

Council Action:	
Approved: <input checked="" type="checkbox"/>	Denied: <input type="checkbox"/>
Date of Action: 2/11/19	
Verified by: <i>Jamerun</i>	

**CITY COUNCIL ACTION MEMORANDUM**

**AM No. 19-05: Contract Award to Motorola Solutions in the amount of \$850,421 for a 700-MHz Motorola Trunked AWARN-Switched Radio Transmitter Site and Related Components for the Police Department.**

Originator: Public Works Director  
 Date: January 30, 2019

Agenda of: February 11, 2019

Route to:	Department Head	Signature	Date
X	Public Works Director	<i>[Signature]</i>	1/29/19
X	Police Chief	<i>[Signature]</i>	1-30-19
X	Finance Director	<i>[Signature]</i>	1-29-19
X	Deputy Administrator	<i>[Signature]</i>	1/30/19
X	City Clerk	<i>[Signature]</i>	1/30/19

Reviewed by Mayor Bert L. Cottle: *[Signature]* 1/30/2019

**Fiscal Impact:**  Yes      **Funds Available:**  Yes

**Account name/number:** WWCN Project/Federal 110-4210-420.45-38 \$773,627  
 WWCN Project/City 110-4210-420.45-39 \$76,794

**Attachments:** Motorola Solutions Proposal Summary (15 pages)

**Summary Statement:** This contract award is proposed in accordance with Wasilla Municipal Code 5.08.110.B.8 for contracts that have been awarded through other government agencies as described in Action Memorandum 19-04. This proposal upgrades the Police Department’s single-band radio communication system to a multi-band communication system as part of the Wasilla Wireless Communication Project. The project includes one (1) 6 Channel 700 MHz ASR Site and Antenna System, two (2) 7/800 APX 7500 700 MHz Consolettes and Antenna System, thirty (30) VHF/7/800 APX 8000 Dual Band Portable Radios; and thirty (30) VHF/7/800 APX 8500 Dual Band Mobile Radios and related components.

This project is funded through the City’s WWCN Federal Grant and associated City match in the combined amount of \$850,421.

**Staff Recommendation:** Adopt AM No.19-05.

Motorola Solutions  
10680 Trenea Street, Suite #200  
San Diego, CA. 92131  
USA

January 29, 2019

Mr. Joel Butcher  
City of Wasilla  
1800 E. Parks Hwy  
Wasilla, Alaska 99654

Subject: 6 Channel 700MHz ASR Cottonwood Site Add On to MOA

Dear Mr. Butcher:

Motorola Solutions, Inc. ("Motorola Solutions") is pleased to have the opportunity to provide the City of Wasilla with quality communications equipment and services. The Motorola Solutions project team has taken great care to propose a solution that will meet your needs and provide unsurpassed value.

To best meet the functional and operational specifications of this solicitation, Motorola Solution response includes a combination of hardware, software, and services. Specifically, this solution is for the 6 Channels ASR Site Add On and provides:

- 1) 6 Channel 700MHz ASR Site and Antenna System
- 2) 7/800 APX 7500 700MHz Consolettes and Antenna System
- 30) VHF/7/800 APX 8000 Dual Band Portable Radios
- 30) VHF/7/800 APX 8500 Dual Band Mobile Radios

This Proposal consists of this cover letter together with its Exhibits. This Proposal is based on the terms and conditions of the existing Communications System Agreement dated February 10, 2017 between the City of Wasilla and Motorola Solutions. The City of Wasilla may accept this Proposal by delivering to Motorola Solutions a Purchase Order or Contract Award incorporating by reference this Proposal. This proposal shall remain valid until March 29, 2019.

Alternatively, Motorola Solutions would be pleased to address any concerns the City of Wasilla may have regarding the proposal. Any questions can be directed to your Manufacturer's Representative Gary Peters at 907 830 4324 or your Motorola Solutions Account Executive, Joe Piksa, at 425 218 8414.

