ELIGIBLE PURCHASER ORDER NO.

BETWEEN
THE CITY OF LOS ANGELES AND
MOTOROLA SOLUTIONS INC.

THIS ELIGIBLE PURCHASER ORDER ("Eligible Purchase Order") is made and entered into by and between the CITY OF LOS ANGELES, a municipal corporation ("City"), acting by and through its Board of Harbor Commissioners ("Board") and MOTOROLA SOLUTIONS INC. ("MOTOROLA"), a Delaware Corporation, 500 W. Monroe Street, 44th Floor, Chicago, IL, 60661 ("CONTRACTOR").

WHEREAS, City requires an updated VHF radio system for use by the City's Harbor Department Port Pilots Division to assist in the navigation of ocean going vessels at the Port of Los Angeles; and

WHEREAS, the Services to be provided herein are of a professional, expert, technical, and of a temporary and occasional character; and

WHEREAS, City requires the professional, expert and technical services of CONTRACTOR on a temporary or occasional basis to assist the City in providing the components of and installing the system; and

WHEREAS, CONTRACTOR possesses extensive experience in dealing with installation, development, maintenance, and repair of the radio system and related software; and

WHEREAS, CONTRACTOR, by virtue of training and experience, is well qualified to provide such services to City; and

WHEREAS, the proprietary nature of the VHF Radio system, especially the software, require the support, expertise, proprietary knowledge and tools of the CONTRACTOR, and there are no known Los Angeles Harbor Department ("Harbor Department") personnel or City job classifications with the expertise to perform the proposed Services nor is it feasible to employ such personnel on a temporary or occasional basis; and

WHEREAS, CONTRACTOR is the system integrator for the Port Police Division's Computer Aided Dispatch (CAD) system and Records Management System (RMS) and 700 MHz Radio System Upgrade project. The Port Pilot Service Division's radio upgrade project will leverage both the Port Police CAD and RMS for Global Positioning System (GPS) location viewing, the Port Police 700MHz radio system for GPS data tracking and voice communications and Port Police radio system capabilities for enhanced coverage for both voice and data communications; and

Transmittal 1

WHEREAS, CONTRACTOR is uniquely qualified to integrate the proposed land mobile radio infrastructure for the Port Pilot Service Division's requirements with existing Port Police Division's CAD RMS and radio system functionality for interoperability; and

WHEREAS, the Harbor Department meets the definition of "Eligible Purchasers" under the terms of City Contract No. C-123897 and Motorola Contract No. 1000409608 (the "Master Services Agreement"), as amended, as a department within the City other than LAPD, and therefore has the same rights and responsibilities as LAPD under the Original Agreement with respect to its purchase of services thereunder;

NOW, THEREFORE, IT IS MUTUALLY AGREED AS FOLLOWS:

1. SERVICES TO BE PERFORMED BY CONTRACTOR

A. CONTRACTOR hereby agrees to render to City, as an independent contractor, certain professional, technical and expert services of a temporary and occasional character as set forth in Exhibit A ("Proposal") dated June 7, 2021.

B. CONTRACTOR, at its sole cost and expense, shall furnish all services, materials, equipment, subsistence, transportation and all other items necessary to perform the Proposal. As between City and CONTRACTOR, CONTRACTOR is solely responsible for any taxes or fees which may be assessed against it or its employees resulting from performance of the Proposal, whether social security, payroll or other, and regardless of whether assessed by the federal government, any state, the City, or any other governmental entity.

C. CONTRACTOR acknowledges and agrees that it lacks authority to perform any services outside the Proposal. CONTRACTOR further acknowledges and agrees that any services it performs outside the Proposal are performed as a volunteer and shall not be compensable under this Eligible Purchaser Order.

D. The Proposal shall be performed by personnel qualified and competent in the sole reasonable discretion of the Executive Director or his or her designee ("Executive Director"), whether performance is undertaken by CONTRACTOR or third-parties with whom CONTRACTOR has contracted ("Subcontractors"). Obligations of this Eligible Purchaser Order, whether undertaken by CONTRACTOR or Subcontractors, are and shall be the responsibility of CONTRACTOR. CONTRACTOR acknowledges and agrees that this Eligible Purchaser Order creates no rights in Subcontractors with respect to City and that obligations that may be owed to Subcontractors, including, but not limited to, the obligation to pay Subcontractors for services performed, are those of CONTRACTOR alone. Upon Executive Director's written request, CONTRACTOR shall supply City's Harbor Department ("Department") with all agreements between it and its Subcontractors.

Further, where the Consultant employs Subconsultants under this Agreement, the Consultant shall submit to City, with each monthly invoice, a Monthly Subconsultant Monitoring Report Form (Exhibit B) listing SBE/VSBE/MBE/WBE/DVBE/OBE amounts. CONTRACTOR shall provide an explanation for any item that does not meet or exceed the anticipated participation levels for this Agreement, with specific plans and

recommendations for improved Subconsultant utilization. Invoices will not be paid without a completed Monthly Subconsultant Monitoring Report Form. All invoices are subject to audit. CONTRACTOR is not required to submit support for direct costs items of $25 or less.

2. SERVICES TO BE PERFORMED BY CITY

A. City shall furnish CONTRACTOR, upon its request, all documents and papers in possession of City which may lawfully be supplied to CONTRACTOR and which are necessary for it to perform its obligations.

B. The Executive Director or his or her designee is designated as the contract administrator for City and shall also decide any and all questions which may arise as to the quality or acceptability of the services performed and the manner of performance, the interpretation of instructions to CONTRACTOR and the acceptable completion of this Eligible Purchaser Order and the amount of compensation due.

C. CONTRACTOR shall provide Executive Director with reasonable advance written notice if it requires access to premises of Department. Subsequent access rights, if any, shall be granted to CONTRACTOR at the sole reasonable discretion of Executive Director, specifying conditions CONTRACTOR must satisfy in connection with such access. CONTRACTOR acknowledges that such areas may be occupied or used by tenants or contractors of City and that access rights granted by Department to CONTRACTOR shall be consistent with any such occupancy or use.

3. EFFECTIVE DATE AND TERM OF ELIGIBLE PURCHASER ORDER

A. Subject to the provisions of Charter Section 245, the effective date of this Eligible Purchaser Order shall be the date of its execution by Executive Director upon authorization of the Board. CONTRACTOR is aware that the City Council, pursuant to Charter Section 245 of the City of Los Angeles, has the right to review this Eligible Purchaser Order. Accordingly, in no event shall this Eligible Purchaser Order become effective until after the expiration of the fifth Council meeting day after Board action, or the date of City Council's approval of the Eligible Purchaser Order.

B. This Eligible Purchaser Order shall be in full force and effect commencing from the date of execution and shall continue until the earlier of the following occurs:

1. Three (3) years have lapsed from the effective date of this Eligible Purchaser Order;

or

2. Board, in its sole discretion, terminates and cancels all or part of this Eligible Purchaser Order for any reason upon giving to CONTRACTOR thirty (30) days' notice in writing of its election to cancel and terminate this Eligible Purchaser

Order in accordance with the terms of Section 4.3, "Termination for Convenience" of City Contract No. C-123897, as amended.

4. TERMINATION DUE TO NON-APPROPRIATION OF FUNDS

This Eligible Purchaser Order is subject to the provisions of the Los Angeles City Charter which, among other things, precludes the City from making any expenditure of funds or incurring any liability, including contractual commitments, in excess of the amount appropriated thereof.

The Board, in awarding this Eligible Purchaser Order, is expected to appropriate sufficient funds to meet the estimated expenditure of funds through June 30 of the current fiscal year and to make further appropriations in each succeeding fiscal year during the life of the Eligible Purchaser Order. However, the Board is under no legal obligation to do so.

The City, its boards, officers, and employees are not bound by the terms of this Eligible Purchaser Order or obligated to make payment thereunder in any fiscal year in which the Board does not appropriate funds therefore. The CONTRACTOR is not entitled to any compensation in any fiscal year in which funds have not been appropriated for the Eligible Purchaser Order by the Board.

Although the CONTRACTOR is not obligated to perform any work under the Eligible Purchaser Order in any fiscal year in which no appropriation for the Eligible Purchaser Order has been made, the CONTRACTOR agrees to resume performance of the work required by the Eligible Purchaser Order on the same terms and conditions for a period of sixty (60) days after the end of the fiscal year if an appropriation therefore is approved by the Board within that 60-day period. The CONTRACTOR is responsible for maintaining all insurance and bonds during this 60-day period until the appropriation is made; however, such extension of time is not compensable.

If in any subsequent fiscal year funds are not appropriated by the Board for the work required by the Eligible Purchaser Order, the Eligible Purchaser Order shall be terminated. However, such termination shall not relieve the parties of liability for any obligation previously incurred.

5. COMPENSATION AND PAYMENT

A. As compensation for the satisfactory performance of the services required by this Eligible Purchaser Order, City shall pay and reimburse CONTRACTOR at the rates set forth in Exhibit A.

B. The maximum payable under this Eligible Purchaser Order, including reimbursable expenses, shall be One Million Three Hundred Sixty-eight Thousand Five Hundred Seventy Dollars ($1,368,570.00).

C. CONTRACTOR shall submit invoices in quadruplicate to City monthly following the effective date of this Eligible Purchaser Order for services performed during the preceding month. Each such invoice shall be signed by the CONTRACTOR and shall include the following certification:

> "I certify under penalty of perjury that the above bill is just and correct according to the terms of Eligible Purchaser Order No. _____ and that payment has not been received. I further certify that I have complied with the provisions of the City's Living Wage Ordinance.
>
> _____"
> (CONTRACTOR's Signature)

D. CONTRACTOR must include on the face of each itemized invoice submitted for payment its Business Tax Registration Certificate number. No invoice will be processed for payment by City without this number shown thereon. All invoices shall be approved by the Executive Director or his or her designee prior to payment.

A statement describing the services performed, deliverable, or milestone completed, as applicable, must accompany each invoice. Funds shall not be released until City has approved the services performed, deliverable, or milestone completed which approval shall not be unreasonably withheld or delayed. The payments to CONTRACTOR shall thereafter be made upon submission of invoices as follows:

Invoices, on CONTRACTOR's letterhead (and if a Project Manager has been assigned, signed by the Project Manager for CONTRACTOR) shall be delivered to the authorized representative for City within fifteen (15) calendar days after the services have been performed, the deliverable has been provided, or the milestone has been completed, as applicable. If the services will be performed over a time period exceeding three (3) months, then Motorola may invoice monthly on an estimated percentage of completion basis or in accordance with the payment milestone schedule if one is included in the Proposal. CONTRACTOR must include the following information on each invoice:

Date of invoice
Invoice number
Agreement number
Date and description of the ordered services that have been performed
Amount of invoice
Taxes, if any

City payments to CONTRACTOR shall be paid within 30 days after receipt by City of an accurate invoice; provided however, that City may withhold any portion of an invoice that it disputes in good faith. If an invoice or portion thereof is disputed, City shall notify CONTRACTOR of the potential disapproval action and afford it an opportunity to be heard prior to official disapproval. City shall pay all undisputed portions of invoices in accordance with this Section.

Invoices and supporting documentation, if any, shall be prepared at the sole expense and responsibility of the CONTRACTOR. The City will not compensate the CONTRACTOR for any costs incurred for invoice preparation. The City may reasonably request, in writing, changes to the content and format of the invoice and supporting documentation at any time. City reserves the right to request additional supporting documentation to Substantiate the invoiced amount is correct and actually due at any time; however, CONTRACTOR will not be required to submit any confidential or proprietary documentation, such as but not limited to cost data.

E. For payment and processing, all invoices should be mailed to the following address:

Accounts Payable Section
Harbor Department, City of Los Angeles
P.O. Box 191
San Pedro, CA 90733-0191

6. INSURANCE

A. In addition to and not as a substitute for, or limitation of, any of the indemnity obligations of the Master Services Agreement, CONTRACTOR shall procure and maintain at its sole cost and expense and keep in force at all times during the term of this Eligible Purchaser Order the form and amount of insurance no less than that identified in Exhibit C.

B. CONTRACTOR shall report in writing to Executive Director within fifteen (15) calendar days after it, its officers or managing agents have knowledge of any accident or occurrence involving death of or injury to any person or persons, or damage in excess of Five Hundred Dollars ($500.00) to property, occurring upon the premises, or elsewhere within the Port of Los Angeles if CONTRACTOR's officers, agents or employees are involved in such an accident or occurrence. Such report shall contain to the extent available (1) the name and address of the persons involved, (2) a general statement as to the nature and extent of injury or damage, (3) the date and hour of occurrence, (4) the names and addresses of known witnesses, and (5) such other information as may be known to CONTRACTOR, its officers or managing agents.

7. NOTICES

In all cases where written notice is to be given under this Eligible Purchaser Order, service shall be deemed sufficient if said notice is deposited in the United States mail, postage prepaid. When so given, such notice shall be effective from the date of mailing of the same. For the purposes hereof, unless otherwise provided by notice in writing from the respective parties, notice to the Department shall be addressed to Executive Director, Los Angeles Harbor Department, P.O. Box 151, San Pedro, California 90733-0151, and notice to CONTRACTOR shall be addressed to it at the address set forth above. Nothing

herein contained shall preclude or render inoperative service of such notice in the manner provided by law.

8. INCORPORATION BY REFERENCE

The terms and conditions of City Contract No. C-123897 and Motorola Contract No. 1000409608 Master Services Agreement, as amended, while not attached hereto as exhibits, are hereby fully incorporated into this Eligible Purchaser Order by reference and the parties agree to be bound by its terms as contemplated by Section 2.3 and Section 2.4 of the Master Services Agreement.

9. STATE TIDELANDS GRANTS

This Eligible Purchaser Order is entered into in furtherance of and as a benefit to the State Tidelands Grant and the trust created thereby. Therefore, this Eligible Purchaser Order is at all times subject to the limitations, conditions, restrictions and reservations contained in and prescribed by the Act of the Legislature of the State of California entitled "An Act Granting to the City of Los Angeles the Tidelands and Submerged Lands of the State Within the Boundaries of Said City," approved June 3, 1929 (Stats. 1929, Ch. 651), as amended, and provisions of Article VI of the Charter of the City of Los Angeles relating to such lands. CONTRACTOR agrees that any interpretation of this Eligible Purchaser Order and the terms contained herein must be consistent with such limitations, conditions, restrictions and reservations.

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(Signature page follows)

IN WITNESS WHEREOF, the parties hereto have executed this Eligible Purchaser Order on the date to the left of their signatures.

THE CITY OF LOS ANGELES, by its Board of Harbor Commissioners

Dated: _____, 2022

By: _____
EUGENE D. SEROKA
Executive Director

Attest: _____
AMBER M. KLESGES
Board Secretary

MOTOROLA SOLUTIONS INC.

Dated: 2/24, 2022

By: _____
Jerry Burch, MSSSI Vice President
(Print/type name and title)

Attest: _____
Ryan Christensen, Assistant Secretary
(Print/type name and title)

APPROVED AS TO FORM AND LEGALITY

April 6, 2022
MICHAEL N. FEUER, City Attorney
JANNA B. SIDLEY, General Counsel

By: _____ for
JOHN T. DRISCOLL, Deputy

Attachments

Date: 3/10/22
Contractor/Vendor Name: Motorola Solutions, Inc.

