

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



ITEM: 3.26  
(ID # 14112)

**MEETING DATE:**

**FROM:** RIVERSIDE COUNTY INFORMATION TECHNOLOGY: Tuesday, December 15, 2020

**SUBJECT:** RIVERSIDE COUNTY INFORMATION TECHNOLOGY - PUBLIC SAFETY ENTERPRISE COMMUNICATION (PSEC): MOU with the City of Corona to expand PSEC radio coverage as approved by the PSEC Steering Committee to increase public safety communications, approve Change Order #CO191270A-02 with Motorola for additional services for the City of Corona for the amount of \$770,920, and approve the purchase of Pepero Cabinet without seeking competitive bids in the amount of \$107,525; All Districts. [Total Cost \$946,767, which includes contingency of \$68,322; RCIT PSEC Funded - 30%, City of Corona funded - 70%]; 4/5 Vote required.

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve the Memorandum of Understanding ("MOU") with the City of Corona (Attachment A) in the amount of \$663,581 (\$629,420 for equipment and services plus \$34,161 for contingency) to recover costs for the Simulcast site addition to the PSEC system in substantially the same form as the attached, subject to approval as to form by County Counsel, and authorize the Chairman of the Board to sign three (3) copies of the final, approved version of the MOU;
2. Approve Change Order #CO191270A-02 (Attachment B) "Northwest Simulcast Cell Site Addition" with Motorola Solutions, Inc (MSI) to enhance PSEC coverage in the critical areas of the City of Corona for the amount of \$770,920 and authorize the Chairman of the Board to sign three (3) copies of each Change Order on behalf of the County;
3. Approve purchase of Pepero Cabinet Equipment made to County-PSEC requirements without seeking competitive bids in the amount of \$107,525 Sole Source Justification attached (Attachment C);

**ACTION: 4/5 Vote Required, Policy**

  
Dave Rogers, Assistant County Executive Officer / CIO 12/7/2020

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**MINUTES OF THE BOARD OF SUPERVISORS**

On motion of Supervisor Spiegel, seconded by Supervisor Jeffries and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Spiegel, Washington, Perez and Hewitt  
Nays: None  
Absent: None  
Date: December 15, 2020  
xc: RCIT, Auditor

Kecia R. Harper  
Clerk of the Board

By:   
Deputy

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4. Authorize Purchasing Agent, in accordance with Ordinance No. 459, based on the availability of fiscal funding and as approved as to form by County Counsel to: (1) sign amendments that exercise the options of the MOU including modifications of Attachment A of the MOU that stay within the intent of the MOU; and (2) sign amendments to the MOU that increase the compensation amount up to \$68,322 for unforeseen installation labor and equipment costs; and
5. Approve and direct the Auditor-Controller to make the budget adjustments per attached Schedule A.

<b>FINANCIAL DATA</b>	<b>Current Fiscal Year:</b>	<b>Next Fiscal Year:</b>	<b>Total Cost:</b>	<b>Ongoing Cost</b>
<b>COST</b>	\$ 946,767	\$ 0	\$ 946,767	\$ 0
<b>NET COUNTY COST</b>	\$ 0	\$ 0	\$ 0	\$ 0
<b>SOURCE OF FUNDS:</b> RCIT PSEC Funded – 30%, City of Corona Revenue – 70%			<b>Budget Adjustment:</b> Yes	
			<b>For Fiscal Year:</b> 20/21	

**C.E.O. RECOMMENDATION:** Approve

**BACKGROUND:**

**Summary**

On January of 2014 the PSEC radio system went live, and the Sheriff and Fire department began operating on the new radio system. Since then, at the recommendation of the Grand Jury and the Board of Supervisors, other cities have joined the PSEC system, realizing the County's vision of making it a truly regional radio system. This has been a great achievement for the County of Riverside and its City partners inside the county.

RCIT, working together with the PSEC user groups, have evaluated the radio coverage performance across the western end of the County. Specifically, areas within the City of Corona have coverage deficiencies that impact the local police department and County agencies operations including County Fire and Sheriff. RCIT has identified the Grape Hill location that will provide significant coverage enhancement to the system. The coverage improvements will impact high density areas that include apartment buildings, major shopping centers and large neighborhoods. The removal of these coverage "dead spots" will result in increased operational support for all emergency responders and will result in greater safety of those first responders and the community in general.

RCIT, working in partnership with the City of Corona, is requesting to add one remote simulcast site to the Northwest Cell of the PSEC communication system. The additional site will expand the coverage performance of that cell and resulting in greater beneficial use in the area. The project will include the design, staging, shipment and installation of the site equipment including backup generators, fuel tanks and radio towers. The project requires a specialized equipment housing that is being purchased by the County through a Sole Source from Pepro as part of the County's contribution to the project. The County will enter into a Memorandum of Understanding (MOU) with the City of Corona to provide the reimbursement mechanism and define the roles and responsibilities through which the parties will work together to accomplish the goal of

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
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installing and maintaining one additional radio site. The City will execute this MOU in substantially the same form as attached.

**Impact on Residents and Businesses**

There is no negative impact on residence and businesses with the approval of this agreement. Public safety agencies in Riverside County, rely on the PSEC system to provide communications for first responders and emergency management teams who serve and protect the community. The PSEC system provides critical countywide communication for these agencies. Enhancing coverage in this area will further improve communication for these agencies.

**Additional Fiscal Information**

The total purchase cost includes the equipment and services \$878,445 and contingency \$68,322 for a total project cost of \$946,767.