We thank you for the opportunity to furnish the City of Wasilla with "best in class" solutions and we hope to continue our relationship by implementing this project. Our goal is to provide you with the best products and services available in the communications industry.

Sincerely,  
Motorola Solutions, Inc.



Larsen Grabenkort  
Area Sales Manager

City of Wasilla  
Cottonwood 700 Site

January 29, 2019  
Use or disclosure of this proposal is subject  
to the restrictions on the cover page.

SECTION 1

# SYSTEM DESCRIPTION

## 1.1 OVERVIEW

Motorola Solutions is pleased to offer a proposal to add an ASTRO 25 Stand-Alone Repeater (ASR) site to the existing Motorola Solutions 7.17 ASTRO 25 MOA AWARN system. The proposed solution consists of a P25 Phase I Stand-alone Radio Site with six (6) 700MHz Channels. Subscribers capable of 700 MHz P25 trunking operation are required to use the proposed site. APX 8000 series dual band (7/800/VHF) subscribers – 30 mobiles and 30 portables are proposed.

In addition to the 700 MHz site, two (2) 700 MHz APX Consolettes, associated antenna systems (excluding tower mounting hardware), and four (4) additional talkgroup licenses for the existing Verint radio logger are proposed for Matcom dispatch. 700 MHz site equipment spares and a ZoneWatch Network Management license are proposed as options.

The 700 MHz Trunked Repeater Site will connect directly to the AWARN system via customer provided backhaul links. The proposed site router used to connect to MOA is non-redundant. The site will use a Tower Top Amplifier (TTA) for optimal receive performance.

The proposed RF platform for this site is Motorola Solutions' G-series portfolio of products. Our portfolio of RF stations, receivers, site controllers and comparators is designed to maximize channel up-time, simplify system technology refresh, enable smaller, more efficient site design, and minimize the cost of ownership. G-series site equipment has many features built in to support ease of service. Six basic modules create the entire G-series platform resulting in reduced spare parts inventory. Modules have front access to improve serviceability with hot-swap support to ensure channels are back on the air in minimum possible time.



## 1.2 SYSTEM COMPONENTS

### 1.2.1 Components Proposed

This proposal includes the following P25 Phase I **Radio Site Infrastructure** Equipment for the Cottonwood 700 MHz trunking repeater site:

- (1) 700MHz GTR8000 Expandable Site Sub-System (ESS):
  - Six (6) Base Radios
  - P25 Phase I FDMA (1 Control Channel /5 Voice Channel)
  - 700MHz Transmitter Combiner, Receiver Multicoupler and Filter
  - Integrated GGM8000 Site Router/Gateway
  - Redundant Site Controller
  - Redundant LAN
  - Configured for DC Power
  - Pre-packaged in a 7' standard 19" Rack
- (1) SDM3000 Network Fault Management RTU
- (1) 48VDC DC Breaker Panel
- (1) T1 Surge Suppression Device
- (1) 700MHz Antenna System:
  - Tower Top Amplifier System (TTA)
  - Two (2) 6dBd Low PIM, Collinear Omni-Directional Antennas with Electrical Downtilt (TX & RX)
  - 150' of 7/8" TX and 150' of RX Coax, 150' of 1/2" TTA Test Line, Hangers, Ground Kits and Surge Protection Devices (SPDs)

In addition, Motorola Solutions has included following software licenses for integrating the site into the MOA System.