Account#	54310	W.O. #
Ctr/Div#	1085	Job Fac.#
Proj/Prog#	000	

Budget FY:	Amount:
FY 21/22	$196,162
FY 22/23	$588,485
TOTAL	**$784,647**

For Acct/Budget Div. Use Only

Verified by: M. Ugalde Digitally signed by Melody Ugalde Date: 2022.03.10 14:39:07 -08'00'

Verified Funds Available: Digitally signed by Frank Liu Date: 2022.03.10 15:56:17 -08'00'

Date Approved: 3/10/2022

Account#	59994	W.O. #
Ctr/Div#	1085	Job Fac.#
Proj/Prog#	000	

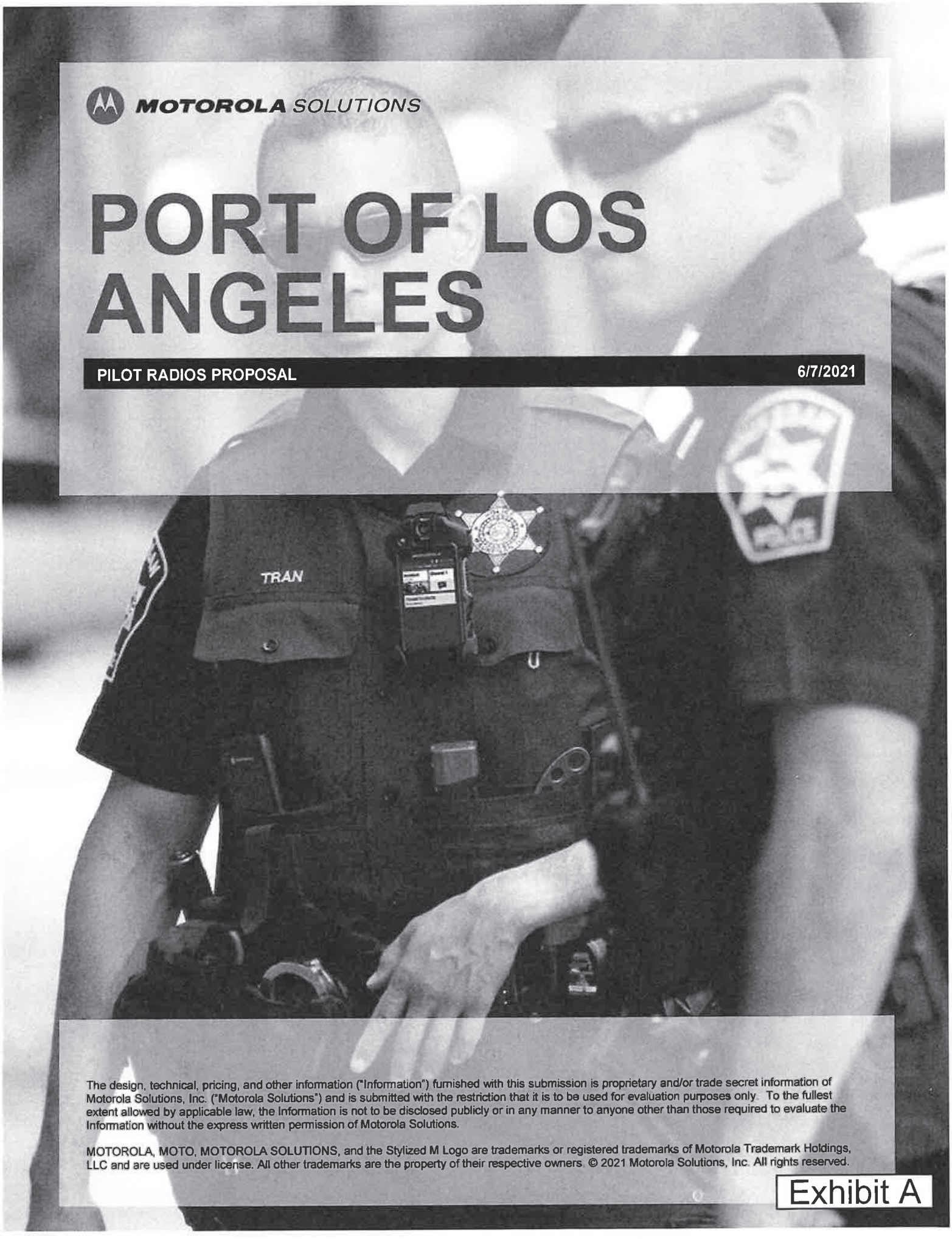
Budget FY:	Amount:
FY 21/22	$145,981
FY 22/23	$437,942
TOTAL	**$583,923**

For Acct/Budget Div. Use Only

Verified by: M. Ugalde Digitally signed by Melody Ugalde Date: 2022.03.10 14:39:19 -08'00'

Verified Funds Available: Digitally signed by Frank Liu Date: 2022.03.10 15:56:30 -08'00'

Date Approved: 3/10/2022



MOTOROLA SOLUTIONS

PORT OF LOS ANGELES

PILOT RADIOS PROPOSAL 6/7/2021

Exhibit A

June 7, 2021

Captain Daniel Cobos
330 S. Centre Street
San Pedro, CA 90731

RE: Pilot Radios Proposal

Dear Captain Cobos:

Motorola Solutions, Inc. ("Motorola") appreciates the opportunity to provide the Port of Los Angeles ("POLA") quality communications equipment and services. Motorola Solutions' project team has taken great care to propose a solution to address your needs and provide exceptional value.

Motorola's proposed solution is consisting of VHF conventional radios located at three Port Pilot sites (Marine Exchange, Warehouse 1 and Pilot House), One (1) GTR 8000, One (1) APX8500-based Consolette, Mobile radios, a Microwave link between Warehouse 1 and Marine Exchange, a number of Portable radios, and a CAD Mapping client. This proposal includes the needed site development for Warehouse 1 in order to create a suitable environment for your equipment.

Motorola's proposal is subject to the terms and conditions of the contracts set forth in the Contractual Documentation section of this Proposal. Pricing will remain valid for 90 days from the date of this proposal.

Any questions POLA has regarding this proposal can be directed to Joseph Warner, Senior Account Manager at 312-204-9300, joseph.warner@motorolasolutions.com.

Our goal is to provide POLA with the best products and services available in the communications industry. We thank you for the opportunity to present our proposed solution, and we hope to strengthen our relationship by implementing this project.

Sincerely,

MOTOROLA SOLUTIONS, INC.

Jerry Burch
MSSSI Vice President

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SECTION 1

SOLUTION DESCRIPTION

1.1 SOLUTION OVERVIEW

The purpose of this proposal is to refresh POLA's VHF radio solution to serve the communications needs of the Port Pilots. The enhanced coverage will provide superior signal strength with a clean, clear signal. With the addition of PremierOne CAD software dispatchers will be to access complete data on every situation including the incoming call, related records and responder location and status. The proposal includes GTRs, Consolettes, APX 8000 Portables, APX 8500 Mobiles, RGUs for the existing MCDs, redundant microwave links and a 4 hour UPS backup solution at each site. Additionally, Motorola has included a CAD Mapping client as requested by POLA.

1.2 SOLUTION DESCRIPTION

The MCD 5000 Deskset is part of the MCD 5000 Deskset System. The unit is a desktop console that provides dispatch capability when connected to a radio. The MCD 5000 Deskset user can select and connect to one of many radios connect to the system for inbound/outbound communication.

The MCD 5000 Deskset System also serves as an intercom system between all parallel MCD 5000 Desksets connected to the same radio.

The MCD 5000 deskset can connect to following radios:

- ASTRO Consolette (W9): ASTRO Spectra, ASTRO Spectra Plus, XTL 5000
- CDM Series Radios: CDM 1550, CDM 1550 LS, CDM 1550 LS+
- MCS 2000 Model III Control Station
- APX 7500 Consolette (through IP)
- Dimetra TETRA Mobile Radios: MTM800E, MTM5400
- TRC Radios Such as:
    - APX 7500 Consolette (through TRC)
    - ASTRO Spectra Consolette, W7
    - ASTRO Spectra Plus Consolette, W7
    - XTL5000 Consolette, W7
    - MTR2000 Tone control Base or repeater
    - QUANTAR Tone control Base or repeater
    - DIU3000 (Tone control wireline port only)
    - MOTOTRBO Mobile in a tray with TRC interface
    - GTR 8000 Tone Control Base or Repeater
    - MTR 3000 Tone Control Base or Repeater
    - Non-Motorola TRC Radios
    - 4W- E&M Radios

MCD 5000 desksets utilize an IP backbone to communicate to a MCD 5000 Remote Gateway Unit (RGU), the MCD functionally will remain unchanged. From what POLA has today.

One RGU will be at Warehouse 1 (controlling the consollete there) and One RGU will be at Marina Exchange (controlling the GTR there).

1.2.1 Solution Scope

The specific solutions included in this proposal are:

Radio System

- 1 x GTR 8000 Base Radio with associated antennas and cabling
- 1 x APX 8500-based Consolette with associated antennas and cabling
- 2 x APX 8500-based Mobiles with associated antennas and cabling
- 2 x MCD 5000 RGU, one at the Marine Exchange location and one at LAPP
- 2 x 4-hour UPS Backup Power
- 1 x Additional VHF antenna for the existing Consolette
- 1 x Additional 700MHz antenna for the existing Consolette

Backhaul System

- 1 x Redundant microwave link between Marine Exchange and LAPP with battery backup
- 2 x MPLS routers for connection to POLA's core
- 2 DC Power Systems for the MW equipment

Subscribers

- 38 x APX 8000XE portable subscriber radios and accessories

CAD Mapping Client

- 38 x Subscriber Portable or Mobile (Person Location Tracking) Licenses
- 1 x PremierOne CAD Low Use Client License mapping
- 1 x CAD Workstation - HP Z4 G4 Workstation
- 1 x Display Monitor: HP Z24n G2 24 inch

1.2.2 Solution Components

1.2.2.1 APX 8000XE Portable Radio

The APX 8000XE redefines mission-critical communications by delivering an ultra-durable radio that combines unlimited interoperability, loud audio, and secure Wi-Fi connectivity. The APX

8000XE is a part of Motorola Solutions' APX Extreme Series, providing all-band P25 access in a portable radio created specifically for first responders who encounter extreme conditions.

Working together with firefighters around the world, Motorola Solutions designed the APX™ XE Series; a complete portfolio of ergonomically advanced, ultra- rugged radios and accessories that are safe, easy, and efficient to use. Firefighters said they wanted equivalent extreme features as the APX XE Series including a larger display, exaggerated control knobs, and the capability to communicate with surrounding municipalities within an all-band radio solution. The APX 8000XE brings together not only these requirements, but also the integration of Wi-Fi for programming flexibility.

Motorola Solutions' goal in creating the APX 8000XE was to redefine mission-critical communications by delivering an ultra-durable radio that combines all-band interoperability, loud audio, and secure Wi-Fi connectivity. Some of its standard features and benefits are identified below:

- **Enhanced Efficiency and Safety through the Seamless Integration of Voice and Data Capabilities** – Incorporating Wi-Fi, IV&D, and P25 data connectivity in one radio enables simultaneous voice and data radio transmission. Management and configuration of each radio becomes transparent, with new software or data upgrades occurring while the user continues to communicate via voice over the radio, resulting in no "shut-down" times. GPS Outdoor Personnel Tracking enables each radio user's location to be shared, resulting in more efficient task assignment and enhanced radio user safety. Mission-critical Wireless Bluetooth allows the radio to connect quickly and securely with remote speaker microphones, surveillance kits, and the LEX L10 Mission Critical LTE Handheld for remote radio control. Off-the-shelf Bluetooth audio and data accessories are also supported on all APX 8000XE radios.
- **All-Band Interoperability** – The APX 8000XE offers four-band multi-mode interoperability with systems in 700 MHz, 800 MHz, VHF, and UHF frequency bands.
- **Hear and be Heard More Clearly** – First responders and other critical personnel must be able to communicate and coordinate their actions even in chaotic, high-noise environments. An adaptive audio engine and ultra-loud speakers enable the radio to automatically adjust to consistently produce the loudest and clearest audio in any environment. Adaptive Dual-sided Operation uses beam-forming technology to allow the radio user to speak into either side of the radio. Adaptive Noise Suppression adjusts the audio algorithm to cancel out the background noise as it changes in the radio user's environment. Adaptive Speaker Equalization automatically adjusts the 3 Watt loud speaker settings based on volume selection to optimize sound for the talker's authenticity and speech intelligibility at low or high volumes. Adaptive Windporting engages a third microphone to cancel out wind noise. A new Unique Speaker Grill feature provides better water runoff to improve overall communications.
- **Advanced Ergonomics for Extreme Conditions** – This compact, rugged, and secure radio has been made with the user's comfort in mind. The familiar look and feel of the APX 8000XE was modeled after Motorola Solutions' award winning APX 6000 radio design, and enhanced with the RF band access of the APX 7000. A flexible all-band antenna bends easily while the radio user is moving around on the job, ensuring the antenna never gets in the way of the user getting their job done. Glove-friendly controls, including well- spaced knobs, larger buttons, and a shielded push-to-talk button facilitate easier operation of critical features, while eliminating their unintentional activation. Enlarged screens are easier for users to read in dark or low-light conditions.

- **Rugged, Robust, and Reliable Design Features** – The APX 8000XE portable radio incorporates the most durable features to provide radio functionality for unpredictable, extreme environments. A water-tight seal employs a shock-absorbing aluminum alloy endoskeleton to protect the radio's interior from water intrusion, even if the outer housing is breached. The IP 68 standard rating ensures that the APX 8000XE can withstand 2 meters of water submersion for 2 hours. The Adding the Delta-T option can be added on to this radio to ensures it can withstand 2 meters of water submersion for 4 hours. A drop-resistant dual battery latch protects the radio from resetting, powering off, or ejecting the battery upon impact from being dropped. Tempered Glass Display protects the radio's color display user interface from scratches, impact, and pressure. ANSI/ISA-12.12.01-2015 CAN/CSA C22.2 NO. 213-15 Compliance ensures that the radio complies with the testing/standards used to evaluate electrical equipment for usage in hazardous, classified locations.
- **Secure Communications** – The APX 8000XE is designed to secure and protect voice and data information from unwanted intruders. Multiple Hardware Encryption Algorithms (ex: AES, DES, ADP with up to 128 keys) ensures that sensitive information stays protected from scanners and eavesdroppers. Over-the-Air Re- Keying (OTAR) offers the ability to efficiently rekey and update encryption keys of fielded radios over time. P25 Radio Authentication ensures that only valid users can access the system and all sensitive information. Two-Factor Authentication allows users to securely log in to query databases.

1.2.2.2 APX 8500 Mobile Radio

The APX 8500 is Motorola Solutions' first all- band P25 mobile radio, created specifically for mission-critical first responders, who need to communicate across all frequency bands using the same device. It is a 4-in-1 radio that offers four RF bands and multi-mode system access. The APX 8500 enables radio users to communicate across 700 MHz, 800MHz, VHF and UHF Bands 1 and 2. Designed with mission- critical technology, the APX 8500 amplifies a radio user with the ability to keep the community safer than ever before. With four RF bands and multi-mode system access, the APX 8500 knows no limits when it comes to interoperability. Some of its standard features and benefits are identified below:

- **All-Band Interoperability** – The APX 8500 offers four-band multi-mode interoperability with systems in 700 MHz, 800 MHz, VHF, and UHF frequency bands.
- **Multiple Control Head Options** – The APX 8500 mobile radio can be controlled by multiple control heads, with four different wired locations. There are five control heads available for the APX 8500: the O2 Rugged Control Head, O3 Handheld Control Head, O5 Standard Control Head, O7 Enhanced Control Head, and 09 Integrated Control Head. Dual control head support is offered for the O2, O5, and O7 control heads.
- **Easy to Install** – The APX 8500's Mid-Power Model has been designed to fit into any existing Motorola XTL footprint, so no further installation is necessary. The High-Power Model has been designed with a trunion design that secures the mobile while enabling it to be removed without also removing connecting cables.
- **Meet Radio Users' Needs** – The APX 8500 is compatible with the following optional advanced features and data applications: Programming over Project 25 (POP25), Text Messaging, Over the Air Rekeying (OTAR), 12 character RF ID asset tracking, Tactical OTAR Siren and Light Interface Module, and Enhanced Encryption Software Options.