ITEM	COST SHARE		
	County	Corona	TOTAL
A. MOTOROLA SERVICES AND EQUIPMENT QUOTE City of Corona	\$141,500	\$629,420	\$770,920
B. EQUIPMENT CABINET - City of Corona - Pepero Quote	\$107,525	\$0	\$107,525
<b>TOTAL COST SHARE</b>	<b>\$249,025</b>	<b>\$629,420</b>	<b>\$878,445</b>
<b>C. PROJECT CONTIGENCY</b>			
\$68,322 Shared Cost Between County and Cities	\$34,161	\$34,161	\$68,322
<b>TOTAL COST SHARE W/ CONTIGENCY</b>	<b>\$283,186</b>	<b>\$663,581</b>	<b>\$946,767</b>

**Contract History and Price Reasonableness**

On December 11, 2018, the Board approved the Communications System and Services Agreement (agenda item 3.33) to replace the MDR 8000 microwave system with the upgraded Motorola Solutions system. The Board of Supervisors approved December 17, 2019 (agenda item 3.32) to amend the existing Communications System and Services Agreement to expand the channel capacity of their existing San Jacinto simulcast cell and to enable Critical Connect service. The increase in capacity added two additional channels at 12 remote sites, increasing the capacity of the San Jacinto simulcast cell to a total of 8 channels.

The County of Riverside continues to benefit from Motorola's 17% discount for the additional services as previously provided by Motorola for the same services.

**ATTACHMENTS:**

- A. City of Corona MOU

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STATE OF CALIFORNIA**

- B. City of Corona Change Order #CO191270A-02 Grapehill Site and Attachment
- C. Sole Source Justification for Pepero Quote #120120-jp01

**SCHEDULE A**

Increase Appropriations:

45520-7400610000-546060	Equipment-Communications	\$196,767
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Anticipated Use of Unrestricted Net Assets

45520-7400610000-380100	Unrestricted Net Assets	\$196,767
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Increase Appropriations:

45521-7400600000-546060	Equipment-Communications	\$750,000
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Anticipated Use of Restricted Net Assets

45521-7400600000-313300	Restricted Net Assets	\$750,000
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Chet A. Baugh, Acting Chairman of the PSEC Steering Committee. 12/7/2020

  
Misley Wang, Supervising Accountant 12/9/2020

  
Tina Grande, Director of Purchasing 12/8/2020

  
Venus Brambila 12/9/2020

  
Gregory F. Prietos, Director County Counsel 12/9/2020

**Change Order No.** 02  
**Date:** 11/23/2020  
**Project Name:** Riverside County Channel Add / Critical Connect  
**Customer Name:** Riverside County on behalf of City of Corona  
**Customer Project Mgr:** Delano Anderson

**The purpose of this Change Order is to:** *(highlight the key reasons for this Change Order)*

Additional equipment and limited services to add one remote simulcast site in the Northwest Cell of the County of Riverside Public Safety Enterprise Communications ("PSEC") system. Reference to the attached proposal (0924 Corona\_Grape Hill\_NW Simulcast Cell Site Addition) are the details of the scope for the new equipment and services.

**Contract #** Motorola Contract dated 12/4/2018, Amended on 12/17/2019  
 (Associated w/ Lease # 24743)

**Contract Date:** 12/17/2019

In accordance with the terms and conditions of the contract identified above between Riverside County on behalf of City of Corona and Motorola Solutions, Inc., the following changes are approved:

**Contract Price Adjustments**

Original Contract Value:	\$ 2,443,426.00
Previous Change Order amounts for Change Order numbers <input type="text" value="1"/> through <input type="text" value="1"/>	\$ 0.00
This Change Order:	\$ 770,920.00
New Contract Value:	\$ 3,214,346.00

**Completion Date Adjustments**

Original Completion Date:	March 30, 2021
Current Completion Date prior to this Change Order:	March 30, 2021
New Completion Date:	March 30, 2021

DEC 15 2020 3.24



# CHANGE ORDER

[CA19I270A-02]

<b>Changes in Equipment:</b> <i>(additions, deletions or modifications)</i> <b>Include attachments if needed</b>
Additional equipment per attached proposal 0924 Corona_Grape Hill_NW Simulcast Cell Site Addition
<b>Changes in Services:</b> <i>(additions, deletions or modifications)</i> <b>Include attachments if needed</b>
Additional services per attached proposal 0924 Corona_Grape Hill_NW Simulcast Cell Site Addition
<b>Schedule Changes:</b> <i>(describe change or N/A)</i>
NONE
<b>Pricing Changes:</b> <i>(describe change or N/A)</i>
Per attached proposal 0924 Corona_Grape Hill_NW Simulcast Cell Site Addition
<b>Customer Responsibilities:</b> <i>(describe change or N/A)</i>
Per attached proposal 0924 Corona_Grape Hill_NW Simulcast Cell Site Addition
<b>Payment Schedule for this Change Order:</b> <i>(describe new payment terms applicable to this change order)</i>
Equipment Shipment - 70% Equipment Installation - 20% System Acceptance - 5% Final Acceptance - 5%


Unless amended above, all other terms and conditions of the Contract shall remain in full force. If there are any inconsistencies between the provisions of this Change Order and the provisions of the Contract, the provisions of this Change Order will prevail.

IN WITNESS WHEREOF the parties have executed this Change Order as of the last date signed below.

