide cable ladder over equipment racks to the cable entrance location.
- **FIRE PROTECTION:** (1) each wall mounted 20lb. ABC and 10lb. CO2 extinguishers
- **WARRANTY:** 2 years parts and labor from the date of shipment

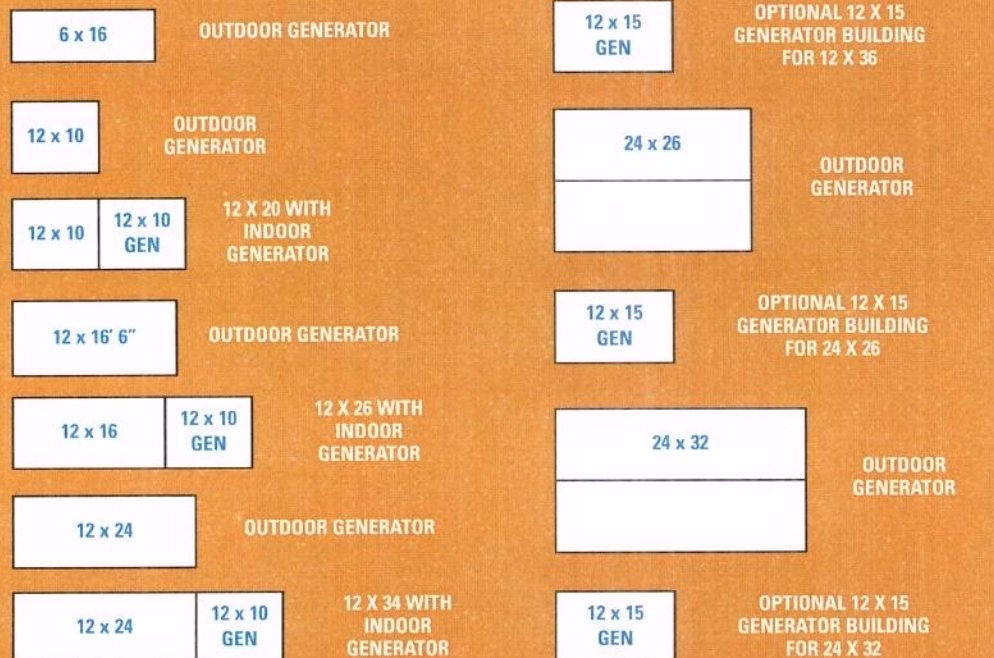


OPTIONAL FEATURES

All new buildings are available with the following options to further meet specific customer requirements:

- FM200 Fire suppression
- Bullet Resistant Doors
- Indoor generator room
- HVAC economizer
- Type 3 surge suppression for receptacles
- Upgraded building structure for seismic rated design
- Fiberglass or lightweight metal construction
- Bullet resistant walls for fiberglass or lightweight metal construction
- Alternate fuels for the generator
- External generator receptacle and manual transfer switch
- Replace generator, transfer switch and UPS with space saving AC PowerPac
- Additional alarming capability

Standard Building Sizes





Motorola's Commercial, Government and Industrial Solutions Sector is a recipient of the prestigious 2002 Malcolm Baldrige National Quality Award. This honor demonstrates our commitment to performance excellence and quality achievement.



*Customer Site
Developed by Motorola
Systems Integration*



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Specifications subject to change without notice.

Product Description	Discounted Price	*Standard Install and Programming & Setup
APX 7000 VHF MHz Model 3.5	\$ 4,393.25	Included
APX 7000 XE VHF MHz Model 3.5	\$ 4,864.25	Included
APX 7000 VHF/700/800 MHz Model 3.5	\$ 5,143.25	Included
APX 7000 XE VHF/700/800 MHz Model 3.5	\$ 5,614.25	Included
APX 7500 VHF Dash Mount Mobile	\$ 4,751.50	Included
APX 7500 VHF Remote Mount Mobile	\$ 4,880.50	Included
APX 7500 VHF Control Station	\$ 4,573.65	Not Included **(Consult installer for final labor and equipment pricing, ¹
APX 7500 VHF/700/800 MHz Dash Mount Mobile	\$ 5,201.50	Included
APX 7500 VHF/700/800 MHz Remote Mount Mobile	\$ 5,330.50	Included
APX 7500 VHF/700/800 MHz Control Station	\$ 5,023.65	Not Included **(Consult installer for final labor and equipment pricing, ¹
APX 6000 Model 2.5 Portable	\$ 3,345.50	Included
APX 6000 Li Model 2.5 Portable	\$ 3,011.75	Included
APX 6500 Dash Mount Mid Power Mobile	\$ 4,159.85	Included
APX 6500 Remote Mount Mid Power Mobile	\$ 4,288.85	Included
APX 6500 Control Station	\$ 3,982.00	Not Included **(Consult installer for final labor and equipment pricing, ¹
APX 6500 Li Dash Mount Mid Power Mobile	\$ 3,601.10	Included
APX 6500 Li Remote Mount Mid Power Mobile	\$ 3,730.10	Included
APX 6500 Li Control Station	\$ 3,423.25	Not Included **(Consult installer for final labor and equipment pricing, ¹
APX 4000 Model 2.5 Portable	\$ 2,305.50	Included
APX 4000 Li Model 1.5 Portable	\$ 1,977.75	Included
APX 4500 Dash Mount Mobile	\$ 3,046.10	Included
APX 4500 Remote Mount Mobile	\$ 3,175.10	Included
APX 4500 Control Station	\$ 2,868.25	Not Included **(Consult installer for final labor and equipment pricing, ¹
APX 4500 Li Dash Mount Mobile	\$ 2,770.10	Included
APX Console	\$ 7,855.80	NOT Included (Consult installer for pricing)
APX DRVS	\$ 8,040.35	NOT Included (Consult installer for pricing)
MCC 7500 Console Position & Install	\$ 80,000.00	Included

* Standard Install and Programming & Setup includes basic installation of mobile radios and mobile and portable radio programming & setup on the MOSWIN system. Standard Install and Programming & Setup does not include the construction of a radio template or any additional cabling or labor associated with unique situations.

** Due to variable circumstances Control Station installation may require specialized labor and equipment cost. Customer must consult installer for final pricing of installation and programming & setup prior to ordering.