1.2.2.2.1 APX Control Heads

O2 Control Head

Motorola Solutions' O2 control head is designed for mission-critical applications. Mounted either in-dash or on a motorcycle, it provides XE ergonomics controls, a built-in 7.5W speaker, multiple control head configurations, and intelligent lighting. A rugged device designed to withstand extreme environments, the O2 control head enables operation even by users wearing bulky gloves. The O2 control head offers the following user interface features:

- Integrated 7.5W speaker.
- Bluetooth hardware.
- Multifunction knob.
- Large color display with three-line, 14-character, customizable tri-color LCD display, with one line designated for icons.
- Can be ordered with a 3 x 6 keypad microphone accessory, with three programmable soft keys.
- Four programmable soft key buttons and five scroll-through menus, with up to 20 programmable soft keys.
- Multiple control head configuration to fully control a single radio, with up to four different wired locations (APX 7500), two wired locations (APX 6500), and one control head (APX 4500).
- Recessed orange emergency button.
- Meets Military Specs 810 (C, D, E, and F).

1.2.2.3 APX® All-Band Consolette

The APX All-Band Consolette provides a low-cost, mid-power wireless dispatch solution as an ideal complement to a modern P25 dispatch center. Equipped with leading edge P25 Phase 2 TDMA technology and multi-band interoperability, the APX All-Band Consolette can also be used as an emergency backup station when infrastructure is offline, or for wireless access to different system types for increased interoperability between agencies.

APX All-Band Consolette

The APX All-Band Consolette's P25 operation and compatibility with legacy systems ensures that communications are clear, continuous, and coordinated across multiple users, agencies, and systems. The durable robust metal housing provides durability and allows for easy servicing, while the integrated front panel numeric keypad allows fast access to radio controls. In addition, optional features and benefits of the APX All-Band Consolette include:

- **Optional Multi-Band Operation in One Radio** – The APX All-Band Consolette delivers the convenience of three radios in one while maintaining APCO TIA receiver specifications. With the APX All-Band, personnel can use one consolette to communicate and provide dispatch operations across multiple digital and analog networks that operate in any three of the following frequency bands: 700 MHz, 800 MHz, VHF, and UHF (R1/R2). The proposed Consolettes only include the 7/800 MHz and VHF frequency bands.
- **Meets Radio Users' Needs** – The APX All-Band Consolette is compatible with the following optional advanced features and data applications: Programming over Project 25 (POP25),

Text Messaging, Over the Air Rekeying (OTAR), and Enhanced Encryption Software Options. It is also capable of Extended Dispatch Operation including: Emergency Alarm ACK Encode, Radio Inhibit/ Uninhibit Encode, Radio Monitor Encode, Radio Check Encode, Status Query Encode, Status Query Response Decode, Status Update Decode, and Message Update Decode. Note that not all these options are included in the proposed Consolettes.

1.2.2.4 Backhaul System

Motorola will manage the delivery and installation of 1 Nokia Wavence/MPT-HLC Microwave Systems hop as part of Motorola's solution for Pilot Radios. The proposed microwave solution includes:

- 2 x MPT-HL Shelf Kit Dual T-R
- 4 x MPT-HLC XCVR 11 GHz (10700 - 11700)
- 2 x MSS-8 Shelf with redundant CorEvo
- 2 x DC Power Rectifier & Battery systems
- Associated Antenna equipment and cabling

Motorola has also included Juniper MPLS routers, with the following functionalities and assumptions:

- Connect the MCDs, RGUs, Switches, Consolettes and the Microwave equipment into an IP backbone network
- Can be used to connect this system into the main POLA Core
- A CAT5 / CAT6 connection from the Pilot House (MCDs) to the Warehouse 1 (MX104) will serve as the demarcation point for the connection between the desksets, and MPLS LAN switches. This is POLA's responsibility.
- The microwave hop is based only on POLA's design and does not incorporate or plan for integration into the main system or any other sites on the main system.

1.2.2.5 GTR 8000 Site Repeater/Base Radio

Figure 115: G-Series Chassis – A single chassis and six basic modules create the entire G-series platform, resulting in reduced spare parts inventory.

The GTR 8000 base radio consists of a transceiver module, power amplifier module, fan module, and power supply. The transceiver module includes the functionality for the exciter, receiver, and station control. The base radio software, configuration, and network management, as well as inbound/outbound traffic handling, are performed through this transceiver module. On-board serial and Ethernet ports are located on this module for local servicing through Configuration/Service Software (CSS). The power amplifier module amplifies the low-level modulated RF signal from the transceiver module and delivers the amplified signal on the path to the transmit antenna. The power supply module supports the transceiver and power amplifier modules, and can also provide auxiliary power to a connected site controller or receive multicoupler/low noise amplifier.

The GTR 8000 can monitor and control up to 16 channels utilizing Tone Remote Control (TRC) via the MCD 5000 RGU and Deskset. Any additional channels beyond that will require a second GTR.

1.2.2.6 CAD Mapping Client

1.2.2.6.1 PremierOne CAD Low Use Client

Leveraging the Port's existing PremierOne CAD system, we are able to provide a PremierOne Low Use Client to display radio location at much lower cost.

1.2.2.6.2 User Input

Users may operate the PremierOne CAD Low Use Client either with or without a mouse. While all commands and actions within the application can be accessed with the mouse, users also may drive PremierOne CAD almost exclusively from the keyboard. A few PremierOne CAD functions, such as selecting units from a map, must be performed with a mouse.

1.2.2.6.3 Security and Roles

PremierOne CAD recognizes authorized users and provide access to individually authorized functions at the time of sign-on. To facilitate these responsibilities, access rights and permissions are associated with the various functions available within PremierOne CAD. A role is a set of specified privileges which provide access to data, commands, forms, devices, and functions. Each user and device is assigned to one or more of the default of Customer created roles.

1.2.2.6.4 Units

A unit within PremierOne CAD represents the resources which are monitored by the communications center personnel. All units in the system are identified with a unit id which is typically the radio call sign for the unit.

1.2.2.6.5 Maps

PremierOne mapping utilizes products from Environmental Systems Research Institute (Esri) for geo-processing. The display of maps is an integrated component within PremierOne. The map may be configured to automatically display when the user signs on to the workstation. A number of commands and functions allow the user to manipulate the map and make updates in response to user actions. The map may be configured to display an icon at this location to assist the operator in determining the location at which an emergency response is required.

1.2.3 Solution Diagram

High Level System Block Diagram
POLA Pilot

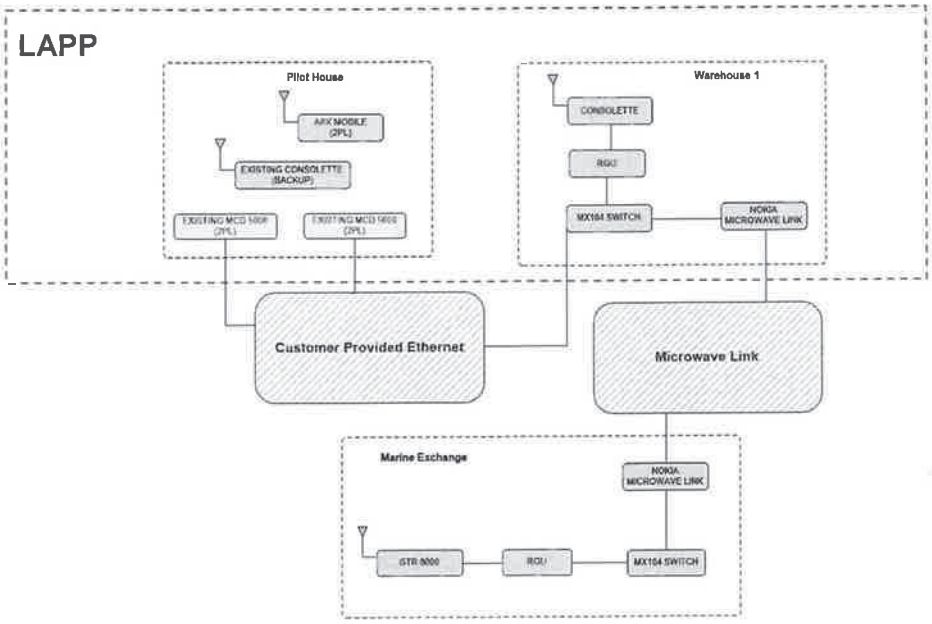

Figure 1-1: POLA – Port Pilots Solution Diagram

MCD 5000 desksets utilize an IP backbone to communicate to a MCD 5000 Remote Gateway Unit (RGU), the MCD functionally will remain unchanged.

1.3 DESIGN ASSUMPTIONS

- 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 antenna towers are sufficient to support the proposed antennas (VHF and microwave) and the towers are able to support mounting of microwave antennas at a height of approximately 70'.
- The structure at Warehouse 1 is sufficient to support the LMR antennas and the microwave dishes.
- Any site/location upgrades or modifications beyond those included in this scope of work are the responsibility of the Port.
- No RF FNE or Subscriber reprogramming is included in this scope of work.
- Any required FCC licensing will be provided by the Port.
- Approved local, State or Federal permits as may be required for the installation and operation of the proposed equipment are the responsibility of POLA.
- All required Ethernet connections will be within the industry standard 100 meter limitations.

- No coverage guarantee is included in this proposal.
- Motorola is not responsible for interference caused or received by the Motorola provided equipment except for interference that is directly caused by the Motorola provided transmitter(s) to the Motorola provided receiver(s). Should the system experience interference, Motorola can be contracted to investigate the source and recommend solutions to mitigate the issue.
- No dispatch consoles have been included in the design. The customer will be unable to patch the VHF and 700 MHz channels to one another without a dispatch console.
- Only One (1) GTR 8000 has been included and can only control up to 16 channels via TRC selected through the MCDs.
- Links between the port sites and the core should be provided by POLA.

1.4 EQUIPMENT LIST

1.4.1 Radio Equipment

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Marine Exchange	CONV_GTR	1	T7039	GTR 8000 Base Radio
Marine Exchange	CONV_GTR	1	X530BG	ADD: VHF (136-174 MHZ)
Marine Exchange	CONV_GTR	1	CA01949AA	ADD: ANALOG ONLY CONV SW
Marine Exchange	CONV_GTR	1	CA01953AA	ADD: POWER EFFICIENCY PACKAGE
Marine Exchange	CONV_GTR	1	CA03111AA	ADD: CEC COMPLIANCE
Marine Exchange	CONV_GTR	1	CA00719AA	ADD: ASTRO SYSTEM RELEASE 2019.2
Marine Exchange	CONV_GTR	1	X153AW	ADD: RACK MOUNT HARDWARE
Marine Exchange	CONV_GTR	1	CA01504AA	ADD: ANTENNA RELAY
Marine Exchange	CONV_GTR	1	CA01954AA	ADD: WILDCARD W/GPIO
Marine Exchange	CONV_GTR	1	CA01958AA	ADD: T2-2R RECEIVER MUTE
Marine Exchange	SWITCH	1	CLN1868	2930F 24-PORT SWITCH
Marine Exchange	SWITCH	1	CLN1866	FRU: 1M DAC CABLE
Marine Exchange	NETWORK	1	F7879	SM, RADIO GATEWAY UNIT (RGU)
Marine Exchange	NETWORK	1	FHN7469	MCD 5000 DESKSET / RGU POWER SUPPLY WITH USA POWER CORD
Marine Exchange	MPLS	1	DSIGMX104PREMAC	MX104 PREM BNDL 4MIC SLOTS 2PS 2RES JUNOS CIF DVR W/ 8X480TV
Marine Exchange	MPLS	2	DSIGMIC3D20GESFPE	MIC-3D-20GE-SFP ENHANCED MAC SEC & TIMING PHY MAX 256 APS
Marine Exchange	MPLS	2	DSIGCBLPWRC15MHTMP	2.5M 13A/125V PWR CORD AC C15M STRAIGHT NEMA N5-15 TO HIGH TEMP
Marine Exchange	MPLS	6	DSIGSFP1GEFE	SFP 10/100/1000 COPPER
Marine Exchange	MPLS	1	DSIGSVCNDMX104	ND SUPPORT FOR MX104
Marine Exchange	RACK	1	TRN7343	SEVEN AND A HALF FOOT RACK
Marine Exchange	ANTENNA	2	DSCOL53160	OMNI, MEANDER COLLINEAR, 4 DBD, 150-160 MHZ, PIM RATED
Marine Exchange	UPPERJUMPR	30	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
Marine Exchange	UPPERJUMPR	4	DDN1088	TYPE N MALE PS FOR 1/2 IN CABLE
Marine Exchange	JUMPER	4	TDN9289	CABLE WRAP WEATHERPROOFING
Marine Exchange	MAINLINE	200	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
Marine Exchange	MAINLINE	4	DDN1089	TYPE N FEMALE PS FOR 1/2 IN CABLE
Marine Exchange	MAINLINE	8	DSSG1212B2U	SG12-12B2U, SUREGROUND 1/2", 48"

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Marine Exchange	MAINLINE	2	DSL4SGRIP	L4SGRIP SUPPORT HOIST GRIP 1/2" LDF
Marine Exchange	ANTACC	8	DS43211A	BUTTERFLY HANGER FOR 1/2 IN OR 3/8 IN COAX CABLE
Marine Exchange	SURGE	2	DSIS50NXC2MA	RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE
Marine Exchange	LOWERJUMPR	50	DSFSJ450BCABLE	FSJ4-50B 1/2" 50 OHM
Marine Exchange	LOWERJUMPR	4	DDN9682	F4PNMV2-HC 1/2" TYPE N MALE PLATED CONNECTOR
Pilot House	MOBILE	2	M37TSS9PW1 N	APX8500 ALL BAND MP MOBILE
Pilot House	MOBILE	2	G91	ADD: CNTRL STATION PWR SUPPLY
Pilot House	MOBILE	2	W665	ADD: CONTROL STATION OPERATION
Pilot House	MOBILE	2	GA00804	ADD: APX O2 CONTROL HEAD
Pilot House	MOBILE	2	G444	ADD: APX CONTROL HEAD SOFTWARE
Pilot House	MOBILE	2	G48	ENH: CONVENTIONAL OPERATION
Pilot House	MOBILE	2	G78	ADD: 3Y ESSENTIAL SERVICE
Pilot House	MOBILE	2	GA05509	DEL: DELETE UHF BAND
Pilot House	MOBILE	2	G361	ENH: P25 TRUNKING SOFTWARE APX
Pilot House	MOBILE	2	QA03399	ADD: ENHANCED DATA
Pilot House	MOBILE	2	GA09008	ADD: GROUP SERVICES
Pilot House	MOBILE	2	G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
Pilot House	MOBILE	2	G996	ENH: OVER THE AIR PROVISIONING
Pilot House	MOBILE	2	G806	ENH: ASTRO DIGITAL CAI OP APX
Pilot House	MOBILE	2	G843	ADD: AES ENCRYPTION APX AND ADP
Pilot House	MOBILE	2	GA00580	ADD: TDMA OPERATION APX
Pilot House	MOBILE	2	GA01513	ADD: ALL BAND MOBILE ANTENNA (7/8/V/U)
Pilot House	MOBILE	2	H1919	MULTIPLEXER QMA
Pilot House	MOBILE	2	CB000091A02	CABLE, COAXIAL,QMA PLUG TO QMA PLUG CONNETOR
Pilot House	ANTENNA	3	DSCOL51160	OMNI, RUGGED MENDER COLLINEAR, 0 DBD, 150-160 MHZ, PIM RATED
Pilot House	UPPERJUMPR	45	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
Pilot House	UPPERJUMPR	6	DDN1088	TYPE N MALE PS FOR 1/2 IN CABLE
Pilot House	JUMPER	6	TDN9289	CABLE WRAP WEATHERPROOFING
Pilot House	MAINLINE	300	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
Pilot House	MAINLINE	6	DDN1089	TYPE N FEMALE PS FOR 1/2 IN CABLE
Pilot House	MAINLINE	12	DSSG1212B2U	SG12-12B2U, SUREGROUND 1/2", 48"
Pilot House	MAINLINE	3	DSL4SGRIP	L4SGRIP SUPPORT HOIST GRIP 1/2" LDF
Pilot House	ANTACC	12	DS43211A	BUTTERFLY HANGER FOR 1/2 IN OR 3/8 IN COAX CABLE
Pilot House	SURGE	3	DSIS50NXC2MA	RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE
Pilot House	LOWERJUMPR	75	DSFSJ450BCABLE	FSJ4-50B 1/2" 50 OHM
Pilot House	LOWERJUMPR	6	DDN9682	F4PNMV2-HC 1/2" TYPE N MALE PLATED CONNECTOR
Pilot House	ANTENNA	3	DSCOL81806	OMNI, MEANDER COLLINEAR, 0DBD, 746-806MHZ, PIM RATED, 7/16 DIN
Pilot House	UPPERJUMPR	45	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
Pilot House	UPPERJUMPR	6	DDN1088	TYPE N MALE PS FOR 1/2 IN CABLE
Pilot House	JUMPER	6	TDN9289	CABLE WRAP WEATHERPROOFING
Pilot House	MAINLINE	300	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
Pilot House	MAINLINE	6	DDN1089	TYPE N FEMALE PS FOR 1/2 IN CABLE
Pilot House	MAINLINE	12	DSSG1212B2U	SG12-12B2U, SUREGROUND 1/2", 48"