**Motorola Solutions,  
Inc.**

By: \_\_\_\_\_  
 Printed Name: Frank Miller  
 Title: SI Director  
 Date: \_\_\_\_\_

**COUNTY OF RIVERSIDE,**  
a political subdivision of the State of California


By:   
 V. Manuel Perez, Chairman  
 Board of Supervisors  
 Dated: **DEC 15 2020**



**CHANGE ORDER**  
[CA19I270A-02]

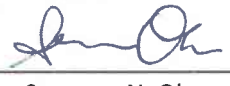
**ATTEST:**

Kecia Harper  
Clerk of the Board

By:   
Deputy

**APPROVED AS TO FORM:**

Gregory P. Priamos  
County Counsel

By:   
Susanna N. Oh,  
Deputy County Counsel

Reviewed by: Tet Sobingsobing  
Motorola Solutions Project Manager

Date: 11/23/2020



# THE CITY OF CORONA

CHANGE ORDER ATTACHMENT A-NORTHWEST SIMULCAST CELL SITE ADDITION

SEPTEMBER 24, 2020

The design, technical, pricing, and other information ("Information") furnished with this submission is proprietary and/or trade secret information of Motorola Solutions, Inc. ("Motorola Solutions") and is submitted with the restriction that it is to be used for evaluation purposes only. To the fullest extent allowed by applicable law, the Information is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the Information without the express written permission of Motorola Solutions.

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SECTION 1

# SYSTEM DESCRIPTION

## 1.1 SYSTEM OVERVIEW

Motorola Solutions is pleased to provide the City of Corona with a proposal for equipment and limited services to add one remote simulcast site in the Northwest Cell of the County of Riverside Public Safety Enterprise Communications (“PSEC”) system. Because this is an existing regional system, it is anticipated the City of Corona may utilize the County of Riverside to complete specific items in this proposal.

This project will include the design, staging, shipment and optimization of the site equipment as specified below.

The existing ASTRO 25 700 MHz Trunked Northwest Simulcast Cell consists of eight channels at each of the existing thirteen remote simulcast sites. This proposal provides equipment for an additional simulcast remote site at Grape Hill with eight channels for a total of fourteen remote simulcast sites for the Northwest Simulcast Cell.

More specifically, this project will include a remote site with eight channels and a SDM3000. **Motorola Solutions will provide cold installation of equipment racks, excluding RF distribution systems.** The tower, Pepero outdoor cabinets, microwave and MPLS routers will be provided by the County of Riverside. The County of Riverside will manage implementation and **all other make work activities**, after all equipment has been shipped to the field and inventoried. A high level block diagram is shown below in Figure 1-1.

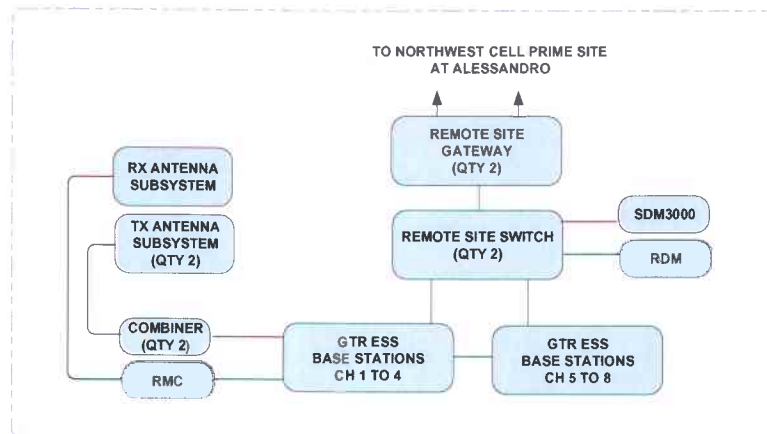


Figure 1-1: Grape Hill Remote Simulcast Site High Level Block Diagram

The remote simulcast site addition will be deployed as Ethernet. The existing County of Riverside backhaul must be Ethernet prior to the deployment of the site addition.

## 1.2 TRUNKED SIMULCAST SYSTEM

A simulcast land mobile radio system provides continuous coverage over a large geographic region using a single set of frequencies. Simulcast solutions extend a system's RF coverage, especially in areas where available frequencies are limited, and in areas where physical barriers (e.g., mountains and buildings) can cause reduced signal coverage.

Trunked simulcast was developed by Motorola Solutions to meet the needs of users who were outgrowing their single-site radio systems. Simulcast offers the following advantages:

- **Improved Coverage** - One radio site may not provide the coverage necessary for the application in question. Simulcast expands the coverage area by expanding the number of radio sites without adding additional frequencies.
- **Efficient Use of Frequencies** - Adding sites typically requires more frequencies. In a simulcast system, the same frequencies are used at every site in the system. This makes very efficient use of the available spectrum.
- **Simplified Radio Operations** - Because the simulcast architecture operates like a single-site system, operations are simplified and radios are easy to use.

The ASTRO 25 simulcast infrastructure consists of a central simulcast prime site. The Prime Site acts as a control and digitized audio center for the simulcast subsystem. Audio is routed to the prime site from each simulcast remote site. To ensure that the best audio from the simulcast receivers is processed, a voting comparator selects the best signal.

The prime site contains the prime site simulcast controller, simulcast comparators, and networking equipment to interface to the remote simulcast sites. The simulcast RF transmitters and receivers are located at the simulcast remote sites. These sites simultaneously transmit identical information from each site to the radios. The receivers at these sites receive the audio from the user radios, and pass the audio back to the prime site for voting. Audio and site control comes from the prime and master sites. Equipment at a simulcast remote site includes a simulcast base radios, fault management equipment, and networking equipment to interface to the prime site.

### Simulcast Remote Site

The ASTRO 25 Simulcast Remote Site consists of the following components, described in the following System Components section.:

- GTR 8000 Expandable Site Subsystem (ESS).
- GTR 8000 Repeater/Base Radio.
- GGM 800 Site Gateway.
- Radio Frequency Distribution System (RFDS).
- Site LAN Switch.



## 1.2.1 System Components

### GTR 8000 Expandable Site Subsystem

The GTR 8000 Expandable Site Subsystem (ESS) enclosure can contain GTR 8000 base stations, site LAN switches, and GCP 8000 controllers, along with an optional Radio Frequency Distribution System (RFDS), depending on your configuration needs.