Product Description	Nomen.	List Price	Discount %	Discounted	MOSWIN Requirement
APX7000 VHF or VHF/700/800 MHz Model 3.5	H97TGD9PW1 N	\$ 2,797.00	25%	\$ 2,097.75	yes
ADD: LARGE COLOR DISPLAY & FULL KEYPAD	QA00577	\$ 500.00	25%	\$ 375.00	yes
ADD: PRIMARY BAND VHF	QA00570	\$ -	25%	\$ -	yes
ADD: SECONDARY BAND 700/800 MHZ	QA00573	\$ -	25%	\$ -	yes
ADD: ASTRO DIGITAL CAI OPERATION	Q806	\$ 515.00	25%	\$ 386.25	yes
ADD: SMARTZONE OPERATION	H38	\$ 1,500.00	25%	\$ 1,125.00	yes
ADD: P25 9600 BAUD TRUNKING	Q361	\$ 300.00	25%	\$ 225.00	yes
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	25%	\$ -	yes
APX IMPRES™ SINGLE UNIT CHARGER (110 VAC)	WPLN7080	\$ 125.00	15%	\$ 106.25	recommended
Programming & Setup	Labor	\$ 78.00	0%	\$ 78.00	
		Single Band		\$ 4,393.25	VHF ONLY
Dual Band Option (Required for dual band operation)					
ADD: ENABLE DUAL BAND OPERATION	QA00579	\$ 1,000.00	25%	\$ 750.00	recommended
		Dual Band		\$ 5,143.25	recommended

Product Description	Nomen.	List Price	Discount %	Discounted	
APX7000 XE VHF or VHF/700/800 MHz Model 3.5	H49TGD9PW1 N	\$ 3,400.00	25%	\$ 2,550.00	yes
ADD: LARGE COLOR DISPLAY & FULL KEYPAD	QA00577	\$ 500.00	25%	\$ 375.00	yes
ADD: PRIMARY BAND VHF	QA00570	\$ -	25%	\$ -	yes
ADD: SECONDARY BAND 700/800 MHZ	QA00573	\$ -	25%	\$ -	yes
ADD: ASTRO DIGITAL CAI OPERATION	Q806	\$ 515.00	25%	\$ 386.25	yes
ADD: SMARTZONE OPERATION	H38	\$ 1,500.00	25%	\$ 1,125.00	yes
ADD: P25 9600 BAUD TRUNKING	Q361	\$ 300.00	25%	\$ 225.00	yes
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	25%	\$ -	yes
ALT:APX 7000XE HOUSING GREEN	QA01427	\$ 25.00	25%	\$ 18.75	optional
APX IMPRES™ SINGLE UNIT CHARGER (110 VAC)	WPLN7080	\$ 125.00	15%	\$ 106.25	recommended
Programming & Setup	Labor	\$ 78.00	0%	\$ 78.00	
		Single Band		\$ 4,864.25	VHF ONLY
Dual Band Option (Required for dual band operation)					
ADD: ENABLE DUAL BAND OPERATION	QA00579	\$ 1,000.00	25%	\$ 750.00	recommended
		Dual Band		\$ 5,614.25	recommended

Additional Portable Options/Features					
ADD: TDMA OPERATION	QA00580	\$ 400.00	25%	\$ 300.00	
ADD: AES ENCRYPTION ALGORITHM	Q629	\$ 475.00	25%	\$ 356.25	
ADD: MULTIPLE KEY ENCRYPTION OPERATION	H869	\$ 330.00	25%	\$ 247.50	
ENH: IV&D OPERATION	Q947	\$ 200.00	25%	\$ 150.00	
ENH: OVER THE AIR PROGRAMMING (OTAP)	G996	\$ 100.00	25%	\$ 75.00	
ENH: GPS FUNCTIONALITY	QA00782	\$ 100.00	25%	\$ 75.00	
ADD: DVRS PSU ACTIVATION	QA00631	\$ 100.00	25%	\$ 75.00	
ADD: EXTREME NOISE REDUCTION	QA1833	\$ 25.00	25%	\$ 18.75	
ADD: ENABLE BLUETOOTH SOFTWARE	QA00583	\$ 150.00	25%	\$ 112.50	

Additional Extended Warranty Options					
ENH: 2 YR SFS LITE	Q58	\$ 102.00	0%	\$ 102.00	
ENH: 3 YR SFS LITE	GA00232	\$ 150.00	0%	\$ 150.00	
ENH: SFS COMPREHENSIVE	HA00025AB	\$ 200.00	0%	\$ 200.00	

Product Description	Nomen.	List Price	Discounted	
APX7500 VHF or VHF/700/800 MHz DASH MOUNT	M30TSS9PW1_N	\$ 2,272.00	25%	\$ 1,704.00 yes
ADD: DASH MOUNT	G66	\$ 125.00	25%	\$ 93.75 yes
ADD: PRIMARY BAND VHF MP	GA00306	\$ -	25%	\$ - yes
ADD: SECONDARY BAND 700/800 MHz MP	GA00225	\$ 400.00	25%	\$ 300.00 yes
ADD: ASTRO DIGITAL CAI OPERATION	Q806	\$ 515.00	25%	\$ 386.25 yes
ADD: SMARTZONE OPERATION	G51	\$ 1,500.00	25%	\$ 1,125.00 yes
ADD: P25 9600 BAUD TRUNKING	G361	\$ 300.00	25%	\$ 225.00 yes
ADD: OS CONTROL HEAD HARDWARE	G442	\$ 432.00	25%	\$ 324.00 Other control heads listed below
ADD: OS CONTROL HEAD SOFTWARE	G444	\$ -	25%	\$ - yes
ADD: PALM MICROPHONE	W22	\$ 72.00	15%	\$ 61.20 recommended
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	25%	\$ - yes
ADD: AUXILIARY SPKR 7.5 WATT	B18	\$ 60.00	15%	\$ 51.00 recommended
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15%	\$ 54.40 MOSWIN required
ADD: ANT 1/4 WAVE 762-870 MHZ	G335	\$ 14.00	15%	\$ 11.90 MOSWIN required
Standard Install & Programming & Setup	Labor	\$ 415.00	0%	\$ 415.00
		Single Band		\$ 4,751.50 VHF ONLY
Dual Band Option (Required for dual band operation)				
ADD: ENABLE DUAL BAND OPERATION	GA00579	\$ 600.00	25%	\$ 450.00 MOSCAP required
		Dual Band		\$ 5,201.50 MOSCAP required