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Pilot House	MAINLINE	3	DSL4SGRIP	L4SGRIP SUPPORT HOIST GRIP 1/2" LDF
Pilot House	ANTACC	12	DS43211A	BUTTERFLY HANGER FOR 1/2 IN OR 3/8 IN COAX CABLE
Pilot House	SURGE	3	DSIS50NXC2MA	RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE
Pilot House	LOWERJUMPR	75	DSFSJ450BCABLE	FSJ4-50B 1/2" 50 OHM
Pilot House	LOWERJUMPR	6	DDN9682	F4PNMV2-HC 1/2" TYPE N MALE PLATED CONNECTOR
Pilot House	UPS	1	DS9PXXR18002060S	UPS, 9PX, 1800W, 120V, SOFTWIRED, 60 MIN RUNTIME RACKMOUNT
Warehouse 1	CONSOLETTE	1	L37TSS9PW1 N	ALL BAND CONSOLETTE
Warehouse 1	CONSOLETTE	1	CA01598	ADD: AC LINE CORD US
Warehouse 1	CONSOLETTE	1	G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
Warehouse 1	CONSOLETTE	1	G851	ADD: AES/DES-XL/DES-OFB ENCRYPTION AND ADP
Warehouse 1	CONSOLETTE	1	GA09008	ADD: GROUP SERVICES
Warehouse 1	CONSOLETTE	1	QA03399	ADD: ENHANCED DATA
Warehouse 1	CONSOLETTE	1	G806	ENH: ASTRO DIGITAL CAI OP APX
Warehouse 1	CONSOLETTE	1	G51	ENH: SMARTZONE OPERATION APX
Warehouse 1	CONSOLETTE	1	G361	ENH: P25 TRUNKING SOFTWARE APX
Warehouse 1	CONSOLETTE	1	G996	ENH: OVER THE AIR PROVISIONING
Warehouse 1	CONSOLETTE	1	GA00580	ADD: TDMA OPERATION APX
Warehouse 1	CONSOLETTE	1	G78	ADD: 3Y ESSENTIAL SERVICE
Warehouse 1	CONSOLETTE	1	W382	ADD: CONTROL STATION DESK GCAI MIC
Warehouse 1	CONSOLETTE	1	L999	ADD: FULL FP W/E5/KEYPAD/CLOCK/VU
Warehouse 1	CONSOLETTE	1	GA05509	DEL: DELETE UHF BAND
Warehouse 1	CONSOLETTE	1	HKN6233C	APX CONSOLETTE RACK MOUNT KIT
Warehouse 1	CONSOLETTE	1	H1926	MULTIPLEXER QMA APX CONSOLETTE
Warehouse 1	CONSOLETTE	1	F7879	SM, RADIO GATEWAY UNIT (RGU)
Warehouse 1	CONSOLETTE	1	FHN7469	MCD 5000 DESKSET / RGU POWER SUPPLY WITH USA POWER CORD
Warehouse 1	MPLS	1	DSIGMX104PREMAC	MX104 PREM BNDL 4MIC SLOTS 2PS 2RES JUNOS CIF DVR W/ 8X480TV
Warehouse 1	MPLS	2	DSIGMIC3D20GESFPE	MIC-3D-20GE-SFP ENHANCED MAC SEC & TIMING PHY MAX 256 APS
Warehouse 1	MPLS	2	DSIGCBLPWRC15MHTMP	2.5M 13A/125V PWR CORD AC C15M STRAIGHT NEMA N5-15 TO HIGH TEMP
Warehouse 1	MPLS	6	DSIGSFP1GEFE	SFP 10/100/1000 COPPER
Warehouse 1	MPLS	1	DSIGSVCNDMX104	ND SUPPORT FOR MX104
Warehouse 1	RACK	1	TRN7343	SEVEN AND A HALF FOOT RACK
Warehouse 1	SWITCH	1	CLN1868	2930F 24-PORT SWITCH
Warehouse 1	SWITCH	1	CLN1866	FRU: 1M DAC CABLE
Warehouse 1	ANTENNA	1	DSCOL54160	OMNI, MEANDER COLLINEAR, 6.0 DBD, 150-160 MHZ, PIM RATED
Warehouse 1	UPPERJUMPR	15	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
Warehouse 1	UPPERJUMPR	2	DDN1088	TYPE N MALE PS FOR 1/2 IN CABLE
Warehouse 1	JUMPER	2	TDN9289	CABLE WRAP WEATHERPROOFING
Warehouse 1	MAINLINE	100	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
Warehouse 1	MAINLINE	2	DDN1089	TYPE N FEMALE PS FOR 1/2 IN CABLE
Warehouse 1	MAINLINE	4	DSSG1212B2U	SG12-12B2U, SUREGROUND 1/2", 48"
Warehouse 1	MAINLINE	1	DSL4SGRIP	L4SGRIP SUPPORT HOIST GRIP 1/2" LDF

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Warehouse 1	ANTACC	4	DS43211A	BUTTERFLY HANGER FOR 1/2 IN OR 3/8 IN COAX CABLE
Warehouse 1	SURGE	1	DSIS50NXC2MA	RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE
Warehouse 1	LOWERJUMPR	25	DSFSJ450BCABLE	FSJ4-50B 1/2" 50 OHM
Warehouse 1	LOWERJUMPR	2	DDN9682	F4PNMV2-HC 1/2" TYPE N MALE PLATED CONNECTOR
Warehouse 1	UPS	1	DS9PXXR18002060S	UPS, 9PX, 1800W, 120V, SOFTWIRED, 60 MIN RUNTIME RACKMOUNT
Network	SPARES	1	DSIGMX104PREMAC	MX104 PREM BNDL 4MIC SLOTS 2PS 2RES JUNOS CIF DVR W/ 8X480TV
Network	SPARES	1	DSIGMIC3D20GESFPE	MIC-3D-20GE-SFP ENHANCED MAC SEC & TIMING PHY MAX 256 APS
Network	SPARES	1	DSIGSFP1GEFE	SFP 10/100/1000 COPPER
Network	SPARES	1	DSIGSVCNDMX104	ND SUPPORT FOR MX104
Microwave Link	MICROWAVE	1	DQMWPOLAPILOTRF	19.US.874628.06INCLUDES ITEMS 1.01, 5.01-5.02 9500MPR RADIOS, ADJ
Microwave Link	MICROWAVE	1	DQMWPOLAPILOTCG	19.US.874628.06INCLUDES ITEMS 1.02 DC POWER
Microwave Link	MICROWAVE	1	DQMWPOLAPILOTAD	19.US.874628.06INCLUDES ITEMS 1.03 ANTENNA MATERIAL
Pilot House	P1 CAD	1	TBD	CAD Workstation - HP Z4 G4 Workstation,HP Single Unit Packaging, Win10 Pro 64 , 2x Intel Xeon W-2102 2.9 GHz 4 Core CPU, 32GB (2x16GB) RegRAM, 2x NVIDIA Quadro P400 2GB 1st-2nd GFX, 512GB SSD 1st HDD, HP USB Keyboard US, HP USB Optical 3-Button Mouse, 9.5mm Slim SuperMulti DVDRW 1st ODD, HP 3/3/3 Warranty US, HP Z4 Fan and Front Card Guide Kit, HP Z4 Country Kit US, HP Processor Air Cooling Kit
Pilot House	P1 CAD	1	TBD	HP Z24n G2 24 inch Display 1JS09A8
Pilot House	P1 CAD	1	CA03257AA	PremierOne CAD Low Use Client License mapping (Per Concurrent User)
Pilot House	P1 CAD	38	CA02802AA	Subscriber Portable or Mobile (Person Location Tracking) Per Radio
Portables	APX8000XE	38	H91TGD9PW9 N	APX 8000H ALL BAND PORTABLE MODEL 3.5
Portables	APX8000XE	38	G996	ADD: PROGRAMMING OVER P25 (OTAP)
Portables	APX8000XE	38	H38	ADD: SMARTZONE OPERATION
Portables	APX8000XE	38	Q15	ENH: AES/DES,DES-XL,DES-OFB AND ADP
Portables	APX8000XE	38	Q361	ADD: P25 9600 BAUD TRUNKING
Portables	APX8000XE	38	Q498	ENH: ASTRO 25 OTAR W/ MULTIKEY
Portables	APX8000XE	38	Q58	ADD: 3Y ESSENTIAL SERVICE
Portables	APX8000XE	38	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Portables	APX8000XE	38	QA00580	ADD: TDMA OPERATION
Portables	APX8000XE	38	QA09001	ADD: WIFI CAPABILITY
Portables	APX8000XE	38	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Portables	APX8000XE	38	QA09008	ADD: GROUP SERVICES
Portables	APX8000XE	38	QA03399	ADD: ENHANCED DATA
Portables	APX8000XE	38	QA05509	DEL: DELETE UHF BAND
Portables	APX8000XE	38	H301	DEL: DELETE BELT CLIP/BASIC CARRY HOLDER
Portables	APX8000XE	38	NTN2570C	ASSEMBLY ACCESSORY WIRELESS ACCY KIT NFP 12 CABLE
Portables	APX8000XE	2	NNTN8860A	CHARGER, SINGLE-UNIT, IMPRES 2, 3A, 115VAC
Portables	APX8000XE	6	NNTN8844A	CHARGER, MULTI-UNIT, IMPRES 2, 6-DISP, NA/LA-PLUG, ACC USB CHGR

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Portables	APX8000XE	38	PMMN4106CBLK	XE500 BLACK HOSUING, CHANNEL KNOB, XTREME TEMPERATURE CABLE
Portables	APX8000XE	38	PMLN6802A	ACCESSORY KIT,MOLDED NYLON CARRY CASE W/SWIVEL

1.4.2 Microwave Equipment

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Marine Exchange	MW Switching Shelf	1	3EM22715AH	9500 MPR Shelf Kit w/Alarm FAN Evo-HSv3
Marine Exchange	MW Switching Shelf	1	3EM24105AA	MSS Shelf Ext Fan Alm Cable Assy 25 foot
Marine Exchange	MW Switching Shelf	2	3DB18788BA	CorEvo-10G
Marine Exchange	MW Switching Shelf	2	3DB19017AB	Ethernet Access Module (v2) w/8 GbE port
Marine Exchange	MW Switching Shelf	4	3DB18163AB	MSS Slot Cover - Blank Plate 1/2H
Marine Exchange	MW Switching Shelf	2	3DB17020DCAA	Wavence 19 uSD Card for CoreEvo-10G
Marine Exchange	MW Switching Shelf	1	3EM23067AAAA	9500 MPR CT License (Per PC Installed)
Marine Exchange	MW Switching Shelf	1	3DB17010HDAA	Wavence 19A SW Electronic Delivery Kit
Marine Exchange	MW Switching Shelf	1	3DB19275AJAA	Wavence 19A POLA Documentation Electronic Library
Warehouse 1	MW Switching Shelf	1	3EM22715AH	9500 MPR Shelf Kit w/Alarm FAN Evo-HSv3
Warehouse 1	MW Switching Shelf	1	3EM24105AA	MSS Shelf Ext Fan Alm Cable Assy 25 foot
Warehouse 1	MW Switching Shelf	2	3DB18788BA	CorEvo-10G
Warehouse 1	MW Switching Shelf	2	3DB19017AB	Ethernet Access Module (v2) w/8 GbE port
Warehouse 1	MW Switching Shelf	4	3DB18163AB	MSS Slot Cover - Blank Plate 1/2H
Warehouse 1	MW Switching Shelf	2	3DB17020DCAA	Wavence 19 uSD Card for CoreEvo-10G
Warehouse 1	MW Switching Shelf	1	3EM23067AAAA	9500 MPR CT License (Per PC Installed)
Warehouse 1	MW Switching Shelf	1	3DB17010HDAA	Wavence 19A SW Electronic Delivery Kit
Marine Exchange	MW Packet Transceiver	1	3EM24238AB	MPT-HL Shelf Kit Dual T-R
Marine Exchange	MW Packet Transceiver	2	3DB76050AA	MPT-HLC XCVR 11 GHz (10700 - 11700)
Warehouse 1	MW Packet Transceiver	1	3EM24238AB	MPT-HL Shelf Kit Dual T-R
Warehouse 1	MW Packet Transceiver	2	3DB76050AA	MPT-HLC XCVR 11 GHz (10700 - 11700)
Marine Exchange	RTUs - per ODU/RF Transceiver	2	3EM23068ABAA	RTU 80Mbps TRX Capacity
Warehouse 1	RTUs - per ODU/RF Transceiver	2	3EM23068ABAA	RTU 80Mbps TRX Capacity
Marine Exchange	MW Packet Transceiver Accessories	1	3EM23465AA	6/11 GHz Hot Standby 1:10 Coupler Diplexer Bracket
Marine Exchange	MW Packet Transceiver Accessories	1	3EM24188BA	11 GHz Hot Standby 1:10 Coupler Diplexer Clamp and Isolator Kits
Marine Exchange	MW Packet Transceiver Accessories	1	3EM24081AA	RF Diplexer Filter 10700-11700, 30 MHz
Marine Exchange	MW Packet Transceiver Accessories	1	1AB077940017	Diplexer to Transition Cable Assy 304.8mm 12 Inch
Marine Exchange	MW Packet Transceiver Accessories	1	3EM23511AF	Diplexer Transition Assy A2 (11 Ghz) Position Initial Kit
Marine Exchange	MW Packet Transceiver Accessories	1	3MU00179CE	Flange Adapter CPR-90 Kit, 1 Port, 11Ghz