- (1) Phase I FDMA Site License
- (1) Classic P25 Data Site License
- (1) 500 pack Subscriber Licenses

This proposal includes the following **dispatch equipment** for Matcom:

- (2) APX7500 700 MHz Consolettes
  - P25 Trunking Operation
  - AES Encryption
  - Full Keypad
  - 3 Year Essential Service
  - 700 MHz Antenna system with 150' of 7/8" Coax, hangers, ground kits and SPD

At the time of generating this proposal, Motorola Solutions does not offer a dual band Consolette. Should an appropriate dual band capable Consolette become available at the time of ordering, Motorola Solutions will order and ship this new Consolette and associated VHF antenna systems (2 sets of VHF antennas, 150' of 7/8 coax, hangers, ground kits and SPD)

- (4) Additional Talkgroup licenses for the existing Verint Radio Recorder
  - Audiolog addition of 4 talkgroups to dongle #20523



This proposal includes the following **Subscriber Equipment**:

- (30) APX 8000 Portables
  - Model 3.5
  - P25 Trunking Operation
  - 7/800 and VHF bands
  - IV&D (Classic Data)
  - Programming over P25 (OTAP)
  - Over the Air Re-keying (OTAR) with AES Encryption
  - WiFi
  - Single Unit Charger
  - IMPRES RSM with 3.5mm jack
  - Carry case with swivel belt loop
  - 3 year Essential Service
  - Standard IMPRES LIION 3400 MAH battery
  - Standard all-band/GPS antenna
- (2) Portable Multi unit chargers are also proposed
- (3) Portable programming cables are included
- (60) Spare portable batteries (IMPRES LIION 3400 MAH)
- (30) Receive –only Earpieces with translucent tube
- (30) APX 8500 Mobiles
  - Mid power mobile
  - P25 Trunking Operation
  - 7/800 and VHF bands
  - IV&D (Classic Data)
  - Programming over P25 (OTAP)
  - Over the Air Re-keying (OTAR) with AES Encryption
  - WiFi
  - O5 Control Head
  - Remote mount with up to 17' of cable
  - All band antenna
  - GPS antenna
  - Standard palm microphone
  - Standard auxiliary speaker 7.5 W
  - 3 year Essential Service
- (3) Mobile programming cables are included
- Master System Key Starter Kit
- Customer Programming Software (CPS)
- (1) Key Variable Loader KVL 4000
  - ASTRO 25 Operation
  - AES Encryption
  - Sleeve Cover
  - Charger

This proposal includes the following **Optional Equipment**:

- One (1) set of 700 MHz Site Spares
- One (1) ZoneWatch Network Management Application License

SECTION 2

# STATEMENT OF WORK

Motorola Solutions is proposing to the City of Wasilla the installation and configuration of the following equipment at the specified locations.

Site Name	Major Equipment
Cottonwood Site	1 – 6 Channel 7/800 ASR Trunking Site
City of Wasilla	2 - 7/800 APX Consolettes
City of Wasilla	30 - VHF/7/800 APX 8000 Portable Radios (Radios Only)
City of Wasilla	30 - VHF/7/800 APX 8500 Mobile Radios (Radios Only)

The document delineates the general responsibilities between Motorola Solutions and the City of Wasilla as agreed to by contract.

## 2.1 MOTOROLA SOLUTIONS RESPONSIBILITIES

Motorola Solutions' general responsibilities include the following:

- ◆ Perform the installation of the Motorola Solutions supplied equipment described above.
- ◆ Schedule the implementation of the ASR Site in agreement with the City of Wasilla.
- ◆ Coordinate the activities of all Motorola Solutions subcontractors under this contract.
- ◆ Administer safe work procedures for installation.
- ◆ Provide the City of Wasilla with the appropriate system interconnect specifications.

## 2.2 CITY OF WASILLA RESPONSIBILITIES

The City of Wasilla will assume responsibility for the installation and performance of all other equipment and work necessary for completion of this project that is not provided by Motorola Solutions. The City of Wasilla's general responsibilities include the following:

- ◆ Provide all buildings, equipment shelters, and towers required for system installation
- ◆ Insure communications sites meet space, grounding, power, and connectivity requirements for the installation of all equipment.
- ◆ Obtain all licensing, site access, or permitting required for project implementation.
- ◆ Obtain frequencies for project as required.
- ◆ Provide required system interconnections.
- ◆ Responsible for all Antenna and Line System installations.
- ◆ Responsible for all APX Portable and Mobile subscriber programming and installations.
- ◆ Responsible for Coverage Design based on site location and tower elevation.
- ◆ The City of Wasilla will provide a dedicated delivery point, such as a warehouse, for receipt, inventory and storage of equipment prior to delivery to the site(s).
- ◆ Coordinate the activities of all the City of Wasilla's vendors or other contractors.