Product Description	Nomen.	List Price	Discount %	Discounted	
APX7500 VHF or VHF/700/800 MHz REMOTE MOUNT	M30TSS9PW1_N	\$ 2,272.00	25%	\$ 1,704.00	yes
ADD: REMOTE MOUNT	G67	\$ 297.00	25%	\$ 222.75	yes
ADD: PRIMARY BAND VHF MP	GA00306	\$ -	25%	\$ -	yes
ADD: SECONDARY BAND 700/800 MHz MP	GA00225	\$ 400.00	25%	\$ 300.00	yes
ADD: ASTRO DIGITAL CAI OPERATION	Q806	\$ 515.00	25%	\$ 386.25	yes
ADD: SMARTZONE OPERATION	G51	\$ 1,500.00	25%	\$ 1,125.00	yes
ADD: P25 9600 BAUD TRUNKING	G361	\$ 300.00	25%	\$ 225.00	yes
ADD: OS CONTROL HEAD HARDWARE	G442	\$ 432.00	25%	\$ 324.00	Other control heads listed below
ADD: OS CONTROL HEAD SOFTWARE	G444	\$ -	25%	\$ -	yes
ADD: PALM MICROPHONE	W22	\$ 72.00	15%	\$ 61.20	yes
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	25%	\$ -	yes
ADD: AUXILIARY SPKR 7.5 WATT	B18	\$ 60.00	15%	\$ 51.00	recommended
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15%	\$ 54.40	MOSWIN required
ADD: ANT 1/4 WAVE 762-870 MHZ	G335	\$ 14.00	15%	\$ 11.90	MOSWIN required
Standard Install & Programming & Setup	Labor	\$ 415.00	0%	\$ 415.00	

		Single Band		\$	4,880.50	VHF ONLY
Dual Band Option (Required for dual band operation)						
ADD: ENABLE DUAL BAND OPERATION	GA00579	\$	600.00	25%	\$	450.00 MOSCAP required
		Dual Band		\$	5,330.50	MOSCAP required

Product Description	Nomen.	List Price	Discounted		
APX7500 VHF or VHF/700/800 MHz CONTROL STATION	M30TSS9PW1_N	\$ 2,272.00	25%	\$ 1,704.00	yes
ADD: DASH MOUNT	G66	\$ 125.00	25%	\$ 93.75	yes
ADD: PRIMARY BAND VHF MP	GA00306	\$ -	25%	\$ -	yes
ADD: SECONDARY BAND 700/800 MHz MP	GA00225	\$ 400.00	25%	\$ 300.00	yes
ADD: ASTRO DIGITAL CAI OPERATION	Q806	\$ 515.00	25%	\$ 386.25	yes
ADD: SMARTZONE OPERATION	G51	\$ 1,500.00	25%	\$ 1,125.00	yes
ADD: P25 9600 BAUD TRUNKING	G361	\$ 300.00	25%	\$ 225.00	yes
ADD: O5 CONTROL HEAD HARDWARE	G442	\$ 432.00	25%	\$ 324.00	Other control heads listed below
ADD: O5 CONTROL HEAD SOFTWARE	G444	\$ -	25%	\$ -	yes
ADD: PALM MICROPHONE	W22	\$ 72.00	15%	\$ 61.20	recommended
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	25%	\$ -	yes
ADD: NO SPEAKER NEEDED	G142	\$ -	15%	\$ -	recommended
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15%	\$ 54.40	MOSWIN required
ADD: ANT 1/4 WAVE 762-870 MHZ	G335	\$ 14.00	15%	\$ 11.90	MOSWIN required
ADD: CONTROL STATION POWER SUPPLY	G91	\$ 269.00	15%	\$ 228.65	required for operation but optional purchase
ADD: BASE STATION APEXWWM	W665	\$ 70.00	15%	\$ 59.50	yes
		Single Band		\$ 4,573.65	VHF ONLY
Dual Band Option (Required for dual band operation)					
ADD: ENABLE DUAL BAND OPERATION	GA00579	\$ 600.00	25%	\$ 450.00	MOSCAP required
		Dual Band		\$ 5,023.65	MOSCAP required
Control Station Installation and Programming & Set up	Labor	\$ 3,500.00	0%	\$ 3,500.00	Consult installer for final labor and equipment pricing
Additional Mobile Options/Features					
ADD: APX O2 CONTROL HEAD	GA00804	\$ 492.00	25%	\$ 369.00	
ADD:IMPACT GREEN COLOR HOUSING (O2)	G201	\$ 25.00	25%	\$ 18.75	
ADD:O3 CONTROL HEAD	G72	\$ 946.00	25%	\$ 709.50	
ADD: APX O7 CONTROL HEAD.	GA00805	\$ 632.00	25%	\$ 474.00	
ADD: O9 CONTROL HEAD	GA00245	\$ 1,200.00	25%	\$ 900.00	
ADD: TDMA OPERATION	GA00580	\$ 400.00	25%	\$ 300.00	
ADD: MULTICAST VOTING SCAN	G387	\$ 200.00	25%	\$ 150.00	
ENH: OVER THE AIR PROVISIONING	G996	\$ 100.00	25%	\$ 75.00	
ADD: RS232 PACKET DATA INTERFACE	W947	\$ 200.00	25%	\$ 150.00	
ADD: GPS ACTIVATION	GA00229	\$ 100.00	25%	\$ 75.00	
ADD: MULTIPLE KEY ENCRYPTION OPERATION	W969	\$ 330.00	25%	\$ 247.50	
ADD: AES ENCRYPTION APX7500	G843	\$ 475.00	25%	\$ 356.25	
Additional Extended Warranty Options					
ENH: 2 YR SFS LITE	G78	\$ 158.00	0%	\$ 158.00	
ENH: 3 YR SFS LITE	GA00232	\$ 236.00	0%	\$ 236.00	
ENH: SFS COMPREHENSIVE	GA00255AB	\$ 317.00	0%	\$ 317.00	