Voice traffic is routed from each of the site base stations to the system for distribution to all sites associated with the call. Benefits of the ESS include:

Integrated design provides a smaller footprint at the site.

Front/top access design and minimized cabling reduces install and service labor.

Increased power supply redundancy through common power bus.

### GTR 8000 Site Repeater/Base Radio

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 via 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.

### Radio Frequency Distribution System

The Radio Frequency Distribution System (RFDS) provides the interconnection between the base radios and antennas, allowing for a completely contained and more compact installation footprint. For the transmitters, this can include combiners and TX filters.

For the receivers, this can include site preselectors, and multicouplers. Various RFDS options exist for the GTR 8000 Base Radio, GTR 8000 Site Subsystem, and GTR 8000 Expandable Site Subsystem.

### Site Gateway

The Site Gateway provides an interface that handles all of the IP Network Management traffic between the Core Site and the RF Site. The Site Gateway provides the following:

- **Media conversion** - the gateway converts Ethernet to the selected transport medium.
- **Traffic prioritization** - the gateway applies a prioritization marking to the packets leaving the site.
- **Fragmentation** - the gateway fragments large IP packets per industry standards.

### Site LAN Switch

The site LAN Switch provides a LAN interface for site equipment and a LAN port for the site gateway. Through the switch, the service technicians gain access to service the site, and also access the system's Graphical User Interface (GUI).

### **SDM3000 Site RTU**

The SDM3000 Site Remote Terminal Unit (RTU) is where the RF components and environmental equipment are alarmed and controlled. The SDM3000 interfaces to IP devices via SNMP to monitor alarms. The SDM3000 serially interfaces to remote site devices by emulating the specific device protocol, allowing the SDM unit to collect and control alarms of the device. The SDM3000 collects alarms and initiates controls through the various inputs, outputs, and analog signals via the onboard Input and Output (I/O). A built-in Web Server on the SDM3000 allows Service Technician to use a browser to view alarms from all equipment and devices, while they are on site or remote over the ASTRO network infrastructure. The SDM3000 RTU has 48 digital inputs, 16 digital outputs and 8 analog inputs. There will be no paging or email notifications configured. All contact closures that demark at the type 66 punch block are dry contact closures.

## **1.3 SYSTEM DESIGN**

Motorola Solutions has designed an eight channel ASTRO 25 700 MHz trunked simulcast remote site located at Grape Hill to be part of the Northwest Simulcast Cell.

### **1.3.1 Master Site**

Motorola Solutions has included the following site license at the master site to add an additional site to the system:

- One FDMA voice site license.
- One TDMA voice site license.

### **1.3.2 Remote Simulcast Sites**

Simulcast base radios at the simulcast sites simultaneously transmit identical information from each site to the user radios. The receivers at these sites receive the audio from the user radios, and pass the audio back to the prime site. Audio and site control comes from the prime site.

The details below depict the items that will be added to the system and their respective site locations.

#### Grape Hill Simulcast Remote Site Subsystem

The simulcast remote site subsystem will consist of the following major devices:

- Eight GTR8000 Base Radios.
- Two Site Switches.
- Two Site Gateways.
- One SDM 3000.

New antennas and combining/multicoupling equipment have been included at Grape Hill remote simulcast site. The remote site will contain the following RF equipment:

- Two 6-channel transmit combiners.
- One 12-channel receive multicoupler.
- Three 700 MHz antennas (two antennas for transmit and one antenna for receive).
- Two GPS antennas.

- Cables, connectors and grounding kits.

The County of Riverside is responsible for providing an existing tower adjacent to the cage area and for allocating tower space for the proposed antennas at the specified heights.

The frequencies for the proposed system have been identified by the County of Riverside and are shown below in Table 1-1. Additional combiners and antennas may be required for channel spacing considerations if the frequencies are modified.

**Table 1-1: Northwest Simulcast Frequencies**

NORTHWEST SIMULCAST CELL		
COMBINER 1		
	TX (MHz)	RX (MHz)
1	773.45625	803.45625
2	772.60625	802.60625
3	772.43125	802.43125
4	772.05625	802.05625
COMBINER 2		
	TX (MHz)	RX (MHz)
1	772.94375	802.94375
2	772.56875	802.56875
3	772.19375	802.19375
4	771.31875	801.31875

## 1.4 COVERAGE

Motorola Solutions has included coverage maps in this proposal for the Northwest simulcast cell. The coverage maps are for general information only and do not constitute any form of coverage guarantee.

The informational only maps are based upon the following assumptions:

- Delivered Audio Quality (DAQ) Level: 3.4.
- 3.0 Arc Sec Resolution, which is the coverage tile resolution.
- 95% Covered Area Reliability, which is the painted coverage area on the Motorola Solutions maps.
- Coverage is based on the APX 7000 Portable Radio for communication Outdoor On-street only.

The site parameters for the system are shown below in Figure 1-2. Motorola Solutions assumes there are no antenna changes at existing sites. The new site added to the existing simulcast cell is in red.