## 2.3 ASSUMPTIONS

Motorola Solutions has made several assumptions in preparing this proposal, which are noted below.

- ◆ All existing sites or equipment locations will have sufficient space available for the system described as required/specified by R56.
- ◆ All existing sites or equipment locations will have adequate electrical power in the proper phase and voltage and site grounding to support the requirements of the system described.
- ◆ All existing towers will have adequate space and size to support the antenna network requirements of the system described.
- ◆ Any site/location upgrades or modifications are the responsibility of the City of Wasilla.
- ◆ Any tower stress analysis or tower upgrade requirements are the responsibility of the City of Wasilla.
- ◆ Antenna and Line System installations will be the responsibility of the City of Wasilla.
- ◆ APX Portable and Mobile subscriber programming and installations will be the responsibility of the City of Wasilla.
- ◆ Coverage Design based on site location and tower elevation and is the responsibility of the City of Wasilla.
- ◆ Approved FCC licensing provided by the City of Wasilla.
- ◆ Approved local, State or Federal permits as may be required for the installation and operation of the proposed equipment are the responsibility of the City of Wasilla.
- ◆ Any required system interconnections not specifically outlined here will be provided by the City of Wasilla. These may include dedicated phone circuits, microwave links or other types of connectivity.
- ◆ No coverage guarantee is included in this proposal.
- ◆ Motorola Solutions is not responsible for interference caused or received by the Motorola Solutions provided equipment except for interference that is directly caused by the Motorola Solutions provided transmitter(s) to the Motorola Solutions provided receiver(s). Should the City of Wasilla's system experience interference, Motorola Solutions can be contracted to investigate the source and recommend solutions to mitigate the issue.



SECTION 3

# EQUIPMENT LIST

This section lists the equipment necessary for the proposed solution.

QTY	NOMENCLATURE	DESCRIPTION
1	SQM01SUM0273	MASTER SITE CONFIGURATION
1	CA02629AC	ADD: EXPAND 7.17 M CORE
1	UA00407AA	ADD: CLASSIC DATA-P25 TRNK SITE
1	UA00153AA	ADD: ASTRO 25 FDMA SITE LICENSE
1	UA00152AA	ADD:500 RADIO USER LICENSES
1	SQM01SUM7054	GTR 8000 EXPANDABLE SITE SUBSYSTEM
1	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
1	CA00855AA	ADD: 700/800 MHZ
1	X306AC	ADD: QTY (6) GTR 8000 BASE RADIOS
6	X591AE	ENH: ASTRO 25 SITE REPEATER SW
1	CA01706AA	ADD: ADD: GGM 8000 GATEWAY
1	CA00862AA	ADD: SITE & CABINET RMC W/CAPABILITY OF 7-24 BRS
1	CA00879AA	ADD: PRIMARY 6 PORT CAVITY COMBINER
1	CA00882AA	ADD: 700 MHZ TX FILTER W/PMU
2	CA00303AA	ADD: QTY (1) SITE CONTROLLER
2	CA03177AA	ADD: ASTRO SITE REPEATER SC SW
1	CA01402AA	ADD: 7.0 FT OPEN RACK
1	CA02686AA	ADD: AC DC POWER DISTRIBUTION
1	T8343	GSERIES SOFTWARE LICENSING
6	UA00401AA	ADD: GSERIES BR-P25 TRNK ST RPTR
2	UA00406AA	ADD: GSERIES SC-P25 TRNK ST RPTR
1	F4544	SITE MANAGER ADVANCED
1	VA00872	ADD: SDM ASTRO RTU FW CURR ASTRO REL
3	V592	AAD TERM BLCK & CONN WI
1	VA00905	ADD:24/48 VDC PS TO SM
1	DS428E83I01C48	CONTROL MONITORING UNIT, NON-DIVERSITY,796-824 MHZ, SNMP, 48 VDC
1	DS428E83I01T	TTA, NON-DIVERSITY, 796-824 MHZ, REDUNDANT LNA, TEST PORT, BYPASS
1	DS8983N0103	FILTER, 798-824 MHZ, BP, BW 3 MHZ
1	DSWLT9072101001	1U 6A/6B -/+24-48VDC SPLIT BUS BREAKER PANEL, 100A TRIMM
6	DSWL030017750I	BREAKER, 20 AMP TRIMM
4	DSWL030017750C	BREAKER 2 AMP TRIMM