Product Description	Nomen.	List Price	Discount %	Discounted
APX6000 VHF MODEL 2.5 PORTABLE	H98KDG9PW6 N	\$ 2,200.00	25%	\$ 1,650.00
ADD: ASTRO DIGITAL	Q806	\$ 515.00	25%	\$ 386.25
ADD: SMARTZONE OPERATION	H38	\$ 1,200.00	25%	\$ 900.00
ADD: P25 9600 BAUD TRUNKING	Q361	\$ 300.00	25%	\$ 225.00
ADD: ADVANCED SYSTEM KEY - SOFTWARE KEY	QA01749	\$ -	25%	\$ -
APX 7000 IMPRES CG SU APX7000 US/NA	WPLN7080	\$ 125.00	15%	\$ 106.25
Programming & Setup	Labor	\$ 78.00	0%	\$ 78.00
	Total			\$ 3,345.50

Additional Portable Options/Features				
ADD: TDMA OPERATION	QA00580	\$ 400.00	25%	\$ 300.00
ADD: AES ENCRYPTION ALGORITHM	Q629	\$ 475.00	25%	\$ 356.25
ADD: MULTIPLE KEY ENCRYPTION OPERATION	H869	\$ 330.00	25%	\$ 247.50
ENH: IV&D OPERATION	Q947	\$ 200.00	25%	\$ 150.00
ENH: OVER THE AIR PROGRAMMING (OTAP)	G996	\$ 100.00	25%	\$ 75.00
ENH: GPS FUNCTIONALITY	QA00782	\$ 100.00	25%	\$ 75.00
ADD: DVRS PSU ACTIVATION	QA00631	\$ 100.00	25%	\$ 75.00
ADD: EXTREME NOISE REDUCTION	QA1833	\$ 25.00	25%	\$ 18.75
ADD: ENABLE BLUETOOTH SOFTWARE	QA00583	\$ 150.00	25%	\$ 112.50

Additional Extended Warranty Options				
ENH: 2 YR SFS LITE	H885BK	\$ 84.00	0%	\$ 84.00
ENH: 3 YR SFS LITE	H886AQ	\$ 125.00	0%	\$ 125.00
ENH: SFS COMPREHENSIVE	HA00022AB	\$ 228.00	0%	\$ 228.00

Product Description	Nomen.	List Price	Discounted
APX6500 VHF DASH MOUNT	M25KSS9PW1 N	\$ 1,899.00	\$ 1,424.25
ADD: DASH MOUNT VERSION	G66	\$ 125.00	\$ 93.75
ADD: ASTRO DIGITAL CAI OPERATION	Q806	\$ 515.00	\$ 386.25
ADD: SMARTZONE OPERATION	G51	\$ 1,500.00	\$ 1,125.00
ADD: P25 9600 BAUD TRUNKING	G361	\$ 300.00	\$ 225.00
ADD: OS CONTROL HEAD HARDWARE	G442	\$ 432.00	\$ 324.00
ADD: OS CONTROL HEAD SOFTWARE	G444	\$ -	\$ -
ADD: PALM MICROPHONE	W22	\$ 72.00	\$ 61.20
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	\$ -
ADD: AUXILIARY SPKR 7.5 WATT	B18	\$ 60.00	\$ 51.00
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	\$ 54.40
Standard Install and Programming & Setup	Labor	\$ 415.00	\$ 415.00
	Total		\$ 4,159.85

Product Description	Nomen.	List Price	Discounted
APX6500 VHF REMOTE MOUNT	M25KSS9PW1 N	\$ 1,899.00	\$ 1,424.25
ADD: REMOTE MOUNT MID POWER	G67	\$ 297.00	\$ 222.75
ADD: ASTRO DIGITAL CAI OPERATION	Q806	\$ 515.00	\$ 386.25
ADD: SMARTZONE OPERATION	G51	\$ 1,500.00	\$ 1,125.00
ADD: P25 9600 BAUD TRUNKING	G361	\$ 300.00	\$ 225.00
ADD: OS CONTROL HEAD HARDWARE	G442	\$ 432.00	\$ 324.00
ADD: OS CONTROL HEAD SOFTWARE	G444	\$ -	\$ -
ADD: PALM MICROPHONE	W22	\$ 72.00	\$ 61.20
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	\$ -
ADD: AUXILIARY SPKR 7.5 WATT	B18	\$ 60.00	\$ 51.00
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	\$ 54.40
Standard Install and Programming & Setup	Labor	\$ 415.00	\$ 415.00
	Total		\$ 4,288.85

Product Description	Nomen.	List Price	Discounted
APX6500 VHF CONTROL STATION	M25KSS9PW1 N	\$ 1,899.00	\$ 1,424.25
ADD: DASH MOUNT VERSION	G66	\$ 125.00	\$ 93.75
ADD: ASTRO DIGITAL CAI OPERATION	Q806	\$ 515.00	\$ 386.25
ADD: SMARTZONE OPERATION	G51	\$ 1,500.00	\$ 1,125.00
ADD: P25 9600 BAUD TRUNKING	G361	\$ 300.00	\$ 225.00
ADD: OS CONTROL HEAD HARDWARE	G442	\$ 432.00	\$ 324.00
ADD: OS CONTROL HEAD SOFTWARE	G444	\$ -	\$ -
ADD: PALM MICROPHONE	W22	\$ 72.00	\$ 61.20
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	\$ -
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	\$ 54.40
ADD: NO SPEAKER NEEDED	G142	\$ -	\$ -
ADD: CONTROL STATION POWER SUPPLY	G91	\$ 269.00	\$ 228.65
ADD: BASE STATION APEXWWM	W665	\$ 70.00	\$ 59.50
	Total		\$ 3,982.00

Control Station Installation and Programming & Set up Labor \$ 3,500.00 0% \$ 3,500.00 Consult installer for final labor and equipment pricing