SITE NAME	LATITUDE	LONGITUDE	TX ANT MODEL	TX ANT HEIGHT (FT)	RX ANT MODEL	RX ANT HEIGHT (FT)
Arlington f	33.91859444	-117.4608722	BPS10-D	80	SC412-HF2LDF	100
Beacon Hill b	33.93417222	-117.5616972	BCD-7509	102	SC412-HF2LDF	120
Blue Mtn d	34.02186111	-117.2955556	BCR-75012-5	113	SC412-HF2LDF(D04-E5608)	130
Box Springs n	33.96222222	-117.2808889	BCD-7509-3-25	82	SC412-HF2LDF(D04-E5608)	100
Cajalco b	33.83668889	-117.4928917	BCD-7509-3-25	222	SC412-HF2LDF	240
Corona c	33.87860833	-117.5801056	SE419-SF3PALDF	70	SC412-HF2LDF	80
Glen Avon e	34.02432778	-117.5030667	DB844H90E-A	113	SC412-HF2LDF(D02-E5608)	120
Grape Hill	33.89379444	-117.5340917	DS7C08PPYU-D	80	CC807-06-T5	100
Green River j	33.88877778	-117.6477778	SE419-SF3PALDF	150	SC412-HF2LDF(D02-E5608)	160
Lake Mathews e	33.83860833	-117.3697694	BPS10-D	141	SC412-HF2LDF	160
Marshall i	33.7839	-117.3788333	BPS10-D	61	SC412-HF2LDF	80
Riverside	33.97777778	-117.3733333	BCD-7509-3-25	230	SC412-HF2LDF(D02-E5608)	230
Sunnyslope f	33.99635667	-117.4451361	BPS10-A	81	SC412-HF2LDF(D02-E5608)	100
Temescal d	33.78043056	-117.4906222	BCD-7509-3-25	132	SC412-HF2LDF	150

Figure 1-2: NW Cell Coverage Site Parameters

## 1.5 ETHERNET SITE LINKS

No site links are included as part of the solution. The County of Riverside is responsible for providing Ethernet/MPLS site links.

## 1.6 POWER

No power systems are included as part of the solution. The City of Corona is responsible for providing **power termination at a junction box overhead of the equipment on a cable tray at Grape Hill.**

## 1.7 INTERFERENCE

Motorola Solutions is not responsible for interference caused or received by the Motorola Solutions provided equipment except for interference that is directly caused by the Motorola Solutions-provided transmitter(s) to the Motorola Solutions-provided receiver(s). Should the County of Riverside system experience interference, Motorola Solutions can be contracted to investigate the source and recommend solutions to mitigate the issue.

## 1.8 SUBSCRIBER UPGRADES OR REPLACEMENT

This proposal does not include any work effort for the fleet of subscriber radios on the system.

## 1.9 ASSUMPTIONS

- Sites to be provided by the City of Corona meet Motorola Solutions' R56 Site Readiness conditions.
- Grounding meets Motorola Solutions' R56 installation standards.
- Sufficient building and tower space exists at all the site locations.
- The County of Riverside is responsible for provision of an existing tower adjacent to the cage area.



- The County of Riverside is responsible for providing concrete pads, bollards, conduits, ATS, generator, fuel tank, and Pepero cabinets.
- The County of Riverside will provide Ethernet MPLS microwave backhaul.
- Adequate power is available to support the new equipment.
- The City of Corona is responsible for the AC and/or DC power systems.
- The County of Riverside is responsible for any frequency license modifications, frequency acquisition, spectrum fingerprinting and FCC coordination.
- For Ethernet site links, the County of Riverside is responsible for meeting the Motorola Solutions Ethernet requirements. Ethernet site links must meet the bandwidth, latency, jitter, packet loss, and tolerance to backhaul congestion in Motorola Solutions' specifications, in order to provide optimal performance of the system.
- No civil work or site upgrades are included in Motorola Solutions' quotation
- This proposal does not include optimization of existing sites within the simulcast cell. The City of Corona, through the services of the County of Riverside, is responsible for setting all new ERPs and launch delays at all existing remote sites.
- City of Corona is responsible for making sure the existing backhaul is Ethernet prior to the implementation of the new site.
- Staging of Motorola Solutions FNE equipment is included.
- System acceptance testing is not included.
- All work will be performed during standard working hours.
- No customer programming software (CPS), flash upgrades, and services to re-program subscribers for encryption have been included in this design.





SECTION 2

# COVERAGE MAPS

The following pages include the coverage maps below for City of Corona/Riverside County. These coverage maps are for general information only and do not constitute any form of coverage guarantee.

- Inbound Portable On Street --- w/ Grape Hill.
- Outbound Portable On Street --- w/ Grape Hill.