1	DSTSJADP	RACK MOUNT GROUND BAR, 19 IN FOR TSJ AND WPH SERIES DATA SPDS
1	DSTSJ48CLT	SPD, RJ-45 OR HARDWIRE CONNECTED FOR T1/E1, PROTECTS 4 WIRES
1	DVN4046B	MASTER SYSTEM KEY STARTER KIT
1	HKVN4289A	SOFTWARE,APX CPS DOWNLOAD - CURRENT VERSION
1	DLN6455	CONFIGURATION/SERVICE SOFTWARE
3	HKN6163C	CABLE, DATA, USB, 1-1/2M, XTL5000
3	TKN8531C	CABLE FOR RNC, DIU MGE G
3	PMKN4012B	PORTABLE PROGRAMMING CABLE
1	DSCC80706T3	OMNI, CORP COLLINEAR, 6DDBD, 746-870MHZ,3 DEG DT PIM & 25KW PIP RATED
2	DSUC114	ANTENNA CLAMP 60 TO 115MM
15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
2	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
2	TDN9289	221213 CABLE WRAP WEATHERPROOFING
150	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER,7/8 IN, BLACK PE JACKET
2	DSA5DFD	D-CLASS 7-16 DIN FEMALE FOR AVA5-50 CABLE
4	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
5	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DSTSXDFMBF	RF SPD, 698-2700MHZ DC BLOCK HIGH PWR, DIN FEM/MALE BI-DIR W/ BRACKET
1	DSGSAKITD	GROUND STRAP KIT - DIN
25	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
1	DSCC80706T3	OMNI, CORP COLLINEAR, 6DDBD, 746-870MHZ,3 DEG DT PIM & 25KW PIP RATED
2	DSUC114	ANTENNA CLAMP 60 TO 115MM
15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
5	TDN9289	221213 CABLE WRAP WEATHERPROOFING
10	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
4	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
150	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER,7/8 IN, BLACK PE JACKET
2	DSA5NFS	N FEMALE FOR AVA5-50 CABLE
4	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP



150	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1089	L4TNF-PSA TYPE N FEMALE PS FOR 1/2 IN CABLE
4	DSSG1212B2U	SG12-12B2U, SUREGROUND 1/2", 48"
1	DSL4SGRIP	L4SGRIP SUPPORT HOIST GRIP 1/2" LDF
5	MDN6816	STD HANGERS FOR 1/2IN CABLE & EW180/EW220/EW-HANGER KIT STAINLESS-10PK
5	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DS1090501WA	RF SPD, 700-1000MHZ BROADBAND 15 VDC PASS NM ANT, NF EQUIP PIP, ASIG
1	DS1090501WA	RF SPD, 700-1000MHZ BROADBAND 15 VDC PASS NM ANT, NF EQUIP PIP, ASIG
25	L1700	FSJ1-50A CABLE: 1/4" SUPERFLEX POLY JKT PER FOOT
2	DDN9769	F1PNM-HC 1/4" TYPE N MALE CONNECTOR FOR FSJ1-50A CABLE
25	L1702	FSJ4-50B CABLE: 1/2" SUPERFLEX POLY JKT PER FOOT
2	DDN9682	F4PNMV2-HC 1/2" TYPE N MALE PLATED CONNECTOR
1	DLN6781	FRU: POWER SUPPLY
1	DLN6895	FRU: PA 7/800 MHZ
1	DLN6885	FRU: XCVR 7/800 MHZ V2
1	DLN6898	FRU: FAN MODULE
1	DLN6634	FRU: 700/800 MHZ SITE LNA
1	DLN1306	FRU: 700/800 MHZ CABINET RMC MODULE
1	DLN6966	FRU: GCP 8000/GCM 8000/GPB 8000
1	SQM01SUM0205	GGM 8000 GATEWAY
1	CA01619AA	ADD: DC POWER
1	SQM01SUM0273	MASTER SITE CONFIGURATION
1	CA02629AC	ADD: EXPAND 7.17 M CORE
1	UA00141AA	ADD: ZONEWATCH GRID & CTRL
2	L30URS9PW1 N	APX CONSOLETTTE 7/800
2	QA01648	ADD: ADVANCED SYSTEM KEY - HARDWARE KEY
2	G806	ADD: ASTRO DIGITAL CAI OPERATION
2	G51	ENH: SMARTZONE OPERATION APX
2	G361	ENH: P25 TRUNKING SOFTWARE APX
2	GA00469	ENH: EXTENDED DISPATCH APX CONSOLETTTE
2	W969	ADD: MULTIPLE KEY ENCRYPTION OPERATION
2	G843	ADD: AES ENCRYPTION APX
2	L999	ADD: FULL FP W/05/KEYPAD/CLOCK/VU
2	W382	ADD: CONTROL STATION DESK GCAI MIC
2	CA01598	ADD: AC LINE CORD US
2	G78	ADD: 3Y ESSENTIAL SERVICE



2	DSCONV	DUAL BAND CONVERSION (IF AVAILABLE AT TIME OF ORDERING)
2	HKN6233C	APX CONSOLETTA RACK MOUNT KIT
1	HKN6184C	CABLE CH, PROGRAMMING,USB
1	DSRMP420B	SPD, TYPE 3, 120V RACK MOUNT, 20A STD PLUG-IN INPUT W/ 4 OUTLETS PER
1	DSCC80706	OMNI, CORPORATE COLLINEAR, 6 DBD, 746-870 MHZ, PIM & 25 KW PIP RATED
2	DSUC114	ANTENNA CLAMP 60 TO 115MM
15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
2	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
2	TDN9289	221213 CABLE WRAP WEATHERPROOFING
150	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER,7/8 IN, BLACK PE JACKET
2	DSA5DFD	D-CLASS 7-16 DIN FEMALE FOR AVA5-50 CABLE
4	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
5	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DSTSXFMBF	RF SPD, 698-2700MHZ DC BLOCK HIGH PWR, DIN FEM/MALE BI-DIR W/ BRACKET
1	DSGSAKITD	GROUND STRAP KIT - DIN
25	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
1	DSCC80706	OMNI, CORPORATE COLLINEAR, 6 DBD, 746-870 MHZ, PIM & 25 KW PIP RATED
2	DSUC114	ANTENNA CLAMP 60 TO 115MM
15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
2	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
2	TDN9289	221213 CABLE WRAP WEATHERPROOFING
150	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER,7/8 IN, BLACK PE JACKET
2	DSA5DFD	D-CLASS 7-16 DIN FEMALE FOR AVA5-50 CABLE
4	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
5	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DSTSXFMBF	RF SPD, 698-2700MHZ DC BLOCK HIGH PWR, DIN FEM/MALE BI-DIR W/ BRACKET
1	DSGSAKITD	GROUND STRAP KIT - DIN
25	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE



1	DSANT140F2	TELEWAVE (135-165MHZ) WIDEBAND ANTENNA
15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
2	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
2	TDN9289	221213 CABLE WRAP WEATHERPROOFING
150	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER, 7/8 IN, BLACK PE JACKET
2	DSA5DFD	D-CLASS 7-16 DIN FEMALE FOR AVA5-50 CABLE
4	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
5	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DSVHF50DMAPGR	RF SPD, 100-512MHZ, DC BLOCK HIGH POWER DIN MALE ANT, DIN FEMALE EQUIP
1	DSGSAKITD	GROUND STRAP KIT - DIN
25	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
1	DSANT140F2	TELEWAVE (135-165MHZ) WIDEBAND ANTENNA
15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
2	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
2	TDN9289	221213 CABLE WRAP WEATHERPROOFING
150	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER, 7/8 IN, BLACK PE JACKET
2	DSA5DFD	D-CLASS 7-16 DIN FEMALE FOR AVA5-50 CABLE
4	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
5	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DSVHF50DMAPGR	RF SPD, 100-512MHZ, DC BLOCK HIGH POWER DIN MALE ANT, DIN FEMALE EQUIP
1	DSGSAKITD	GROUND STRAP KIT - DIN
25	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
4	DDN2020	TRUNKED RADIO TALKGROUP (1 PER TG)
30	H91TGD9PW7 N	APX 8000 ALL BAND PORTABLE MODEL 3.5
30	QA05509	DEL: DELETE UHF BAND
30	Q806	ADD: ASTRO DIGITAL CAI OPERATION
30	H38	ADD: SMARTZONE OPERATION
30	Q361	ADD: P25 9600 BAUD TRUNKING

30	G996	ADD: PROGRAMMING OVER P25 (OTAP)
30	QA09001	ADD: WIFI CAPABILITY
30	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
30	Q498	ENH: ASTRO 25 OTAR W/ MULTIKEY
30	Q629	ENH: AES ENCRYPTION
30	H301	DEL: DELETE BELT CLIP/BASIC CARRY HOLDER
30	Q58	ADD: 3Y ESSENTIAL SERVICE
30	QA01648	ADD: ADVANCED SYSTEM KEY - HARDWARE KEY
30	NNTN8860A	CHARGER, SINGLE-UNIT, IMPRES 2, 3A, 115VAC, US/NA
30	PMMN4062A	IMPRES RSM, NOISE CANC. EMERGENCY BUTTON 3.5MM JACK IP54
30	PMLN7904A	LEATHER CARRY CASE WITH D-RINGS AND 2.75" SWIVEL BELT LOOP
2	NNTN8844A	CHARGER, MULTI-UNIT, IMPRES 2, 6-DISP, NA/LA-PLUG, ACC USB CHGR
60	PMNN4486	BATT IMPRES 2 LIION R IP68 3400T
30	RLN4941A	RECEIVE ONLY EARPIECE W/TRANSLUCENT TUBE
30	M37TSS9PW1 N	APX8500 ALL BAND MP MOBILE
30	GA00250	ADD: WIFI/GNSS FLEXIBLE CABLE LMR195
30	GA05509	DEL: DELETE UHF BAND
30	G806	ENH: ASTRO DIGITAL CAI OP APX
30	G51	ENH: SMARTZONE OPERATION APX
30	G361	ENH: P25 TRUNKING SOFTWARE APX
30	G442	ADD: O5 CONTROL HEAD
30	G444	ADD: APX CONTROL HEAD SOFTWARE
30	G67	ADD: REMOTE MOUNT MP
30	GA01513	ADD: ALL BAND MOBILE ANTENNA (7/8/V/U)
30	GA00235	ADD: NO GPS ANTENNA NEEDED
30	W22	ADD: STD PALM MICROPHONE APEX
30	B18	ADD: AUXILARY SPKR 7.5 WATT
30	GA01517	DEL: NO J600 ADAPTER CABLE NEEDED
30	G78	ADD: 3Y ESSENTIAL SERVICE
30	G610	ADD: REMOTE MOUNT CBL 30 FEET
30	GA09001	ADD: WI-FI CAPABILITY
30	GA09007	ADD: OUT OF THE BOX WI-FI PROVISIONING
30	G996	ENH: OVER THE AIR PROVISIONING
30	G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
30	G843	ADD: AES ENCRYPTION APX
30	QA01648	ADD: ADVANCED SYSTEM KEY - HARDWARE KEY
30	H1919	MULTIPLEXER QMA
30	HAF4016	ANTENNA (762-870 MHZ) 1/4 WAVE
30	HAD4022A	ANTENNA 132-174 3DB GAIN