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Marine Exchange	MW Packet Transceiver Accessories	2	3DB80628AB	SFP Cable Assembly, 2 m
Warehouse 1	MW Packet Transceiver Accessories	1	3EM23465AA	6/11 GHz Hot Standby 1:10 Coupler Diplexer Bracket
Warehouse 1	MW Packet Transceiver Accessories	1	3EM24188BA	11 GHz Hot Standby 1:10 Coupler Diplexer Clamp and Isolator Kits
Warehouse 1	MW Packet Transceiver Accessories	1	3EM24081AA	RF Diplexer Filter 10700-11700, 30 MHz
Warehouse 1	MW Packet Transceiver Accessories	1	1AB077940017	Diplexer to Transition Cable Assy 304.8mm 12 Inch
Warehouse 1	MW Packet Transceiver Accessories	1	3EM23511AF	Diplexer Transition Assy A2 (11 Ghz) Position Initial Kit
Warehouse 1	MW Packet Transceiver Accessories	1	3MU00179CE	Flange Adapter CPR-90 Kit, 1 Port, 11Ghz
Warehouse 1	MW Packet Transceiver Accessories	2	3DB80628AB	SFP Cable Assembly, 2 m
Marine Exchange	Racks and Accessories	1	1AD014120046	Seismic Rack 7 ft tall,19 inch wide
Marine Exchange	Racks and Accessories	1	3EM13317AB	Power Distribution Panel w/Fuse Alarm
Marine Exchange	Racks and Accessories	13	900329830	NUT-300 HEX SST .250-20
Marine Exchange	Racks and Accessories	13	407305549	WSHR LK-92147A029 SPLT 1*
Marine Exchange	Racks and Accessories	50	406645671	6 Ground cable-KS22641L1, Per FT
Marine Exchange	Racks and Accessories	26	900327453	FLAT WASHER, STAINLESS STEEL,1/4 INCH
Marine Exchange	Racks and Accessories	1	1AD214220001	Universal grd bar kit SB57903/19in rack
Marine Exchange	Racks and Accessories	13	901350322	SCR M-.25 IN 20 TPI 1 IN*
Marine Exchange	Racks and Accessories	26	408406536	KIT-YA6C-L BOX PWR COMMO*
Marine Exchange	Racks and Accessories	1	3EM09257AA	Optical Fiber Management Panel
Marine Exchange	Racks and Accessories	2	3EM20277AA	Optics SFP GigE 850 NM Multimode 550 Meter
Marine Exchange	Racks and Accessories	2	3EM07641AC	Fiber Optic Jumper Cable, LC to LC, 3 meter, multi mode
Warehouse 1	Racks and Accessories	1	1AD014120046	Seismic Rack 7 ft tall,19 inch wide
Warehouse 1	Racks and Accessories	1	3EM13317AB	Power Distribution Panel w/Fuse Alarm
Warehouse 1	Racks and Accessories	13	900329830	NUT-300 HEX SST .250-20
Warehouse 1	Racks and Accessories	13	407305549	WSHR LK-92147A029 SPLT 1*
Warehouse 1	Racks and Accessories	50	406645671	6 Ground cable-KS22641L1, Per FT
Warehouse 1	Racks and Accessories	26	900327453	FLAT WASHER, STAINLESS STEEL,1/4 INCH
Warehouse 1	Racks and Accessories	1	1AD214220001	Universal grd bar kit SB57903/19in rack
Warehouse 1	Racks and Accessories	13	901350322	SCR M-.25 IN 20 TPI 1 IN*
Warehouse 1	Racks and Accessories	26	408406536	KIT-YA6C-L BOX PWR COMMO*
Warehouse 1	Racks and Accessories	1	3EM09257AA	Optical Fiber Management Panel
Warehouse 1	Racks and Accessories	2	3EM20277AA	Optics SFP GigE 850 NM Multimode 550 Meter
Warehouse 1	Racks and Accessories	2	3EM07641AC	Fiber Optic Jumper Cable, LC to LC, 3 meter, multi mode
Marine Exchange	Antennas	1	10039985	SC3-W100AC
Marine Exchange	Antennas	1	10039985	SC3-W100AC

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Marine Exchange	Waveguide	140	815487-001	WG E105J 10.50-11.70GHZ
Marine Exchange	Waveguide	140	815487-001	WG E105J 10.50-11.70GHZ
Marine Exchange	11 GHz	2	399503-101	Conn E/Ep105 Cpr90g Gk Tune
Marine Exchange	11 GHz	2	399503-103	CONN E/EP105 CPR90G FG
Marine Exchange	11 GHz	2	916533-108	Grip Hoisting E105 E78 Lace-Up
Marine Exchange	11 GHz	6	921234-108	Kit Gnd E105 Fld Instld
Marine Exchange	11 GHz	8.4	920981-007	Kit Hngr E/Ep105 10/Kt
Marine Exchange	11 GHz	2	920745	Wall Feed Thru E/Ep105
Marine Exchange	11 GHz	2	400130	Window Press Wpw-090ep
Marine Exchange	11 GHz	2	400124	Twist Flex & Hdw Tf24-090ep
Marine Exchange	11 GHz	2	915665	Boot Assy 4in W/1 Hole E105
Marine Exchange	Common materials	8.4	915006	Kit Hdw 3/8-16x1in
Marine Exchange	Common materials	2	CEIL12-5I	Kit Clg Adptr 514608-003 Qty 5
Marine Exchange	Common materials	8.4	915255	Kit Adptr Ang Mbr Qty Of 10
Marine Exchange	Common materials	1	WPFG-1	KIT WTHPRF CONNS&SPLICE
Marine Exchange	Dehydrators	1	10042194	APD20-D-35XH0R00S1 120v, 3-5psi, Lo psi alm, 10 day purge, < 7800' 6-12GHz
Marine Exchange	Dehydrators	1	920202-W	Kit Gdm-2 Port 0-15psig
Marine Exchange	Dehydrators	1	20040835	SHELF, WALL / RACK MOUNT, PAINTED
Marine Exchange	SST/Guyed	1	409081635	KIT-860117 ASSY MICROWAVE 31L-R5 PM FIT*
Warehouse 1	Antennas	1	10039985	SC3-W100AC
Warehouse 1	Antennas	1	10039985	SC3-W100AC
Warehouse 1	Waveguide	140	815487-001	WG E105J 10.50-11.70GHZ
Warehouse 1	Waveguide	140	815487-001	WG E105J 10.50-11.70GHZ
Warehouse 1	11 GHz	2	399503-101	Conn E/Ep105 Cpr90g Gk Tune
Warehouse 1	11 GHz	2	399503-103	CONN E/EP105 CPR90G FG
Warehouse 1	11 GHz	2	916533-108	Grip Hoisting E105 E78 Lace-Up
Warehouse 1	11 GHz	3	921234-108	Kit Gnd E105 Fld Instld
Warehouse 1	11 GHz	8.4	920981-007	Kit Hngr E/Ep105 10/Kt
Warehouse 1	11 GHz	2	920745	Wall Feed Thru E/Ep105
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Warehouse 1	11 GHz	2	400124	Twist Flex & Hdw Tf24-090ep
Warehouse 1	11 GHz	2	915665	Boot Assy 4in W/1 Hole E105
Warehouse 1	Common materials	8.4	915006	Kit Hdw 3/8-16x1in
Warehouse 1	Common materials	2	CEIL12-5I	Kit Clg Adptr 514608-003 Qty 5
Warehouse 1	Common materials	8.4	915255	Kit Adptr Ang Mbr Qty Of 10
Warehouse 1	Common materials	1	WPFG-1	KIT WTHPRF CONNS&SPLICE
Warehouse 1	Dehydrators	1	10042194	APD20-D-35XH0R00S1 120v, 3-5psi, Lo psi alm, 10 day purge, < 7800' 6-12GHz
Warehouse 1	Dehydrators	1	920202-W	Kit Gdm-2 Port 0-15psig

LOCATION	SUBSYSTEM	QTY	NOMENCLATURE	DESCRIPTION
Warehouse 1	Dehydrators	1	20040835	SHELF, WALL / RACK MOUNT, PAINTED
Warehouse 1	Rooftop	1	1AF29408AAAA	Heavy-Duty Non-Penetrating Tri
Warehouse 1	Rooftop	1	1AD082220001	PIPE, P2126, SCHEDULE 40 PLAIN END HOT
Warehouse 1	Rooftop	6	1AF29407AAAA	Rubber Mat 1/2inch x 18inch x 48inch
Warehouse 1	Rooftop	3	1AF29406AAAA	Ballast Tie Down Kit
Marine Exchange	DC Power	1	FPSJ65I-ANL-VC	FLATPACK S 48V,100A 1U FRONT WIRE 19"
Marine Exchange	DC Power	1	SPS-FPS100-A01-VV	SMARTPACK S CONTROLLER WITH A01 PROFILE
Marine Exchange	DC Power		241122.125	FPS 48V/1800W HE RECTIFIER
Marine Exchange	DC Power	2	241122.105	FPS HE RECTIFIER 1000W 85-300V AC INPUT RANGE FA
Marine Exchange	DC Power	1	331E00116500	FPS BLANK
Marine Exchange	DC Power	2	ACPWCBL157	ACPOWER CABLE 12/3 WITH AMP PLUG AND L620P 20 A
Marine Exchange	DC Power	1	BATCABL086	BATCABL086 - 10FT 6G 65 AMP NORTH STAR 5/16 LUG
Marine Exchange	DC Power		BATCABL092	BATCABL092 BAT CBL 8FT 6G VALERE 65AMP W/NSTAR
Marine Exchange	DC Power	2	CBB060E...	CBB060E PLUG - IN BULLET BREAKER 60 AMP
Marine Exchange	DC Power	10	GMT-BLANK-FUSES	GMT BLANK FUSES
Marine Exchange	DC Power	1	BT19-BATTERY	´217035
Marine Exchange	DC Power	4	NSB100HTRD	NSB 100ft Ht Red
Warehouse 1	DC Power	1	FPSJ65I-ANL-VC	FLATPACK S 48V,100A 1U FRONT WIRE 19"
Warehouse 1	DC Power	1	SPS-FPS100-A01-VV	SMARTPACK S CONTROLLER WITH A01 PROFILE
Warehouse 1	DC Power		241122.125	FPS 48V/1800W HE RECTIFIER
Warehouse 1	DC Power	2	241122.105	FPS HE RECTIFIER 1000W 85-300V AC INPUT RANGE FA
Warehouse 1	DC Power	1	331E00116500	FPS BLANK
Warehouse 1	DC Power	2	ACPWCBL157	ACPOWER CABLE 12/3 WITH AMP PLUG AND L620P 20 A
Warehouse 1	DC Power	1	BATCABL086	BATCABL086 - 10FT 6G 65 AMP NORTH STAR 5/16 LUG
Warehouse 1	DC Power		BATCABL092	BATCABL092 BAT CBL 8FT 6G VALERE 65AMP W/NSTAR
Warehouse 1	DC Power	2	CBB060E...	CBB060E PLUG - IN BULLET BREAKER 60 AMP
Warehouse 1	DC Power	10	GMT-BLANK-FUSES	GMT BLANK FUSES
Warehouse 1	DC Power	1	BT19-BATTERY	´217035
Warehouse 1	DC Power	4	NSB100HTRD	NSB 100ft Ht Red

SECTION 2

IMPLEMENTATION PLAN

2.1 STATEMENT OF WORK

Motorola will install and configure the proposed equipment. The following table describes the tasks involved with installation and configuration.

Tasks	Motorola	POLA
PROJECT INITIATION		
Contract Finalization and Team Creation		
Execute contract and distribute contract documents.	X	X
Assign a Project Manager as a single point of contact.	X	X
Assign resources.	X	X
Schedule project kickoff meeting.	X	X
Deliverable: Signed contract, defined project team, and scheduled project kickoff meeting.		
Project Administration		
Ensure that project team members attend all meetings relevant to their role on the project.	X	X
Set up the project in the Motorola information system.	X	
Record and distribute project status meeting minutes.	X	
Maintain responsibility for third-party services contracted by Motorola.	X	
Complete assigned project tasks according to the project schedule.	X	X
Submit project milestone completion documents.	X	
Upon completion of tasks, approve project milestone completion documents.		X
Conduct all project work Monday thru Friday, 8:00 a.m. to 5:00 p.m.).	X	
Deliverable: Completed and approved project milestones throughout the project.		
Project Kickoff		
Introduce team, review roles, and decision authority.	X	X

Tasks	Motorola	POLA
Present project scope and objectives.	X	
Review SOW responsibilities and project schedule.	X	X
Schedule Design Review.	X	X
Deliverable: Completed project kickoff and scheduled Design Review.		
Design Review		
Review POLA's operational requirements.	X	X
Present the system design and operational requirements for the solution.	X	
Present installation plan.	X	
Present preliminary cutover plan and methods to document final cutover process.	X	
Present configuration and details of sites required by system design.	X	
Validate that POLA sites can accommodate proposed equipment.	X	X
Provide approvals required to add equipment to proposed existing sites.		X
Review safety, security, and site access procedures.	X	
Present equipment layout plans and system design drawings.	X	
Provide heat load and power requirements for new equipment.	X	
Provide information on existing system interfaces.		X
Provide frequency and radio information for each site.		X
Assume liability and responsibility for proving all information necessary for complete installation.		X
Assume responsibility for issues outside of Motorola's control.		X
Complete the required forms required for frequency coordination and licensing.		X
Ensure that frequency availability and licensing meet project requirements, and pay licensing and frequency coordination fees.		X
Review and update design documents, including System Description, Statement of Work, Project Schedule, and Acceptance Test Plan, based on Design Review agreements.	X	
Provide minimum acceptable performance specifications for POLA provided hardware, software, LAN, WAN and internet connectivity.	X	
Execute Change Order in accordance with all material changes to the Contract resulting from the Design Review.	X	
Deliverable: Finalized design documentation based upon "frozen" design, along with any relevant Change Order documentation.		
SITE PREPARATION AND DEVELOPMENT		
Site Planning		

Tasks	Motorola	POLA
Provide necessary buildings, equipment shelters, and towers for installation of system equipment.		X
Provide the R56 requirements for space, power, grounding, HVAC, and connectivity requirements at each site.	X	
Provide adequate electrical power in proper phase and voltage at sites.		X
Provide as-built structural and foundation drawings of the structures and site locations, along with geotechnical reports, in order to facilitate a structural analysis.		X
Perform structural analysis of towers, rooftops, or other structures to confirm that they are capable of supporting proposed and future antenna loads.		X
Confirm that there is adequate utility service to support the new equipment and ancillary equipment.		X
Modify towers or other structures, or relocate sites in the system, to ensure that they are capable of supporting proposed and future antenna loads.		X
Conduct site walks to collect pertinent information (e.g. location of telco, power, structures, etc.)	X	
Ensure that each site meets the R56 standards for space, grounding, power, HVAC, and connectivity requirements.	X	X
Prepare site construction drawings showing the layout of new and existing equipment.	X	
Review and approve site construction drawings.		X
Ensure that required rack space is available for installation of the new equipment.		X
Deliverable: Information and permitting requirements completed at each site.		
General Facility Improvements – Warehouse 1		
Provide adequate HVAC, grounding, lighting, cable routing, and surge protection based upon Motorola Solutions' Standards and Guidelines for Communication Sites (R56) to support the proposed equipment.	X	
Ensure that electrical service will accommodate installation of system equipment, including isolation transformers, circuit breakers, surge protectors, and cabling.	X	
Provide obstruction-free area for the cable run between the demarcation point and system equipment.	X	
Provide structure penetrations (wall or roof) for transmission equipment (e.g. antennas, microwave radios, etc.).	X	
Supply interior building cable trays, raceways, conduits, and wire supports.	X	
Transport removed site equipment to a location designated by POLA and within POLA's jurisdiction.	X	
Deliverable: **Sites meet physical requirements for equipment installation.**		
General Facility Improvements – Marine Exchange Tower		
Provide adequate HVAC, grounding, lighting, cable routing, and surge protection based upon Motorola Solutions' Standards and		X

Tasks	Motorola	POLA
Guidelines for Communication Sites (R56) to support the proposed equipment.		
Ensure that electrical service will accommodate installation of system equipment, including isolation transformers, circuit breakers, surge protectors, and cabling.		X
Provide obstruction-free area for the cable run between the demarcation point and system equipment.		X
Provide structure penetrations (wall or roof) for transmission equipment (e.g. antennas, microwave radios, etc.).		X
Supply interior building cable trays, raceways, conduits, and wire supports.		X
Transport removed site equipment to a location designated by POLA and within POLA's jurisdiction.		X
Deliverable: Sites meet physical requirements for equipment installation.		
General Facility Improvements – Pilot House		
Provide adequate HVAC, grounding, lighting, cable routing, and surge protection based upon Motorola Solutions' Standards and Guidelines for Communication Sites (R56) to support the proposed equipment.		X
Ensure that electrical service will accommodate installation of system equipment, including isolation transformers, circuit breakers, surge protectors, and cabling.		X
Provide obstruction-free area for the cable run between the demarcation point and system equipment.		X
Provide structure penetrations (wall or roof) for transmission equipment (e.g. antennas, microwave radios, etc.).		X
Supply interior building cable trays, raceways, conduits, and wire supports.		X
Transport removed site equipment to a location designated by POLA and within POLA's jurisdiction.		X
Deliverable: Sites meet physical requirements for equipment installation.		
System Staging		
Ship all equipment needed for staging to Motorola's Customer Center for Solutions Integration (CCSi).	X	
Provide information on existing system interfaces, room layouts, or other information necessary for the assembly to meet field conditions.		X
Set up and rack the solution equipment on a site-by-site basis, as it will be configured in the field at each of the sites.	X	
Cut and label the cables with to/from information to specify interconnection for field installation and future servicing needs.	X	
Complete the cabling/connecting of the subsystems to each other ("connectorization" of the subsystems).	X	
Assemble required subsystems to assure system functionality.	X	
Inventory the equipment with serial numbers and installation references.	X	
Deliverable: System staged and ready for shipment.		