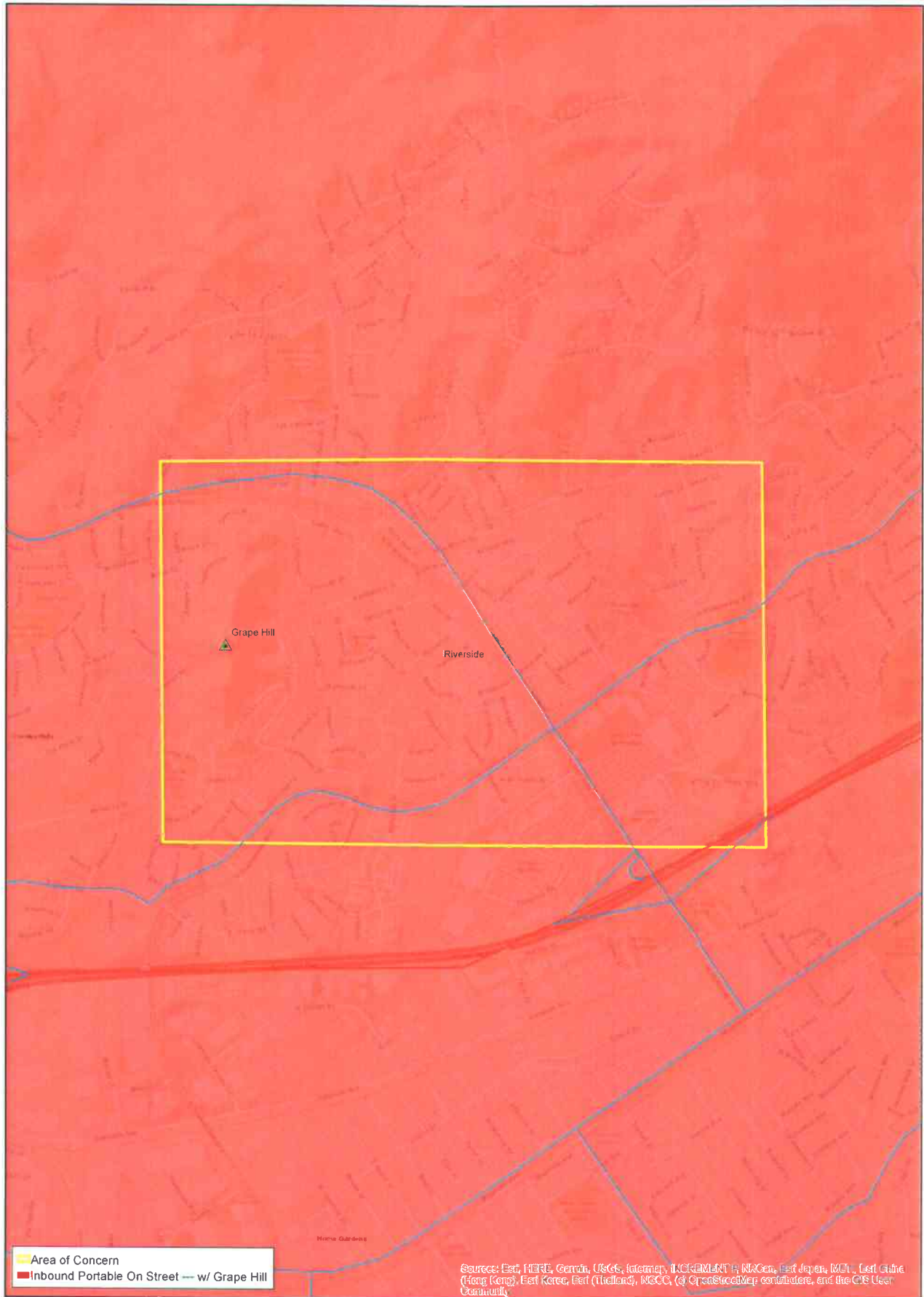




# Riverside County, CA

14-Site 700 MHz P25 Phase 2 Simulcast System with Grape Hill  
Shaded Area Represents 95% Covered Area Reliability at DAQ 3.4

This map is a coverage estimate based upon the information provided and should be used for informational purposes only



Area of Concern  
Inbound Portable On Street --- w/ Grape Hill

Source: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, MDA, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NCCO, © OpenStreetMap contributors, and the GIS User Community

0 0.05 0.1 0.2 Miles  
1 inch = 0.17 miles

Portable Config: APX 7000, 2.5 W  
Tx/Rx at hip, swivel case w/ RSM  
Portable antenna: Half-wave

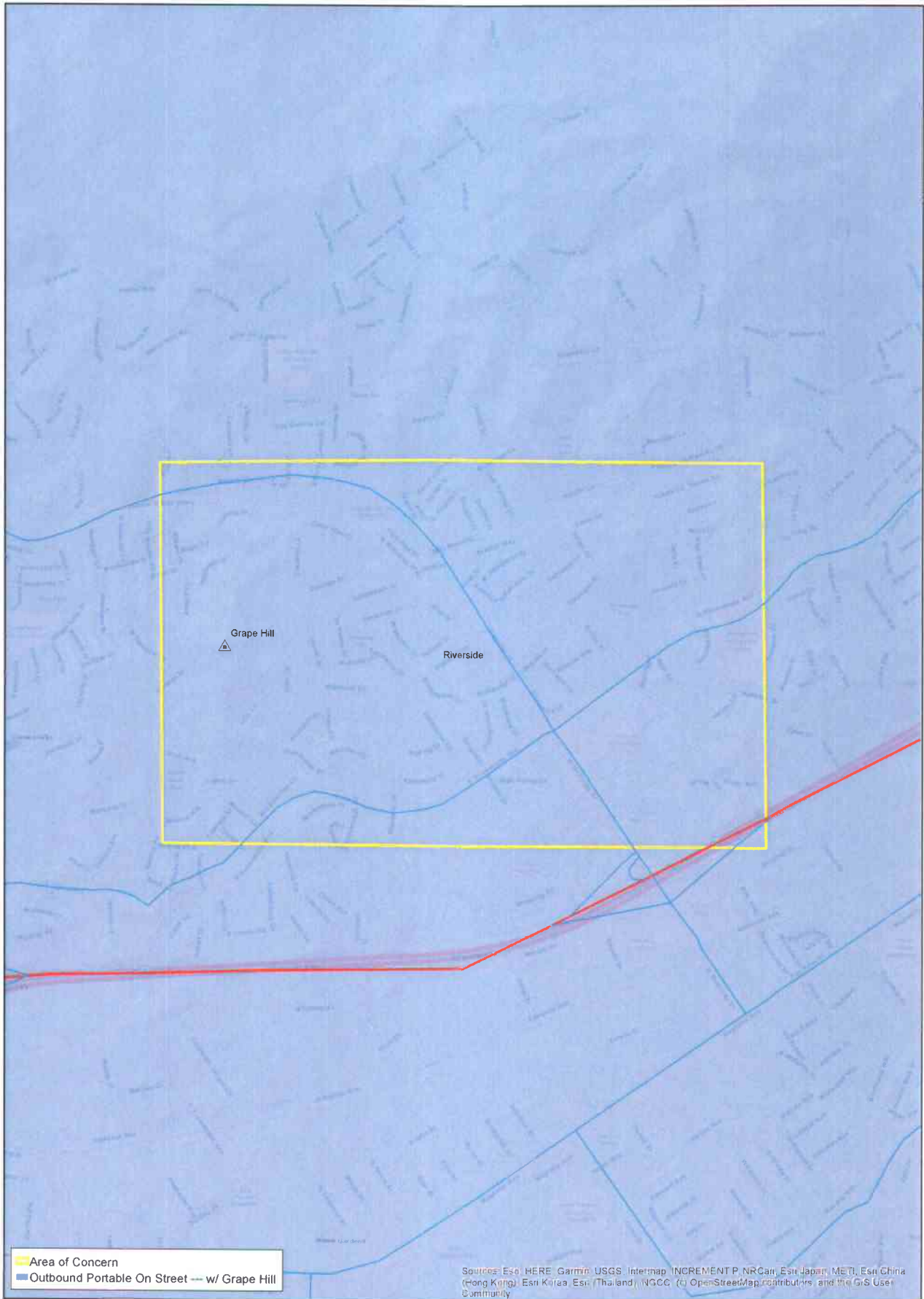
RiversideCountyCA  
NW Cell  
PXJ864  
CCDTLAB-357