1	T7537B	KVL 4000 PDA SNAP-ON
1	U239AD	ADD: ASTRO 25 MODE
1	CA00182AP	ADD: AES ENCRYPTION SOFTWARE
1	QA01767AA	ADD: KVL RADIO AUTHENTICATION
1	X795AJ	ADD: ASN MODE
1	CA00243AG	ADD: ADP PRIVACY
1	CA01598AA	ADD: AC LINE CORD US
1	C543	ADD: CABLE FOR RNC, DIU, MGEN
1	C724	CABLE, KEYLOAD
1	C725AA	ADD: KEYLOAD CABLE FOR APX PORTABLE
1	C954	ADD: CABLE FOR SPECTRA/SPECTRO
1	CA01603AA	ADD: USB COMM/CHARGE CABLE W/ CUP
1	CA02187	ADD: KEYLOADING CABLE ADAPTER (GCAI)
1	CA01803	ADD: KVL 4000 SLEEVE COVER
1	CKN6324	KVL 3000 DB-9/MODEM CABLE



SECTION 7

# PRICING

Motorola Solutions is pleased to provide the following equipment and services to the City of Wasilla:

Equipment and Services	Pricing
City of Wasilla Equipment	\$943,449
City of Wasilla Equipment Discount	(\$215,452)
City of Wasilla Discounted Equipment	\$727,996
City of Wasilla System Implementation	\$272,499
City of Wasilla Tax (No Tax applied for Equipment or Services)	\$0
City of Wasilla Total System	\$1,000,495
Customer Loyalty System Incentive if Order is Received by: March 29, 2019	(\$150,074)
City of Wasilla Grand Total with System Incentive	\$850,421

## 7.1 PAYMENT TERMS

Except for a payment that is due on the Effective Date, the City of Wasilla will make payments to Motorola Solutions within thirty (30) days after the date of each invoice. The City of Wasilla will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution. Payment for the System purchase will be in accordance with the following milestones.

System Purchase (excluding Subscribers, if applicable)

- 30% of the Contract Price for mobilization due at Contract Execution (Effective Date);
- 25% of the Contract Price upon shipment of equipment;
- 25% of the Contract Price upon installation of equipment;
- 15% of the Contract Price upon System Acceptance or start of Beneficial Use, whichever occurs first;
- 5% of the Contract Price upon Final Project Completion.

If Subscribers are purchased, 100% of the Subscriber Contract Price will be invoiced upon shipment (as shipped).

Motorola Solutions may make partial shipments of Equipment and will request payment upon shipment of such Equipment. In addition, Motorola Solutions will invoice for installations completed on a site-by-site basis or when professional services are completed, when applicable. The value of the Equipment shipped/services performed will be determined by the value of the shipped/services performed as a percentage of the total milestone value. Unless otherwise specified, contract discounts are based upon all items proposed and overall System package. For invoicing purposes only, discounts will be applied proportionately to the FNE and Subscriber Equipment values to total Contract Price. Overdue invoices will bear simple interest at the maximum allowable rate.



SECTION 8

# CONTRACTUAL DOCUMENTATION

This Proposal is based on the terms and conditions of the existing Communications System Agreement dated February 10, 2017 between the City of Wasilla and Motorola Solutions. The City of Wasilla may accept this Proposal by delivering to Motorola Solutions a Purchase Order or Contract Award incorporating by reference this Proposal.