Additional Mobile Options/Features				
ADD: APX O2 CONTROL HEAD	GA00804	\$ 492.00	25%	\$ 369.00
ADD: IMPACT GREEN COLOR HOUSING (O2)	G201	\$ 25.00	25%	\$ 18.75
ADD: O3 CONTROL HEAD	G72	\$ 946.00	25%	\$ 709.50
ADD: APX O7 CONTROL HEAD.	GA00805	\$ 632.00	25%	\$ 474.00
ADD: TDMA OPERATION	GA00580	\$ 400.00	25%	\$ 300.00
ADD: MULTICAST VOTING SCAN	G387	\$ 200.00	25%	\$ 150.00
ENH: OVER THE AIR PROVISIONING	G996	\$ 100.00	25%	\$ 75.00
ADD: RS232 PACKET DATA INTERFACE	W947	\$ 200.00	25%	\$ 150.00
ADD: GPS ACTIVATION	GA00229	\$ 100.00	25%	\$ 75.00
ADD: MULTIPLE KEY ENCRYPTION OPERATION	W969	\$ 330.00	25%	\$ 247.50
ADD: AES ENCRYPTION APX7500	G843	\$ 475.00	25%	\$ 356.25
ADD: REMOTE MOUNT MID POWER	G67	\$ 297.00	25%	\$ 222.75

Additional Extended Warranty Options				
ENH: 2 YR SFS LITE	G24	\$ 121.00	0%	\$ 121.00
ENH: 3 YR SFS LITE	G398AU	\$ 182.00	0%	\$ 182.00
ENH: SFS COMPREHENSIVE	GA00249AC	\$ 246.00	0%	\$ 246.00

Product Description	Nomen.	List Price	Discount %	Discounted
APX6000 LI VHF MODEL 2.5 PORTABLE	H98KGF9PW6 N	\$ 2,200.00	25%	\$ 1,650.00
ADD: 9600 TRUNKING OR 3600 DIGITAL TRUNKING	QA02756	\$ 1,570.00	25%	\$ 1,177.50
ADD: ADVANCED SYSTEM KEY - SOFTWARE KEY	QA01749	\$ -	25%	\$ -
APX 7000 IMPRES CG SU APX7000 US/NA	WPLN7080	\$ 125.00	15%	\$ 106.25
Programming & Setup	Labor	\$ 78.00	0%	\$ 78.00
	Total			\$ 3,011.75

Additional Portable Options/Features

ADD: TDMA OPERATION	QA00580	\$ 400.00	25%	\$ 300.00
ADD: AES ENCRYPTION ALGORITHM	Q629	\$ 475.00	25%	\$ 356.25
ADD: MULTIPLE KEY ENCRYPTION OPERATION	H869	\$ 330.00	25%	\$ 247.50
ENH: IV&D OPERATION	Q947	\$ 200.00	25%	\$ 150.00
ENH: OVER THE AIR PRORAMMING (OTAP)	G996	\$ 100.00	25%	\$ 75.00
ENH: GPS FUNCTIONALITY	QA00782	\$ 100.00	25%	\$ 75.00
ADD: DVRS PSU ACTIVATION	QA00631	\$ 100.00	25%	\$ 75.00
ADD: ENABLE BLUETOOTH SOFTWARE	QA00583	\$ 150.00	25%	\$ 112.50

Additional Extended Warranty Options

ENH: 2 YR SFS LITE	H885BK	\$ 84.00	0%	\$ 84.00
ENH: 3 YR SFS LITE	H886AQ	\$ 125.00	0%	\$ 125.00
ENH: SFS COMPREHENSIVE	HA00022AB	\$ 228.00	0%	\$ 228.00

Product Description	Nomen.	List Price	Discount %	Discounted
APX6500 LI VHF DASH MOUNT	M25KSS9PW1 N	\$ 1,899.00	25%	\$ 1,424.25
ENH: 9600 OR 3600 SINGLE SYSTEM DIG	QA02756	\$ 1,570.00	25%	\$ 1,177.50
ADD: DASH MOUNT VERSION	G66	\$ 125.00	25%	\$ 93.75
ADD: O5 CONTROL HEAD HARDWARE	G442	\$ 432.00	25%	\$ 324.00
ADD: O5 CONTROL HEAD SOFTWARE	G444	\$ -	25%	\$ -
ADD: PALM MICROPHONE	W22	\$ 72.00	15%	\$ 61.20
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	25%	\$ -
ADD: AUXILIARY SPKR 7.5 WATT	B18	\$ 60.00	15%	\$ 51.00
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15%	\$ 54.40
Standard Intall and Programming & Setup	Labor	\$ 415.00	0%	\$ 415.00
	Total			\$ 3,601.10

Product Description	Nomen.	List Price	Discount %	Discounted
APX6500 LI VHF REMOTE MOUNT	M25KSS9PW1 N	\$ 1,899.00	25%	\$ 1,424.25
ENH: 9600 OR 3600 SINGLE SYSTEM DIG	QA02756	\$ 1,570.00	25%	\$ 1,177.50
ADD: REMOTE MOUNT	G67	\$ 297.00	25%	\$ 222.75
ADD: O5 CONTROL HEAD HARDWARE	G442	\$ 432.00	25%	\$ 324.00
ADD: O5 CONTROL HEAD SOFTWARE	G444	\$ -	25%	\$ -
ADD: PALM MICROPHONE	W22	\$ 72.00	15%	\$ 61.20
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	25%	\$ -
ADD: AUXILIARY SPKR 7.5 WATT	B18	\$ 60.00	15%	\$ 51.00
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15%	\$ 54.40
Standard Install and Programming & Setup	Labor	\$ 415.00	0%	\$ 415.00
	Total			\$ 3,730.10

Product Description	Nomen.	List Price	Discount %	Discounted
APX6500 LI VHF CONTROL STATION	M25KSS9PW1 N	\$ 1,899.00	25%	\$ 1,424.25
ENH: 9600 OR 3600 SINGLE SYSTEM DIG	QA02756	\$ 1,570.00	25%	\$ 1,177.50
ADD: DASH MOUNT VERSION	G66	\$ 125.00	25%	\$ 93.75
ADD: O5 CONTROL HEAD HARDWARE	G442	\$ 432.00	25%	\$ 324.00
ADD: O5 CONTROL HEAD SOFTWARE	G444	\$ -	25%	\$ -
ADD: PALM MICROPHONE	W22	\$ 72.00	15%	\$ 61.20
ADD: ADVANCED SYSTEM KEY	QA01749	\$ -	25%	\$ -
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15%	\$ 54.40
ADD: NO SPEAKER NEEDED	G142	\$ -	15%	\$ -
ADD: CONTROL STATION POWER SUPPLY	G91	\$ 269.00	15%	\$ 228.65
ADD: BASE STATION APEXWWM	W665	\$ 70.00	15%	\$ 59.50
	Total			\$ 3,423.25