# Riverside County, CA

14-Site 700 MHz P25 Phase 2 Simulcast System w/ Grape Hill  
Shaded Area Represents 95% Covered Area Reliability at DAQ 3.4

This map is a coverage estimate based upon the information provided and should be used for informational purposes only



0 0.05 0.1 0.2 Miles  
1 inch = 0.17 miles

Portable Config: APX 7000, 2.5 W  
Tx/Rx at hip, swivel case w/ RSM  
Portable antenna: Half-wave

RiversideCountyCA  
NW Cell  
PXJ864  
CCDTLAB-357

SECTION 3

# EQUIPMENT LIST

QTY	NOMENCLATURE	DESCRIPTION
1	SQM01SUM0323	ASTRO MASTER SITE
1	CA03517AB	ADD: CORE EXPANSION
1	UA00153AB	ADD: P25 FDMA TRUNKING OPERATION SITE
1	UA00159AB	ADD: P25 PHASE 2 TDMA TRKNG OP SITE LIC
7	UA00161AA	ADD: P25 PHASE 2 TDMA SW BASE RADIO LIC
1	UA00160AA	ADD: PHASE 2 DYNAMIC TG ASGNMT SITE LIC
7	UA00162AA	ADD: PHASE 2 DYNAMIC CH BASE RADIO LIC
2	CA01316AA	ADD: UNC ADDTL DEVICE LIC (QTY 10)
2	CLN1868	2930F 24-PORT SWITCH
1	T8492	SITE ROUTER & FIREWALL- AC
1	CA03445AA	ADD: MISSION CRITICAL HARDENING
1	CA03448AA	ADD: STATEFUL FIREWALL
1	T8492	SITE ROUTER & FIREWALL- AC
1	CA03445AA	ADD: MISSION CRITICAL HARDENING
1	CA03448AA	ADD: STATEFUL FIREWALL
1	F4544	SITE MANAGER ADVANCED
1	VA00873	ADD: SDM SNT FW CURR ASTRO REL
1	V266	ADD: 90VAC TO 260VAC PS TO SM
3	V592	AAD TERM BLCK & CONN WI
1	T8343	GSERIES SOFTWARE LICENSING
8	UA00400AA	ADD: GSERIES BR-P25 TRNK MS IP
2	UA00409AA	ADD: GSERIES RDM
1	SQM01SUM7054	GTR 8000 EXPANDABLE SITE SUBSYSTEM
1	CA00719AA	ADD: ASTRO SYSTEM RELEASE 2019.2
1	CA00855AA	ADD: 700/800 MHZ
1	X304AE	ADD: QTY (4) GTR 8000 BASE RADIOS
4	CA01193AA	ADD: IP BASED MULTISITE BASE RADIO SOFTWARE
1	CA02684AA	ADD: AC ONLY POWER DISTRIBUTION
4	CA01953AA	ADD: POWER EFFICIENCY PACKAGE
1	CA03111AA	ADD: CEC COMPLIANCE
3	CA01842AA	ADD: P25 TDMA SOFTWARE
3	CA01902AA	ADD: P25 DYNAMIC CHANNEL SOFTWARE
1	CA00862AA	ADD: SITE & CABINET RMC W/CAPABILITY OF 7-24 BRS
1	CA00879AA	ADD: PRIMARY 6 PORT CAVITY COMBINER