Tasks	Motorola	POLA
Equipment Shipment and Storage		
Provide secure location for solution equipment.		X
Pack and ship solution equipment to the identified, or site locations.	X	
Receive solution equipment.		X
Inventory solution equipment.	X	
Deliverable: Solution equipment received and ready for installation		
General Installation		
Deliver solution equipment to installation location.	X	
Coordinate receipt of and inventory solution equipment with designated contact.	X	
Install all proposed fixed equipment as outlined in the System Description based upon the agreed-upon floor plans, connecting audio, control, and radio transmission cables to connect equipment to the power panels or receptacles, and audio/control line connection points. Installation performed in accordance with R56 standards and state/local codes.	X	
Provide system interconnections that are not specifically outlined in the system design, including dedicated phone circuits, microwave links, or other types of connectivity.		X
Install and terminate all network cables between site routers and network demarcation points, including microwave, leased lines, and Ethernet.	X	
Ensure that Type 1 and Type 2 AC suppression is installed to protect installed equipment.		X
Connect installed equipment to the provided ground system.	X	
Label equipment, racks, and cables.	X	
Perform preliminary audit of installed equipment to ensure compliance with requirements and R56 standards.	X	
Note any required changes to the installation for inclusion in the "as-built" system documentation.	X	
Remove, transport, and dispose of old equipment.	X	
Deliverable: Equipment installed.		
Antenna and Transmission Line Installation		
Install antennas, including supplying and installing new side arm mounts	X	
Install transmission lines required for system.	X	
Provide structure penetrations for transmission equipment (e.g. antennas & microwave line.).		X
Install microwave waveguide and lines, as applicable.	X	

Tasks	Motorola	POLA
Perform sweep tests on transmission lines.	X	
Provide and install attachment hardware for supporting transmission lines on antenna support structure.	X	
Supply and install ground buss bar at the bottom of each antenna support structure.	X	
Deliverable: Antenna and Transmission Line installed.		
Consolettes Installation and Configuration		
Provide the locations of consolettes at each site.		X
Survey mounting locations and develop consolettes installation plan.	X	
Provide adequate space, grounding, and power for the consolettes installation.		X
Properly connectorize and ground the cabling, which will be run to the outdoor antenna location using the least obtrusive method.	X	
Provide an elevated antenna mounting location, and adequate feed-line routing and support.		X
Install line (not greater than 100 feet in length) and antenna system (connectors, coax grounding kit, antenna, and surge protection).	X	
Install consolettes identified in the equipment list.	X	
Perform "one-time only" consolettes programming.	X	
Deliverable: Consolettes equipment installation completed.		
Portable Radio Programming and Distribution		
Pass all features and functionalities of the portable radio template.	X	
Program test portable radios with each template version and activate them on the system.	X	
Program the portable radios identified in the equipment list in accordance with the programming templates, client software, and fleetmap. A "one-time only" programming is included in the project pricing.	X	
Deliver portable radios to authorized POLA personnel and inventory upon receipt.	X	
Acknowledge receipt of portable radios and accessories and verify proper operation of a sampling of delivered portable radios.		X
Distribute portable radios to end users.		X
Deliverable: Portable radios accepted and distributed.		
SYSTEM OPTIMIZATION AND TESTING		
R56 Site Audit		
Perform R56 site-installation quality-audits, verifying proper physical installation and operational configurations.	X	

Tasks	Motorola	POLA
Create site evaluation report to verify site meets or exceeds requirements, as defined in Motorola Solutions' R56 Standards and Guidelines for Communication Sites.	X	
Deliverable: R56 Standards and Guidelines for Communication Sites audits completed successfully.		
Solution Optimization		
Verify that all equipment is operating properly and that all electrical and signal levels are set accurately.	X	
Verify that all audio and data levels are at factory settings.	X	
Verify communication interfaces between devices for proper operation.	X	
Ensure that functionality meets manufacturers' specifications and complies with the final configuration established during design review or system staging.	X	
Deliverable: Completion of System Optimization.		
Functional Acceptance Testing		
Verify the operational functionality and features of the solution supplied by Motorola, as contracted.	X	
Witness the functional testing.		X
Document all issues that arise during the acceptance tests.	X	
If any major task for the system as contractually described fails during POLA acceptance testing or beneficial use, repeat that particular task after Motorola determines that corrective action has been taken.	X	
Resolve any minor task failures before Final System Acceptance.	X	
Document the results of the acceptance tests and present for review.	X	
Review and approve final acceptance test results.		X
If any major task as contractually described fails, repeat that particular task after Motorola determines that corrective action has been taken.	X	
Document all issues that arise during the acceptance tests.	X	
Document the results of the acceptance tests and present to POLA for review.	X	
Resolve any minor task failures before Final System Acceptance.	X	
Deliverable: Completion of functional testing and approval by POLA.		
PROJECT TRANSITION		
Cutover		
Finalize Cutover Plan.	X	X
Calibrate and tune existing mobile and portable radios to ensure good working order.		X

Tasks	Motorola	POLA
Provide Motorola with user radio information for input into the system database and activation, as required.		X
If required, provide reprogramming of user radios and related services (i.e. template building, re-tuning, testing and installations), as needed, during cutover period.		X
Conduct cutover meeting with relevant personnel to address both how to mitigate technical and communication problem impacts to the users during cutover and during the general operation of the system.	X	
Notify the personnel affected by the cutover of the date and time planned for cutover.		X
Provide ongoing communication with users regarding the project and schedule.	X	X
Cut over users and ensure that user radios are operating on system.		X
Resolve punchlist items, documented during the Acceptance Testing phase, in order to meet all the criteria for final system acceptance.	X	
Assist Motorola with resolution of identified punchlist items by providing support, such as access to the sites, equipment and system, and approval of the resolved punchlist items.		X
Deliverable: Migration to new system completed, and punchlist items resolved.		
Transition to Warranty		
Review the items necessary for transitioning the project to warranty support and service.	X	
Motorola to provide services during year 1 warranty which align with the proposed services.	X	
Provide a POLA Support Plan detailing the warranty support associated with the contract equipment.	X	
Participate in the Transition Service/Project Transition Certificate (PTC) process.		X
Deliverable: Service information delivered and approved by POLA		
Finalize Documentation and System Acceptance		
Provide manufacturer's installation material, part list and other related material to POLA upon project completion.	X	
Provide an electronic as-built system manual on CD or other POLA preferred electronic media. The documentation will include the following: ▪ Site Block Diagrams. ▪ Site Floor Plans. ▪ Site Equipment Rack Configurations. ▪ ATP Test Checklists. ▪ Functional Acceptance Test Plan Test Sheets and Results. ▪ Equipment Inventory List. ▪ Maintenance Manuals (where applicable). ▪ Technical Service Manuals (where applicable). Drawings will be delivered in Adobe PDF format.	X	
Receive and approve documentation.		X

Tasks	Motorola	POLA
Execute Final Project Acceptance.	X	X
Deliverable: All required documents are provided and approved. Final Project Acceptance.		

2.2 SITE ENGINEERING

The following engineering responsibilities pertain only to the POLA Pilot and have no baring or connection to the ongoing POLA's Radio System C-123897 project.

2.2.1 Motorola Responsibilities

- Prepare site construction drawings, showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc).
- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Prepare record drawings of the site showing the as-built information.
- Interior equipment anchorage of racks for seismic.
- Identify the needed site / building documentation requirements such as framing plans, structural details, and electrical drawings necessary to create and complete the stamped drawings.

2.2.2 POLA Responsibilities

- Provide to Motorola the necessary site / building documentation needed such as framing plans, structural details, and electrical drawings.

2.3 SITE DEVELOPMENT

Per customer request Motorola will undertake the following actions to ensure site readiness for installation.

2.3.1 Marine Exchange Tower

- As of 4/2/2021 site is still under development for the ongoing POLA's Radio System C-123897. Tower is assembled and shelter is in place however no power is currently installed in shelter. Power will need to be provided to this location before Pilot Radio Project can be completed.
- Motorola site walk revealed no visible actions necessary for site improvements prior to installation of equipment pertaining to this project.

2.3.2 Warehouse 1

- Build out of an existing rooftop shelter with new interior plywood walls with FRP panelling, floor tiling, grounding, and electrical. Close off one of the existing doors and install a new metal door. Motorola will add two (2) new 2 ton HVAC split units. An allowance has been included for reinforcement of the flooring if needed to support the new equipment racks. For antenna work we will be supplying and installing a non-penetrating tri pod mount for 3' MW dish and sleepers for routing of the MW cabling. Asbestos and lead testing will be completed. This work will include engineering services for site drawings and regulatory approvals. Site acquisition services and zoning services are not included.

2.3.2.1 Motorola Responsibilities

- Site Engineering
    - Utility investigation and coordination.
    - Conduct site investigation necessary to develop structural analysis (cases where adequate as-built documentation is not provided).
    - Prepare site construction drawings, showing the layout of various new and existing site components.
    - Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
    - Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
    - Prepare record drawings of the site showing the as-built information.
    - Provide a structural engineering analysis for antenna support structure, if necessary, to support the proposed the proposed equipment loads.
    - Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing.
    - Asbestos and lead testing include.
    - Asbestos removal included for renovated room (if deemed necessary)
    - Interior equipment anchorage of racks for seismic
- Site Preparation
    - Obtain the permits such as electrical, building, and construction permits, and coordinate any inspections with local authorities that may be needed to complete site development work.
    - Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.
- Site Components Installation
    - Conduct a clamp on grounding test of the site.
- Tower Work
    - Ground antenna mounting structure, antenna ground bars, equipment shelter and connect it to existing building ground or structural steel using #2/0 stranded copper.

- Antenna and Transmission Line Installation
- Supply and install 1 rooftop antenna mount(s) to support proposed MW dish
- Provide and install 40 linear ft of PVC sleepers and attachment hardware for supporting transmission lines on the rooftop every three feet.
- Supply and install 1 ground buss bar at the bottom of the antenna support structure for grounding RF cables before they make horizontal transition.

- Existing Facility Improvement Work
  - Renovation of the existing rooftop building to include installation of plywood and FRP panelling to replace existing walls. New floor tiling, sealing and finishing of the room (Not to exceed 500 sq ft).
  - Coordinate the installation of electrical subfeed with disconnect into the equipment room.
  - Supply and install 1 200-amp breaker panel with capacity for 30 circuits.
  - Supply and install 12 20-amp breakers.
  - Supply and install 4 30-amp breakers in the distribution panel and wire to outlets located on an average within 35 cable feet.
  - Supply and install 4 simplex outlets near equipment locations.
  - Supply and install cable runway inside the equipment shelter (30 ln ft).
  - Supply and install 2 cable entry panel with 6 ports.
  - Ground all metallic objects in the interior of the existing room, to meet current Motorola's Standards and Guidelines for Communications Sites (R56) requirements and terminate near equipment locations.
  - Supply and install 2 copper ground buss bar(s).
  - Supply and install 4 fluorescent lighting fixtures inside the existing room.
  - Supply and install 2 telco board (48 inch x 96 inch).
  - Supply and install 1 wall-mounted 10-pound CO2 fire extinguisher and 1 wall-mounted 20-pound ABC fire extinguisher.
  - Supply and install 1 eye wash station and 1 first aid kit.
  - Supply (2) 2-ton split unit air-conditioning systems, includes penetrations.
  - Install air-conditioning unit controls and wire to breaker panel located within 50 cable feet of the air-conditioning unit.
  - Supply and install FM-200 system. This work does not include any building HVAC shutdown, modification and/or tie in to the base building fire alarm system graphic annunciator, modification and/or tie in to the base building fire alarm.
  - Supply and install sensors for alarming (Fire, Smoke, Hi/Lo temp, door intrusion), punch block and wiring of contact closures to alarm block.

- Miscellaneous Work
  - Additional Framing to seal up existing windows.
  - Structural remediation allowance for equipment room flooring to support new equipment racks. Also includes structural remediation design and calculations.
  - Supply and install insulated metal door - includes handles and hardware.
  - Demo existing flooring and doors and disposal. Pending formal asbestos and lead investigation.
  - Furnish material and labor to install one 3/4" emt conduit and appropriate alarm wiring from proposed FM-200 panel to existing building fire alarm demarc within 100'. Includes required testing.

2.3.2.2 Customer Responsibilities

- If required by POLA, prepare and submit Electromagnetic Energy (EME) plans for the site (as a licensee) to demonstrate compliance with FCC RF Exposure guidelines.
- Review and approve site design drawings preferably within 7 calendar days of submission by Motorola or its subcontractor(s). Should a re-submission be required, the Customer shall review and approve the re-submitted plans preferably within 7 calendar days from the date of submittal.
- If applicable, pay for the usage costs of power during the construction/installation effort and on an on-going basis.
- Pay for application fees, taxes and recurring payments for lease/ownership of the property.
- Provide personnel to observe construction progress and testing of site equipment according to the schedule provided by Motorola.
- Provide property deed or lease agreement, and boundary survey, along with existing as-built drawings of the site and site components to Motorola for conducting site engineering if available.
- Provide a right of entry letter from the site owner for Motorola to conduct field investigations if applicable.
- If required, remove or relocate any existing facilities, equipment, and utilities to create space for new site facilities and equipment.

2.3.3 Pilot House

- Motorola site walk revealed no visible actions necessary for site improvements prior to installation of equipment pertaining to this project.

2.3.4 Site Development Assumptions

All clarifications and exceptions contained in this Section (General Site Development Assumptions) take precedence over any other section of this Contract.

- All recurring and non-recurring utility costs [including, but not limited to, generator fuel (except first fill), electrical, Telco] will be borne by the Customer or site owner.
- All utility installations performed by the utility company shall be coordinated and paid for by the site owner and located at jointly agreed to location within or around the new communications shelter or equipment room.
- Site will have adequate electrical service for the new shelter and tower. Utility transformer, transformer upgrades, line, or pole extensions have not been included.
- Hazardous materials are not present at the work location. Testing has been included in this proposal but no removals have been included.
- A maximum of 30 days will be required for obtaining approved building permits from time of submission, and a maximum of 60 days will be required for zoning approvals from time of submittal.
- If extremely harsh or difficult weather conditions delay the site work for more than a week, Motorola will seek excusable delays rather than risk job site safety.
- AM detuning or electromagnetic emission studies will not be required.
- Protective grating over microwave dishes or the communications shelter has not been included in this proposal.

- The site has adequate utility service to support the proposed equipment loading. Utility transformer upgrades or step-up or down transformers will not be required.
- The existing utility service and backup power facilities (UPS, generators) have sufficient extra capacity to support the proposed new equipment load.
- A clear obstruction-free access exists from the antenna location to the equipment room.
- The Customer does not desire upgrade of the existing site to meet Motorola's R56 standards.
- An allowance has been provided for reinforcement of the Warehouse 1 flooring to support the new equipment racks. Once the assessment and calculations have been performed the final cost will be solidified.
- Tribal consulting fees, applications or administration costs have not been included
- Storm water management requirements, plans or implementation have not been included.
- Site construction drawings includes up to 2 revisions - Includes up to (4) sets of 24"x32" CDs
- Asbestos removal has been included (if deemed necessary)

2.3.5 Site Development Completion Criteria

- Site development completed per issued for construction (IFC) construction drawings, project requirements, contractual obligations (including any customer/Motorola approved changes) and approved by POLA.
    - This shall be confirmed by contractor and reviewed with Motorola construction manager and project manager before inspections occur.
- All jurisdictional and contractual required testing and inspections to be performed by the contractor. (Contractual testing and inspections defined and agreed to with project team and customer prior to project kick off; vendor solely responsible for conducting, coordinating and paying for all jurisdictional testing and inspections).
- Motorola site development checklist shall be completed and signed off by contractor prior to customer inspection. (Review with project team and customer and amend checklist as required at project kick off or before work begins).
- Site turn-over package completed and turned over to Motorola (As defined and agreed to with project team and customer).
- All punch list and deficiencies shall be completed prior to customer and Motorola inspections.