Control Station Installation and Programming & Set up Labor \$ 3,500.00 0% \$ 3,500.00 Consult installer for final labor and equipment pricing

Additional Mobile Options/Features

ADD: APX O2 CONTROL HEAD	GA00804	\$ 492.00	25%	\$ 369.00
ADD:IMPACT GREEN COLOR HOUSING (O2)	G201	\$ 25.00	25%	\$ 18.75
ADD:O3 CONTROL HEAD	G72	\$ 946.00	25%	\$ 709.50
ADD: APX O7 CONTROL HEAD.	GA00805	\$ 632.00	25%	\$ 474.00
ADD: TDMA OPERATION	GA00580	\$ 400.00	25%	\$ 300.00
ADD: MULTICAST VOTING SCAN	G387	\$ 200.00	25%	\$ 150.00
ENH: OVER THE AIR PROVISIONING	G996	\$ 100.00	25%	\$ 75.00
ADD: RS232 PACKET DATA INTERFACE	W947	\$ 200.00	25%	\$ 150.00
ADD: GPS ACTIVATION	GA00229	\$ 100.00	25%	\$ 75.00
ADD: MULTIPLE KEY ENCRYPTION OPERATION	W969	\$ 330.00	25%	\$ 247.50
ADD: AES ENCRYPTION APX7500	G843	\$ 475.00	25%	\$ 356.25
ADD: REMOTE MOUNT MID POWER	G67	\$ 297.00	25%	\$ 222.75

Additional Extended Warranty Options

ENH: 2 YR SFS LITE	G24	\$ 121.00	0%	\$ 121.00
ENH: 3 YR SFS LITE	G398AU	\$ 182.00	0%	\$ 182.00
ENH: SFS COMPREHENSIVE	GA00249AC	\$ 246.00	0%	\$ 246.00

Product Description	Nomen.	List Price	Discount %	Discounted
APX 4000 VHF MODEL 2.5 PORTABLE	H51KDF9PW6 N	\$ 1,400.00	25%	\$ 1,050.00
ENH: 3600 OR 9600 TRUNKING BAUD SIN	QA02756	\$ 1,570.00	25%	\$ 1,177.50
Programming & Setup	Labor	\$ 78.00	0%	\$ 78.00
	Total			\$ 2,305.50

Additional Portable Options/Features

ADD: TDMA OPERATION	QA00580	\$ 400.00	25%	\$ 300.00
ADD: AES ENCRYPTION ALGORITHM	Q629	\$ 475.00	25%	\$ 356.25
ADD: MULTIPLE KEY ENCRYPTION OPERATION	H869	\$ 330.00	25%	\$ 247.50
ENH: OVER THE AIR PROGRAMMING (OTAP)	G996	\$ 100.00	25%	\$ 75.00
ENH: GPS FUNCTIONALITY	QA00782	\$ 100.00	25%	\$ 75.00
ADD: EXTREME NOISE REDUCTION	QA1833	\$ 25.00	25%	\$ 18.75
ADD: ENABLE BLUETOOTH SOFTWARE	QA00583	\$ 150.00	25%	\$ 112.50

Additional Extended Warranty Options

ENH: 2 YR SFS LITE	H885BK	\$ 84.00	0%	\$ 84.00
ENH: 3 YR SFS LITE	H886AQ	\$ 125.00	0%	\$ 125.00
ENH: SFS COMPREHENSIVE	HA00022AB	\$ 228.00	0%	\$ 228.00

Product Description	Nomen.	List Price	Discounted
APX4500 VHF DASH MOUNT	M22KSS9PW1 N	\$ 1,099.00	25% \$ 824.25
ADD: 3600 OR 9600 TRUNKING BAUD SINGLE SYSTEM	QA02756	\$ 1,570.00	25% \$ 1,177.50
ADD: ADVANCED SYSTEM KEY - SOFTWARE KEY	QA01749	\$ -	25% \$ -
ADD: APX O2 CONTROL HEAD	GA00804	\$ 492.00	25% \$ 369.00
ADD: APX CONTROL HEAD SOFTWARE	G444	\$ -	25% \$ -
ADD: DASH MOUNT	G66	\$ 125.00	25% \$ 93.75
ADD: AUXILIARY SPKR 7.5 WATT	B18	\$ 60.00	15% \$ 51.00
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15% \$ 54.40
ADD: HEAVY-DUTY PALM MICROPHONE	W22	\$ 72.00	15% \$ 61.20
Standard Install and Programming & Setup	Labor	\$ 415.00	0% \$ 415.00
	Total		\$ 3,046.10

Product Description	Nomen.	List Price	Discounted
APX4500 VHF REMOTE MOUNT	M22KSS9PW1 N	\$ 1,099.00	25% \$ 824.25
ADD: 3600 OR 9600 TRUNKING BAUD SINGLE SYSTEM	QA02756	\$ 1,570.00	25% \$ 1,177.50
ADD: ADVANCED SYSTEM KEY - SOFTWARE KEY	QA01749	\$ -	25% \$ -
ADD: APX O2 CONTROL HEAD	GA00804	\$ 492.00	25% \$ 369.00
ADD: APX CONTROL HEAD SOFTWARE	G444	\$ -	25% \$ -
ADD: REMOTE MOUNT MID POWER	G67	\$ 297.00	25% \$ 222.75
ADD: AUXILIARY SPKR 7.5 WATT	B18	\$ 60.00	15% \$ 51.00
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15% \$ 54.40
ADD: PALM MICROPHONE	W22	\$ 72.00	15% \$ 61.20
Standard Install and Programming & Setup	Labor	\$ 415.00	0% \$ 415.00
	Total		\$ 3,175.10