2.4 IMPLEMENTATION ASSUMPTIONS

The proposed solution is contingent upon the following assumptions:

- All existing sites or equipment locations will have sufficient space available for the system described to install new equipment (3) 7 ½ foot racks at Warehouse 1 and Marine Exchange sites. Also, the existing tower will have sufficient space to accommodate the proposed antenna system design as outlined in the system description.
- Any tower stress analysis or tower upgrade requirements are the responsibility of POLA, except as noted in the scope of work.
- All existing sites or equipment locations will have adequate electrical power and site grounding suitable to support the requirements of the system described.

- Any site/location upgrades or modifications not referenced in this proposal are the responsibility of POLA.
- Approved local, State, or Federal permits as may be required for the installation and operation of the proposed equipment, are the responsibility of POLA.
- FCC licensing and coordination will be the responsibility of POLA. Motorola has not included any support services or cost for this activity.
- Motorola is not responsible for interference caused or received by the Motorola provided equipment except for interfere that is directly caused by the Motorola-provided transmitter(s) to the Motorola-provided receiver(s). Should POLA system experience interference, Motorola can be contracted to investigate the source and recommend solutions to mitigate the issue.
- Coverage maps were not generated for this proposal. There is no coverage guarantee or coverage verification testing included in this proposal.
- Design is subject to change pending the completion of the site walks, which might result in a project Change Order and additional cost for POLA.
- Motorola will create up to three standard radio templates that will either mirror POLA's existing radio template or will be created from scratch. This proposal does not include services to recreate or revise the radio templates and does not include services to demo and test the new features being sold with the new radios.
- Replaced radio equipment will be removed after system cutover and transported to a disposal location specified by POLA.
- No dispatch consoles have been included in the design. The customer will be unable to patch the VHF and 700 MHz channels to one another without a dispatch console.
- All work is to be performed during normal work hours, Monday through Friday 7:30 a.m. to 5:00 p.m.

2.5 BACKHAUL SOW

Motorola in partnership with Nokia will deliver the following as part of this project:

- Provide performance calculations, path AND site surveys, path design, site engineering services, closeout documentation.
- Deployment of 1 Wavence/MPT-HLC Microwave System HOP.
- Supply and install 1 hop of microwave radios.
- Install MPT shelves in new relay racks.
- Supply and install DC Power System at each of the microwave sites.
- Complete the microwave radio to transmission line connections and inter-bay cabling.
- Install new antennas, standard mounts, transmission lines and DC power rectifiers at the sites.
- Test and turn-up the newly installed microwave radios.

- Any changes to the scope of this SOW due to the results of actual site surveys and/or POLA changes may result in additional charges to POLA.
- The microwave hop is based only on POLA's design and does not incorporate or plan for integration into the main system or any other sites on the main system.

2.6 CAD MAPPING

Port Pilots will be provisioned as its own agency on the LAPD PremierOne CAD system with access to its own agency resources only. They will require deployment of one CAD terminal which will monitor radio location of Port Pilots resources only. They will have no visibility to any other agencies on the system.

The Ports Pilots workstation will be using locally (on the workstation) deployed map data that will cover the geographic areas of interest to the Port Pilots.

The Ports Pilots workstation will be using MXDmap files created locally (in house by Port Pilots GIS personnel to ensure proper coverage). Motorola will assist the Port with the deployment of the maps. These maps subsequently will be loaded locally directly onto the Port Pilots CAD workstation. The maps will be independent from the LAPD maps and Port Pilot's will control 100% of the map content.

2.6.1 CAD Mapping SOW

This Statement of Work (SoW) defines the principal activities and responsibilities of all parties to provide POLA with the hardware, software and services as described below.

Motorola's PremierOne CAD/Mobile system is currently in the process of being implemented for POLA. Motorola is also in the process of upgrading POLA's Radio System as per C-123897 Amendment Number 14.

The scope presented in this SoW and resulting contract with POLA will be executed independently of the CAD/Mobile implementation work being complete. The work stated in this document can be implemented in conjunction with the CAD/Mobile activities, but cannot be finalized until the CAD/Mobile and Radio upgrade activities are completed.

2.6.2 POLA Responsibilities

- Site Conditions: POLA will ensure that all work sites it provides will be safe, secure, and in compliance with all applicable industry and OSHA standards. To the extent applicable and unless the Statement of Work states to the contrary, POLA will ensure that these work sites have adequate: physical space; air conditioning and other environmental conditions; adequate and appropriate electrical power outlets, distribution, equipment and connections; and adequate telephone or other communication lines (including modem access and adequate interfacing networking capabilities), all for the installation, use and maintenance of the System.
- Before installing the Equipment or Software at a work site, Motorola may inspect the work site and advise POLA of any apparent deficiencies or non-conformities with the requirements of this Section. This Agreement is predicated upon normal soil conditions as defined by the version of EIA standard RS-222 in effect on the Effective Date.

- POLA will provide network connectivity to clients as specified in the Network Requirements Section.
- Networking hardware for the connectivity outside the PremierOne LAN must be provided by POLA.
- POLA will provide a network diagram depicting all the devices, device types, and interfaces that the PremierOne system will connect to and through, including, but not limited to all blocked ports, hubs, switches, routers, firewalls, and any other network equipment.
- POLA will provide IP addresses on their network for the PremierOne Servers and third-party application servers.
- POLA will provide external interface connection demarcation points at locations agreed to by Motorola. These locations shall normally be adjacent to the PremierOne equipment rack.
- POLA will provide access, administrative or otherwise, to appropriate systems, locations, information, tools, and equipment to ensure proper connectivity, installation, operations, and maintenance of the system.
- POLA will provide 24-hour access to a secured two-way Internet connection to the PremierOne firewalls for the purposes of deployment, maintenance and monitoring.
- POLA will provide for outbound Internet connectivity initialized by PremierOne Servers.

2.6.3 Network Requirements

- Motorola's solution requires the TCP/IP protocol for connectivity. All servers and workstations will connect to POLA's existing network. POLA will need to provide access to facilities and a dedicated resource knowledgeable on POLA's WAN/LAN. Network bandwidth is determined by the transaction volume and size of incidents and records.
- POLA will supply IP addresses and a mechanism for maintaining IP persistence. Desktop client requires a persistent IP address from the time the application is opened to the time the application is closed.
- PremierOne is dependent on POLA's LAN for client workstation performance. The estimated network requirement per CAD client with typical usage is 0.8Mbps – 1.2Mbps. The recommended built-to bandwidth for new deployments is 1.2Mbps per workstation. Peak load events (e.g. login) require higher bandwidth and higher bandwidth will generally be required for sites with higher quantities of users and greater data intensive operations such as complex map annotation sets and map manipulation if the data resides on the server. The bandwidth recommendations account for the operation of the LAN client to not exceed the values with the map data being stored locally on the client workstation. Additional bandwidth will be required for the transfer of large multi-media files, premise hazard data files and other large attachments.
- Network latency plays a key role in the responsiveness of CAD client operations. PremierOne is designed for optimal use on a local network environment where latency is very low (1ms round-trip). It is important that efforts be made to provide the lowest latency possible between the PremierOne CAD servers and each PremierOne CAD client. PremierOne requires latency of no greater than 20ms round-trip from the client to the servers and back.

2.6.4 Network Bandwidth Calculations

The following bandwidth specifications are required for system performance and have been calculated based on the solution being provided for POLA. These figures represent the requirements needed to accommodate the environment. Also provided are bandwidth specifications after 5 years of annually compounded growth of 3.5% resulting in up to 5 client workstations. As this is a recommendation, the values represented are rounded up. If POLA usage exceeds the figures Motorola used in its considerations, POLA will need to provide additional hardware and or software as needed.

Bandwidth Specifications for Year 1 Assuming 4 CAD Clients		
CAD Client to Server Bandwidth (typical range of 0.8 Mbps to 1.2 Mbps)	3 to 5	Mbps
CAD Client to Server Bandwidth (recommended bandwidth of 2Mbps)	8	Mbps

Bandwidth Specifications for Year 5 Assuming 5 CAD Clients		
CAD Client to Server Bandwidth (typical range of 0.8Mbps to 1.2Mbps)	4 to 6	Mbps
CAD Client to Server Bandwidth (recommended bandwidth of 2Mbps)	10	Mbps

2.6.5 PremierOne CAD Workstation Implementation

2.6.5.1 Motorola Responsibilities

- Procure the client licenses, workstation, monitor as listed in 1.2.
- Ship hardware to POLA.
- Provide on-site technical resource to set up the workstation hardware, monitor and install CAD client on the workstation.

2.6.5.2 POLA Responsibilities

- Ensure adequate power outlets, desk-space and LAN connectivity are available to set up the hardware.
- Provide on-site access for install activities.
- Assign IP addresses and computer names on the LAN.
- Provide a temporary staging area for the unpacking and assembly of equipment.
- Provide access to dumpsters for the removal of trash and shipping containers.
- Remove old consoles, furniture, and equipment as necessary.

2.6.5.3 Completion Criteria

Work will be considered complete upon Motorola's installation of the workstation and CAD clients, and demonstrating CAD Client connectivity to PremierOne CAD server.

2.6.5.4 Assumptions

- Motorola is not providing any training or any other consultative services. POLA is responsible for internal transfer of knowledge to the Port Pilot personnel.
- Functionality of Radio Location feature will be limited by, and in accordance with the feature availability as stated in C-123897 Amendment Number 12, and C-123897 Amendment Number 14.

2.7 TRAINING

In order to achieve the training goals identified by the Port of Los Angeles, we propose the following courses.

It is necessary that participants bring their laptop computers for all system administrator and technician classes. Materials will be delivered electronically via USB drives.

2.7.1 Subscriber Radio – User Training

Course Title	Target Audience	Sessions	Duration	Location	Date	Participants
APX 8000 XE Portable Operator Training Course #: AST1060 (Instructor-led)	Port Boat Captains	2 (4 hour sessions)	1 day	San Pedro, CA	Prior to cutover	18 Total (9 per session)

2.7.2 Course Description

Course description for the Port of Los Angeles proposed training is included below.

APX Portable and APX Mobile Users

Course Synopsis and Objectives:	This course provides APX mobile and portable radio users with an introduction to their radio, its basic operation and tailored job aids available for assistance in operation. The learning experience is a mix of facilitation and hands-on activities to help users perform common tasks associated with their radio operation. Segmentation between user groups (i.e. Police, Fire/EMS and Public Service) is encouraged to help focus instruction on the specific operational issues of the individual user group. After completing the course the participant will be able to: ▪ Understand a high-level overview of the customer system configuration ▪ Understand the general radio operation ▪ Understand proper operating procedures for specific customer features ▪ Perform basic operational tasks of the radio ▪ Utilize the provided job aids to perform specific tasks associated with the radio
Delivery Method:	ILT - Instructor-led Training
Duration:	Normally 4 hours for one mobile and one portable radio product
Participants:	APX portable and mobile radio users, supervisors and support personnel

Class Size:	Up to 15
Prerequisite:	**Required Pre-work:** None **Recommended Prerequisites:** None

Curriculum:	**- Basics**
	
	• Controls
	  o Top and Side Buttons
	  o Switches
	  ▪ 3 Position toggle
	  ▪ 2 Position Concentric
	  o Home key
	  o Data Key
	• Display
	  o Front Display
	  o Top Display
	  o Display light
	  o Intelligent Lighting
	• Push To Talk or Accessory PTT found on the microphone
	• Hub, hang up box (Mobile)
	• Menu
	  o Menu Screen Anatomy
	  o Navigating Menu Screen
	• Recent Call List (Model 3.5)
	• Unified Call List - Contacts (Model 3.5)
	• Dual Sided Radio (Model 3.5)
	  o Dual Mics
	  o Dual Speakers
	• Accessory Connector
	
	- Specific Features
	
	• Changing Talkgroups/Channels
	• Changing Zones
	• Mute tones of keypad
	• Talkgroup Call
	• Private Call
	  o Accessing Private Call Feature
	  o Initiating Private Call
	  o Call List Programming
	• Announcement/All Call (Calls involving Multiple Talkgroups)
	  o Initiating Announcement/All Call
	• Direct/Talkaround
	• Failsoft
	• Radio Profiles
	  o Accessing and changing Radio Profile
	
	- Optional Features
	
	• Scan
	  o Scan program
	  o Priority Scan
	  o Dynamic Priority
	
	• Telephone Interconnect
	  o Accessing Telephone Interconnect Feature
	  o Initiating a Phone Call
	  o Phone List Programming

- Data Services
  - Text Messaging
    - Accessing the Text Messaging Feature
    - Creating a Free Form Text Message
    - Sending a "Canned Text Message
  - GPS
  - User interface with OTAP
- Encryption

2.8 ACCEPTANCE TEST PLAN

System Acceptance of the proposed solution will occur upon successful completion of a Functional Acceptance Test Plan (FATP), which will test the feature and functions for the installed equipment in order to verify that the solution operates according to its design. This plan will validate that POLA's solution will operate according to its design, and increase the efficiency and accuracy of the final installation activities. A detailed FATP will be developed and finalized during the Design Review.

2.9 PROJECT SCHEDULE

The estimated time for completion of the project is approximately 11 months from Project Kickoff through Final Project Acceptance.

Below is a snapshot of the preliminary project schedule prepared for this proposal. A project specific schedule will be prepared by the assigned Motorola Solutions Project Manager during the Detailed Design Review, and then reviewed and approved by POLA.

SECTION 3

PRICING

3.1 PRICING SUMMARY

Below is the pricing summary for the Main proposed solution:

Description	Price (USD)
Equipment	
- GTR with Antenna Systems - Consolette with Antenna Systems - Backup Mobile Radios with Antenna Systems - Portable Radios - Backhaul Equipment - CAD Mapping Client	$750,480
Equipment Discount (LA County Contract)	*-$163,598*
Equipment Total	**$586,882**
Project Services	
- LMR System Integration Services - Backhaul System Integration Services - Subscribers Programming - Equipment Removal - Training - A&E Drawings - Site Development Services - Warehouse 1	$836,028
Project Services Total	**$836,028**
CAD Mapping Services	
- Hardware to support CAD mapping solution	$10,000
- Software to support CAD mapping solution	$5,000
- Services to support CAD mapping solution	$10,000
CAD Mapping Services Total	**$25,000**
Radio Upgrade Joint Project Savings	-$130,000
Equipment total after Discount	**$533,263**
Project Services total after Discount	**$759,647**
CAD Mapping Services	**$25,000**
Project Total (after Discount)	**$1,317,910**
Estimated Tax on Equipment (9.5%)	$50,660

3.2 PAYMENT TERMS

Except for a payment that is due on the Effective Date, Customer will make payments to Motorola within thirty (30) days after the date of each invoice. Customer will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution. If Customer has purchased additional Professional or Subscription services, payment will be in accordance with the applicable addenda. Payment for the System purchase will be in accordance with the following milestones.

System Purchase (excluding Subscribers, if applicable):

1. 25% of the Contract Price due upon contract execution (due upon effective date);
2. 60% of the Contract Price due upon shipment of equipment from Staging;
3. 10% of the Contract Price due upon installation of equipment; and
4. 5% of the Contract Price due upon Final Acceptance.

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

Motorola shall make partial shipments of equipment and will request payment upon shipment of such equipment. In addition, Motorola shall 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 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 by state law.