Product Description	Nomen.	List Price	Discounted
APX4500 VHF CONTROL STATION	M22KSS9PW1 N	\$ 1,099.00	25% \$ 824.25
ADD: 3600 OR 9600 TRUNKING BAUD SINGLE SYSTEM	QA02756	\$ 1,570.00	25% \$ 1,177.50
ADD: ADVANCED SYSTEM KEY - SOFTWARE KEY	QA01749	\$ -	25% \$ -
ADD: APX O2 CONTROL HEAD	GA00804	\$ 492.00	25% \$ 369.00
ADD: APX CONTROL HEAD SOFTWARE	G444	\$ -	25% \$ -
ADD: DASH MOUNT	G66	\$ 125.00	25% \$ 93.75
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15% \$ 54.40
ADD: PALM MICROPHONE	W22	\$ 72.00	15% \$ 61.20
ADD: NO SPEAKER NEEDED	G142	\$ -	15% \$ -
ADD: CONTROL STATION POWER SUPPLY	G91	\$ 269.00	15% \$ 228.65
ADD: BASE STATION APEXWWM	W665	\$ 70.00	15% \$ 59.50
	Total		\$ 2,868.25

Control Station Installation and Programming & Set up Labor \$ 3,500.00 0% \$ 3,500.00 Consult installer for final labor and equipment pricing

Additional Mobile Options/Features

ADD: TDMA OPERATION	GA00580	\$ 400.00	25%	\$ 300.00
ADD: MULTICAST VOTING SCAN	G387	\$ 200.00	25%	\$ 150.00
ENH: OVER THE AIR PROVISIONING	G996	\$ 100.00	25%	\$ 75.00
ADD: RS232 PACKET DATA INTERFACE	W947	\$ 200.00	25%	\$ 150.00
ADD: GPS ACTIVATION	GA00229	\$ 100.00	25%	\$ 75.00
ADD: MULTIPLE KEY ENCRYPTION OPERATION	W969	\$ 330.00	25%	\$ 247.50
ADD: AES ENCRYPTION APX7500	G843	\$ 475.00	25%	\$ 356.25
ADD: REMOTE MOUNT MID POWER	G67	\$ 297.00	25%	\$ 222.75

Additional Extended Warranty Options

ENH: 2 YR SFS LITE	G24	\$ 121.00	0%	\$ 121.00
ENH: 3 YR SFS LITE	G398AU	\$ 182.00	0%	\$ 182.00
ENH: SFS COMPREHENSIVE	GA00249AC	\$ 246.00	0%	\$ 246.00

Product Description	Nomen.	List Price	Discount %	Discounted
APX 4000 Li 700/800 MHZ MODEL 1.5 PORTABLE	H51KDD9PW5AN	\$ 1,200.00	25%	\$ 900.00
ENH: LITE 9600 TRUNKING	QA03161AA	\$ 1,270.00	25%	\$ 952.50
110 VAC 50/60 HZ US IMPRES SUC	WPLN4232A	\$ 63.00	15%	\$ 47.25
Programming & Setup	Labor	\$ 78.00	0%	\$ 78.00
	Total			\$ 1,977.75

Product Description	Nomen.	List Price	Discount %	Discounted
APX4500 Li VHF DASH MOUNT	M22KSS9PW1 N	\$ 1,099.00	25%	\$ 824.25
ADD: Li P25 9600 Trunking ONLY	QA03161AB	\$ 1,270.00	25%	\$ 952.50
ADD: ADVANCED SYSTEM KEY - SOFTWARE KEY	QA01749	\$ -	25%	\$ -
ADD: APX O2 CONTROL HEAD	GA00804	\$ 492.00	25%	\$ 369.00
ADD: APX CONTROL HEAD SOFTWARE	G444	\$ -	25%	\$ -
ADD: DASH MOUNT	G66	\$ 125.00	25%	\$ 93.75
ADD: NO SPEAKER NEEDED	G142	\$ -	15%	\$ -
ADD: 1/4 WAVE BROADBAND ANT 146-174	G629	\$ 64.00	15%	\$ 54.40
ADD: PALM MICROPHONE	W22	\$ 72.00	15%	\$ 61.20
Standard Install and Programming & Setup	Labor	\$ 415.00	0%	\$ 415.00
	Total			\$ 2,770.10

APX Consollette	Nomen.	List Price	Discount %	Discounted
APX7500 CONSOLETTTE DUAL BAND MODEL	L30TSS9PW1 N	\$ 3,980.00	25%	\$ 2,985.00
ADD: VHF MP PRIMARY BAND	GA00306	\$ -	25%	\$ -
ADD: 7/800MHZ SECONDARY BAND	GA00225	\$ 400.00	25%	\$ 300.00
ENH: ASTRO DIGITAL CAI OP APX	G806	\$ 515.00	25%	\$ 386.25
ENH: SMARTZONE OPERATION APX	G51	\$ 1,500.00	25%	\$ 1,125.00
ADD: P25 TRUNKING SOFTWARE	G361	\$ 300.00	25%	\$ 225.00
ADD: ADVANCED SYSTEM KEY - SOFTWARE	QA01749	\$ -	25%	\$ -
ADD: CONTROL STATION DESK GCAI MIC	W382	\$ 169.00	25%	\$ 126.75
ADD: AC LINE CORD US	CA01598	\$ -	25%	\$ -
ADD: FULL FP W/05/KEYPAD/CLOCK/VU	L999	\$ 789.00	25%	\$ 591.75
ASSEMBLY,ACCESSORY,APX CONSOLETTTE R	HKN6233	\$ 200.00	25%	\$ 150.00
CPS R07.00.00 ASTRO DIG APX POR MOB	RVN5224M	\$ 265.00	25%	\$ 198.75
MASTER SYSTEM KEY STARTER KIT	DVN4046	\$ 500.00	25%	\$ 375.00
M4X MINI-BLADE WITH 150 MODULE WITH	DS47800A0031	\$ 1,530.00	9%	\$ 1,392.30
			Total	\$ 7,855.80

DRVS	Nomen.	List Price	Discount %	Discounted
700MHZ DVR SIDE-BY-SIDE CROSS-BAND APPLICATION A	TT2042	\$ 8,593.00	10%	\$ 7,733.70
UPGRADE OPTION-DVR TO XTL Y CONTROL CABLE (3FT TO 25FT)	DDN9012	\$ 59.00	10%	\$ 53.10
ANTENNA (762-870 MHZ) 1/4 WAVE	HAF4016	\$ 23.00	15%	\$ 19.55
SOFTWARE SUBSCRIPTION PER UNIT PER YEAR - FOR APX DVRS	DDN1578	\$ 130.00	10%	\$ 117.00
SOFTWARE SUBSCRIPTION PER UNIT PER YEAR - FOR XTL DVRS	DDN9007	\$ 130.00	10%	\$ 117.00
			Total	\$ 8,040.35

MOTOROLA STATE CONTRACT

<u>APC</u>	<u>DESCRIPTION</u>	<u>DISCOUNT %</u>
2	VIDEO STREAMING	5
40	MVX1000 In Car Digital Video	15
41	AUTOMATIC LICENSE PLATE RECOGN	10
103	DATACONTROLLERSDATA CONTROLLERS	20
112	INFRASTRUCTURE - GTR8000	25
117	FIXED DATA Dropship	15
118	911 Equipment	10
124	ComandStar remote desk sets and desktop dispatch consoles	10
129	MISC. DROPSHIP	15
131	MICROWAVE & CHANNEL BANKS	15
147	CABLES/KITS/SOFTWARE	25
153	HPD MODEM	10
170	MW810 Mounting Gear	15
177	ENTERPRISE MOBILE COMPUTING	10
189	MOBILE ACCESSORIES	15
195	INFRASTRUCTURE SOFTWARE	15
201	KVL II	25
202	IP DESKSET	15
205	XTS2500 - 700/800	27.5
207	SITE/DROPSHIP EQUIP	15
214	Fixed Data MOSCAD	15
218	Cambium - PTP/Orthogon License	10
224	Orthogon and point to point radio	10
225	QTAR/QTAR RCVR 6809 TRNK	10
228	Centracom and MCC7500 console accessories	15
229	LOGGING RECORDERS	15
244	Centracom spare ambassador modules	15
256	ASTRO Accessories - XTVA	15
262	TEST EQUIPMENT	5
271	Carry case	15
274	BASE STATIONS ACCS	10
276	XTL5000 series consolette	27.5
277	SMARTX	15
280	ZONE CONTROLLER MANAGER	25
281	ZONE MGR USER INTERFACE	25
291	MOBILE DROPSHIP	15
320	XTS5000	27.5
322	CML CONSOLE MCC5500	15
328	CENTRACM II ELECT SP	10
329	Site packages- site on wheels - outdoor cabinets	15

Project O081801
Contract Change #22

330	CORRECTIONS MGMT SOFTWARE	5
333	PREMIER CAD SOFTWARE	5
370	NETRMS	5
372	SPEAKER MICROPHONES	15
374	ASTRO CONSOLETTTE	15
381	WNG RNC SW	5
382	Fixed Data Software & Licenses	15
403	Data controllers	15
404	VORTEX / MEGG	25
407	XTS2500 - UHF AND VHF	27.5
417	FIXED ACCESSORIES	15
424	KVL, CIU, DIGITACS	20
425	L Core	15
426	APX4000 PORTABLE	25
430	FLASHPORT SFTWR UPGRADE	10
443	MCC7500 CONSOLE	25
448	ANALOG QUANTAR	25
453	CGISS BATTERIES	15
457	RF distribution tower top amps & receiver multicouplers	10
469	Fixed Data - NFM HW	15
470	APX7000 PORTABLE	25
471	APX4500/APX2500	25
476	SCHAUMBURG ACCESSORIES	20
481	APX6000 PORTABLE	25
488	Optimized Video Security (OVS)	7
495	PDG HARDWARE	25
500	XTL5000 7/800 MHZ	27.5
503	VRM500	10
509	ASTRO QUANTAR	25
512	MTR3000	15
514	XTL2500 7/800 MHZ	27.5
515	RF distribution tower top amps & receiver multicouplers	10
518	XTL2500 - UHF/VHF	27.5
524	ASTRO DIU	25
527	APX6500 Mobile	25
536	APX Covert Portable	25
537	QTAR SZ ASTRO INTELLIRPT	15
548	PSA MOT PROF SVCS (INCL MCNS)	5
554	MOBILE ANTENNAS	10
562	APX7000XE/ APX FIRE PORTABLE	25
585	XTL5000 - UHF/VFH	27.5
606	Canopy	15
608	NET RMS SOFTWARE	5
617	CLEAR SPECTRA (HIGH) CON	15

Project O081801
Contract Change #22

623	MCS2000	15
637	APX4000Li Portable	25
644	Portable accessories, misc	15
652	APX6500 PORTABLE	25
655	APX7000 PORTABLE	25
656	APX7500 Mobile	25
675	QTAR SZ INTELLIREPEATER	15
683	MESH NETWORKS	15
687	XTS1500/MT1500	27.5
688	SOFTWARE SERVICES	10
702	PREMIER CAD MAINTENANCE	5
706	MOBILE/CONSOLE ACCESSORIES	15
708	SPECIALIZED COMPUTERS/MODEMS FOR RADIO SYSTEM	15
721	XTS5000 PORTABLE	27.5
726	XTL1500 - UHF/VHF	27.5
736	MW810 MOBILE WORKSTATION	15
743	ASTRO RECEIVERS	15
755	APX6000 PORTABLE	25
756	APX6000XE PORTABLE	25
761	APX7500 Console	25
775	XTL1500 - 700/800	27.5
785	CHARGER/RECONDITIONERS	15
850	MOBILE APPS MAINTENANCE	5
877	Master Site Astro	15
879	MOBILE APPS SOFTWARE	5
904	Dropship Point to Multipoint	15
906	Branded Point to Multipoint	15
907	DROPSHIP UNLICENSE POINT TO POINT	15
908	Dropship license Point to Point	15
983	NET RMS MAINTENANCE	5

DEMO OR USED SUBSCRIBER PRICING FOR STATE OF MISSOURI

Motorola demo or used subscriber radio provisions:

- * Radios (when available) will be offered at a minimum of 40% off of current list price
- * Some radios (when available) will be offered at greater than 40% off of current list price
- * This will be based on warranty status, age, overall condition etc.
- * Some radios will have warranty left on them and some will have no warranty.
- * Warranty details will always be provided for the specific unit(s) that are available.
- * Some radios will have accessories with them and some units will have no accessories.
- * Accessory details will always be provided for the specific unit(s) that are available.
- * Demo or used radios by their very nature may show some signs of being used.
- * The radios may or may not be in their original shipping boxes.
- * Quantities of demo or used radios will always be limited.
- * There are no assurances that any specific model will ever be available in the demo or used pool.