SECTION 4

CONTRACTUAL TERMS

The proposed solution is subject to the below contractual terms:

The City of Los Angeles (the "City") and Motorola Solutions, Inc. ("Motorola") have two master agreements that are relevant to this Motorola Proposal. Concerning Radio Communications Equipment, the City and Motorola have previously entered into Contract No. 59456 (the "Master Equipment Agreement"). Concerning services and systems, the City and Motorola have previously entered into a Master Services Agreement identified as City Contract No. C-123897 and Motorola Contract No. 1000409608 (the "Master Services Agreement").

The Master Services Agreement contains a Communications System Agreement, including its exhibits, as Exhibit C (referred to as the "Communications System Agreement"). In accordance with the last paragraph of Section 2.2 of the Master Services Agreement, this proposed transaction is a "system transaction" and, as such, this Motorola Proposal is based upon the Communications System Agreement, the other applicable provisions of the Master Services Agreement, and the Master Equipment Agreement (to the extent necessary, applicable and not covered by the Communications System Agreement and the Master Services Agreement).

Pricing for the Equipment offered in the Motorola Proposal is based off of the Master Equipment Agreement and pricing for the services offered in the Motorola Proposal is based off of the Master Services Agreement, and any additional discounts set forth in this Proposal as permitted by Section 2.2 of the Master Services Agreement. Further, this Motorola Proposal is a "Proposal" as that term is used in Section 2.2 of the Master Services Agreement and contains various additional documents (e.g., System Description, Equipment List, Statement of Work, Performance Schedule, Acceptance Test Plan, and Payment Schedule showing the payment milestones, etc.).

POLA may accept this Proposal by issuing a Purchase Order that specifically refers to and incorporates by reference this Proposal by date and general description.

EXHIBIT B

(1)SMALL/VERY SMALL BUSINESS ENTERPRISE PROGRAM

(2)LOCAL BUSINESS PREFERENCE PROGRAM

(1) SMALL/VERY SMALL BUSINESS ENTERPRISE PROGRAM:

The Harbor Department is committed to creating an environment that provides all individuals and businesses open access to the business opportunities available at the Harbor Department in a manner that reflects the diversity of the City of Los Angeles. The Harbor Department's Small Business Enterprise (SBE) Program was created to provide additional opportunities for small businesses to participate in professional service and construction contracts. An overall Department goal of 25% SBE participation, including 5% Very Small Business Enterprise (VSBE) participation, has been established for the Program. The specific goal or requirement for each contract opportunity may be higher or lower based on the scope of work.

It is the policy of the Harbor Department to solicit participation in the performance of all service contracts by all individuals and businesses, including, but not limited to, SBEs, VSBEs, women-owned business enterprises (WBEs), minority-owned business enterprises (MBEs), and disabled veteran business enterprises (DVBEs). The SBE Program allows the Harbor Department to target small business participation, including MBEs, WBEs, and DVBEs, more effectively. It is the intent of the Harbor Department to make it easier for small businesses to participate in contracts by providing education and assistance on how to do business with the City, and ensuring that payments to small businesses are processed in a timely manner. **In order to ensure the highest participation of SBE/VSBE/MBE/WBE/DVBEs, all proposers shall utilize the City's contracts management and opportunities database, the Los Angeles Business Assistance Virtual Network (LABAVN), at http://www.labavn.org, to outreach to potential subconsultants.**

The Harbor Department defines a SBE as an independently owned and operated business that is not dominant in its field and meets criteria set forth by the Small Business Administration in Title 13, Code of Federal Regulations, Part 121. Go to www.sba.gov for more information. The Harbor Department defines a VSBE based on the State of California's Micro-business definition which is 1) a small business that has average annual gross receipts of $3,500,000 or less within the previous three years, or (2) a small business manufacturer with 25 or fewer employees.

The SBE Program is a results-oriented program, requiring consultants who receive contracts from the Harbor Department to perform outreach and utilize certified small businesses. **Based on the work to be performed, it has been determined that the percentage of small business participation will be 3 %, including 0 % VSBE participation**. The North American Industry Classification System (NAICS) Code for the scope of services is $34,050. This NAICS Code is the industry code that corresponds to at least 51% of the scope of services and will be used to determine the size standard for SBE participation of the Prime Consultant. The maximum SBE size standard for this NAICS Code is $_ million.

Consultant shall be responsible for determining the SBE status of its subconsultants for purposes of meeting the small business requirement. Subconsultants must qualify as an SBE based on the type of services that they will be performing under the Agreement. All business participation will be determined by the percentage of the total amount of compensation under the agreement paid to SBEs. The Consultant shall not substitute an SBE firm without obtaining prior approval of the City. A request for substitution must be based upon demonstrated good cause. If substitution is permitted, Consultant shall endeavor to make an in-kind substitution for the substituted SBE.

Consultant shall complete, sign, and submit as part of the executed agreement the attached Affidavit and Consultant Description Form. The Affidavit and Consultant Description Form, when signed, will signify the Consultant's intent to comply with the SBE requirement. All SBE/VSBE firms must be certified by the time proposals are due to receive credit. In addition all consultants and subconsultants must be registered on the LABAVN by the time proposals are due.

(2) LOCAL BUSINESS PREFERENCE PROGRAM:

The Harbor Department is committed to maximizing opportunities for local and regional businesses, as well as encouraging local and regional businesses to locate and operate within the Southern California region. It is the policy of the Harbor Department to support an increase in local and regional jobs. The Harbor Department's Local Business Preference Program (LBPP) aims to benefit the Southern California region by increasing jobs and expenditures within the local and regional private sector.

Consultants who qualify as a Local Business Enterprise (LBE) will receive an 8% preference on any proposal for services valued in excess of $150,000. The preference will be applied by adding 8% of the total possible evaluation points to the Consultant's score. Consultants who do not qualify as a LBE may receive a maximum 5% preference for identifying and utilizing LBE subconsultants. Consultants may receive 1% preference, up to a maximum of 5%, for every 10% of or portion thereof, of work that is subcontracted to a LBE. LBE subconsultant preferences will be determined by the percentage of the total amount of compensation proposed under the Agreement.

The Harbor Department defines a LBE as:

(a) A business headquartered within Los Angeles, Orange, Riverside, San Bernardino, or Ventura Counties. Headquartered shall mean that the business physically conducts and manages all of its operations from a location in the above-named counties; or

(b) A business that has at least 50 full-time employees, or 25 full-time employees for specialty marine contracting firms, working in Los Angeles, Orange, Riverside, San Bernardino, or Ventura Counties.

In order for Harbor Department staff to determine the appropriate LBE preference, Consultant shall complete, sign, notarize (where applicable) and submit the attached Affidavit and Consultant Description Form. The Affidavit and Consultant Description Form will signify the LBE status of the Consultant and subconsultants.

In the event of Consultant's noncompliance during the performance of the Agreement, Consultant shall be considered in material breach of contract. In addition to any other remedy available to City under this Agreement or by operation of law, the City may withhold invoice payments to Consultant until noncompliance is corrected, and assess the costs of City's audit of books and records of Consultant and its subconsultants. In the event the Consultant falsifies or misrepresents information contained in any form or other willful noncompliance as determined by City, City may disqualify the Consultant from participation in City contracts for a period of up to five (5) years.

AFFIDAVIT OF COMPANY STATUS

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on **the attached Consultant Description Form** is true and correct and includes all material information necessary to identify and explain the operations of

_____

Name of Firm

as well as the ownership and location thereof. Further, the undersigned agrees to provide complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this agreement."

(1) **Small/Very Small Business Enterprise Program:** Please indicate the ownership of your company. Please check all that apply. At least one box must be checked:

☐SBE ☐VSBE ☐MBE ☐WBE ☐DVBE ☑OBE

- A Small Business Enterprise (SBE) is an independently owned and operated business that is not dominant in its field and meets criteria set forth by the Small Business Administration in Title 13, Code of Federal Regulations, Part 121.
- A Very Small Business Enterprise (VSBE) is 1) a small business that has average annual gross receipts of $3,500,000 or less within the previous three years, or (2) a small business manufacturer with 25 or fewer employees.
- A Minority Business Enterprise (MBE) is defined as a business in which a minority owns and controls at least 51% of the business. A Woman Business (WBE) is defined as a business in which a woman owns and controls at least 51% of the business. For the purpose of this project, a minority includes:
  - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, The Indian Subcontinent, or the Pacific Islands); and
  - (4) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- A Disabled Veteran Business Enterprise (DVBE) is defined as a business in which a disabled veteran owns at least 51% of the business, and the daily business operations are managed and controlled by one or more disabled veterans.
- An OBE (Other Business Enterprise) is any enterprise that is neither an SBE, VSBE, MBE, WBE, or DVBE.

(2) **Local Business Preference Program:** Please indicate the Local Business Enterprise status of your company. Only one box must be checked:

☐ LBE ☑ Non-LBE

- A Local Business Enterprise (LBE) is: (a) a business headquartered within Los Angeles, Orange, Riverside, San Bernardino, or Ventura Counties; or (b) a business that has at least 50 full-time employees, or 25 full-time employees for specialty marine contracting firms, working in Los Angeles, Orange, Riverside, San Bernardino, or Ventura Counties. "Headquartered" shall mean that the business physically conducts and manages all of its operations from a location in the above-named counties.
- A Non-LBE is any business that does not meet the definition of a LBE.

Signature: Jerry Burch

Printed Name: Jerry Burch

Title: Vice President Motorola Solutions Sales & Services, Inc.

Date Signed: 1/10/2022

Consultant Description Form

PRIME CONSULTANT:

Contract Title: Port Pilot Radios

Business Name: Motorola Solutions, Inc. LABAVN ID#: 2406

Award Total: $ $1,368,570

Owner's Ethnicity: N/A Gender N/A Group: SBE VSBE MBE WBE DVBE OBE (Circle all that apply)

Local Business Enterprise: YES_____ NO X (Check only one)

Primary NAICS Code: 334220 Average Three Year Gross Revenue: $ N/A

Address: 500 W. Monroe Street, 37th Floor

City/State/Zip: Chicago, Illinois 60661

County: Cook

Telephone: (312-) 204-9300 FAX: ( )

Contact Person/Title: Joe Warner/ Sr. Account Executive

Email Address: joseph.warner@motorolasolutions.com

SUBCONSULTANT:

Business Name: Airwave LABAVN ID#: 138117

Award Total: (% or $): $34,050

Services to be provided: Installation Services

Owner's Ethnicity: Latin Gender M Group: SBE VSBE MBE WBE DVBE OBE (Circle all that apply)

Local Business Enterprise: YES X NO_____ (Check only one)

Primary NAICS Code: 517210 Average Three Year Gross Revenue: $ N/A

Address: 2727 Supply Ave

City/State/Zip: Commerce, CA 90040

County: Los Angeles

Telephone: (323) 725-0998 FAX: ( )

Contact Person/Title: Gary Shoup / Vice President

Email Address: g.shoup@airwavecommunicaton.com

SUBCONSULTANT:

Business Name: Pyramid Network Services, LLC LABAVN ID#: 105440

Award Total: (% or $): $227,786

Services to be provided: Install Services, euipment and shelter

Owner's Ethnicity: _____ Gender _____ Group: SBE VSBE MBE WBE DVBE OBE (Circle all that apply)

Local Business Enterprise: YES_____ NO X (Check only one)

Primary NAICS Code: 237130 Average Three Year Gross Revenue: $ 70M

Address: 6615 Towpath Rd

City/State/Zip: East Syracuse, NY 13057

County: Onondaga County

Telephone: (315) 701-1300 FAX: ( )

Contact Person/Title: Kevin Herring / Regional Program Manager

Email address: kerring@pyramidns.com

Consultant Description Form

SUBCONSULTANT:

Business Name: Nokia of America Corporation LABAVN ID#: 29201

Award Total: (% or $): 115,000

Services to be provided: Eginerring and Installation Services

Owner's Ethnicity: N/A Gender N/A Group: SBE VSBE MBE WBE DVBE OBE (Circle all that apply)

Local Business Enterprise: YES_____ NO X (Check only one)

Primary NAICS Code: N/a Average Three Year Gross Revenue: $N/A

Address: 600 Mountatin Ave

City/State/Zip: Murray Hill, NJ 07974

County: Union

Telephone: (905) 460-6296 FAX: ( )

Contact Person/Title: Gino Sicillano / Account Executive

Email Address: gino.siciliano@nokia.com

SUBCONSULTANT:

Business Name: _____ LABAVN ID#: _____

Award Total: (% or $): _____

Services to be provided: _____

Owner's Ethnicity: _____ Gender _____ Group: SBE VSBE MBE WBE DVBE OBE (Circle all that apply)

Local Business Enterprise: YES_____ NO_____ (Check only one)

Primary NAICS Code: _____ Average Three Year Gross Revenue: $_____

Address: _____

City/State/Zip: _____

County: _____

Telephone: ( ) _____ FAX: ( ) _____

Contact Person/Title: _____

Email Address: _____

SUBCONSULTANT:

Business Name: _____ LABAVN ID#: _____

Award Total: (% or $): _____

Services to be provided: _____

Owner's Ethnicity: _____ Gender _____ Group: SBE VSBE MBE WBE DVBE OBE (Circle all that apply)

Local Business Enterprise: YES_____ NO_____ (Check only one)

Primary NAICS Code: _____ Average Three Year Gross Revenue: $_____

Address: _____

City/State/Zip: _____

County: _____

Telephone: ( ) _____ FAX: ( ) _____

Contact Person/Title: _____

Email address: _____

INSURANCE ASSESSMENT REQUEST FORM

Send completed form in Word format to polariskmgmt@portla.org for processing. Please allow up to 10 business days for completed IAR to be returned. For status inquires, contact Risk Management at 310-732-3758.

This section to be completed by Risk Management	
☐ No insurance required, only indemnification ☐ Amendment does not require change to existing contract's insurance requirements	
INSURANCE REQUIREMENTS	**LIMITS (Per Occurrence)**
■ General Liability ☐ Deletion of railroad exclusion ☐ Terminal Operator's Liability ☐ Garage keepers Legal Liability ☐ Host Liquor Liability ☐ Explosion, collapse and underground hazards ☐ Fire Legal Liability (Limits $250K per occ)	$5M
■ Auto Liability (all autos) ☐ On Hook Coverage	$5M
■ Workers' Compensation/Employer's Liability ☐ USL&H ■Waiver of Subrogation	STATUTORY
■ Professional Liability ☐ Medical Malpractice ☐ Law Enforcement Legal Liability ☐ Technology Errors & Omissions (E&O)	$1M
☐ Railroad Protective Liability	$
☐ Ocean Marine Liability ☐ Protective & Indemnity ☐ Jones Act ☐ Hull & Machinery ☐ Ship Builders/Repairers Liability	$
☐ Property/All Risk Insurance	100% replacement value over $250K
☐ Environmental Impairment Liability	$
☐ Builder's Risk (Reference Specification for exclusions)	Value of the project
☐ Fine Arts Insurance	Actual cash value
☐ Aircraft Liability ☐ Passenger Liability for manned aircraft (Limit $1M per seat) ☐ Airport Liability	$

Date Reviewed:11/23/2021

By: Chrizelle Makaena for:
Risk Manager

RM Staff:JU

S:\ASSESS\Pilots - Purchase Install Pilot Radio System Upgrade Motorola.docx

Form IAR05062021

Exhibit C

Acceptable Evidence and Approval of Insurance

Electronic submission is the required method of submitting Consultant's insurance documents. Consultant's insurance broker or agent shall register with the City's online insurance compliance system **KwikComply** at https://kwikcomply.org/ and submit the appropriate proof of insurance on Consultant's behalf.

Renewal of Policies

Within (10) days of the expiration or renewal of any policy, Consultant shall direct their insurance broker or agent to submit to the City's online insurance compliance system **KwikComply** at http://kwikcomply.org a renewal certificate showing that the policy has been renewed or extended or, if new insurance has been obtained, evidence of insurance as specified below. If Consultant neglects or fails to secure or maintain the insurance required below, Executive Director may, at his or her own option but without any obligation, obtain such insurance to protect the City's interests. The cost of such insurance will be deducted from the next payment due Consultant.

EXHIBIT C