QTY	NOMENCLATURE	DESCRIPTION
1	CA00882AA	ADD: 700 MHZ TX FILTER W/PMU
2	CA01536AA	ADD: GPB 8000 REFERENCE DISTRIBUTION MODULE
2	CA01537AA	ADD: REFERENCE DISTRIBUTION SOFTWARE
1	X882AH	ADD: 7.5 FT OPEN RACK, 48RU
2	PMUG1017A	GNSS REMOTE RECEIVER ASSY
2	DSWM4	HEAVY DUTY W STYLE WALL MOUNT WITH 4 INCH STAND-OFF
2	DSP04268	ALUMINUM 6061-T6. PIPE 1 INCH SCHED 40
2	DSIX2L1M1DC48IG	SPD, HPD GPS DATA LINE, 48VDC, HARD WIRE WITH ISOLATED GROUNDING
2	DS30C87465CO1	125FT OUTDOOR UV PROTECTED CABLE 6 PR, 22AWG DB15 CABLE
1	SQM01SUM7054	GTR 8000 EXPANDABLE SITE SUBSYSTEM
1	CA00719AA	ADD: ASTRO SYSTEM RELEASE 2019.2
1	CA00855AA	ADD: 700/800 MHZ
1	X304AE	ADD: QTY (4) GTR 8000 BASE RADIOS
4	CA01193AA	ADD: IP BASED MULTISITE BASE RADIO SOFTWARE
1	CA02684AA	ADD: AC ONLY POWER DISTRIBUTION
4	CA01953AA	ADD: POWER EFFICIENCY PACKAGE
1	CA03111AA	ADD: CEC COMPLIANCE
4	CA01842AA	ADD: P25 TDMA SOFTWARE
4	CA01902AA	ADD: P25 DYNAMIC CHANNEL SOFTWARE
1	CA00877AA	ADD: CABINET RMC FOR EXPANSION RACK
1	CA00879AA	ADD: PRIMARY 6 PORT CAVITY COMBINER
1	CA00882AA	ADD: 700 MHZ TX FILTER W/PMU
2	CA00885AA	ADD: HIGH AVAILABILITY XHUB
1	X882AH	ADD: 7.5 FT OPEN RACK, 48RU
1	DSPF7982101031N	BANDPASS FILTER, RX, 10 MHZ BW, RANGE 796-824 MHZ
1	TRN7343	SEVEN AND A HALF FOOT RACK
1	DSTSJADP	RACK MOUNT GROUND BAR, 19 IN FOR TSJ AND WPH SERIES DATA SPDS
2	DS1101990	SPD, SHIELDED RJ-45 JACK, SINGLE LINE GBE (1000MBPS) R56 COMPLIANT
8	DSRMP420B	SPD, TYPE 3, 120V RACK MOUNT, 20A STD PLUG-IN INPUT W/ 4 OUTLETS PER
2	TXANT	TXANTENNA
60	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
4	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
4	TDN9289	221213 CABLE WRAP WEATHERPROOFING
400	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER, 7/8 IN, BLACK PE JACKET

QTY	NOMENCLATURE	DESCRIPTION
4	DSA5DFD	D-CLASS 7-16 DIN FEMALE FOR AVA5-50 CABLE
10	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
2	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
14	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
2	DSTSXFMBF	RF SPD, 698-2700MHZ DC BLOCK HIGH PWR, DIN FEM/MALE BI-DIR W/ BRACKET
2	DSGSAKITD	GROUND STRAP KIT - DIN
60	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
4	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
20	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
4	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
1	DSAPM7487K2AC	ADVANCED POWER MONITOR, 740-870 MHZ, 90-246V AC (INC SINGLE COUPLER)
1	DSSP74964440DFF1RU	ANT LINE COUPLER 740-960MHZ 40DB 4-PORTS SUIT APM748 AND APM8796
20	DSFSJ150ACABLE	CABLE: 1/4" SUPERFLEX POLY JKT PER FOOT
4	DDN9769	F1TNM-HC 1/4" TYPE N MALE CONNECTOR FOR FSJ1-50A CABLE
20	DSFSJ150ACABLE	CABLE: 1/4" SUPERFLEX POLY JKT PER FOOT
4	DDN9769	F1TNM-HC 1/4" TYPE N MALE CONNECTOR FOR FSJ1-50A CABLE
1	DSRXANT	RX ANTENNA
15	DSLDF450ACABLE	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
5	TDN9289	221213 CABLE WRAP WEATHERPROOFING
200	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER, 7/8 IN, BLACK PE JACKET
2	DSA5NFS	N FEMALE FOR AVA5-50 CABLE
5	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
7	MDN6816	***OBSOLETE PART # - USE DS43211A***
7	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DS1090501WA	RF SPD, 700-1000MHZ BROADBAND 15 VDC PASS NM ANT, NF EQUIP PIP, ASIG
1	DS1090501WA	RF SPD, 700-1000MHZ BROADBAND 15 VDC PASS NM ANT, NF EQUIP PIP, ASIG
25	DSFSJ450BCABLE	FSJ4-50B 1/2" 50 OHM
2	DDN9682	F4PNMV2-HC 1/2" TYPE N MALE PLATED CONNECTOR

SECTION 4

# STATEMENT OF WORK

This Statement of Work (SOW) describes the deliverables to be furnished to the City of Corona. The tasks described herein will be performed by Motorola Solutions and the City of Corona (utilizing the County of Riverside as the primary contact to Motorola Solutions during project implementation).

**Motorola will:**

1. Provide equipment to add 1 Remote simulcast site with 6 channels at Hollingsworth, SW Cell.
2. Provide Project Management services up to the point of equipment delivery.
3. Provide services to finalize the detailed design package of the new site addition, including: coverage design (antennas, mounting heights etc) and simulcast parameters (launch delays, power), equipment power requirements, interconnect drawings etc. Limited equipment descriptions will be provided. Motorola engineering work is required (for router/switch/site equipment) to tie into the larger microwave/MPLS network.
4. Provide a documentation update, up to the point of the Design Review.
5. Place equipment order.
6. Manufacture equipment.
7. Provide CCSi staging, including cutting of cables and development of labels.
8. Ship equipment to the City of Corona warehouse.
9. Provide cold installation of fixed network equipment racks, excluding RF distribution systems.
10. Provide TNCT network design and equipment configurations.
11. Provide site/box level optimization (Hollingsworth site, only).
12. Perform work during normal working hours M-F.

**Note:**

1. Simulcast launch delays will be provided based upon already approved maps.
2. No civil work, no equipment removals or disposal of existing equipment, no optimization of existing sites, no ATP, no coverage test/guarantee of coverage nor OJT Customer Tech Training are included.
3. No Spares are included in this change order.
4. Tech Support and SUAll are quoted separately.

**The City of Corona/County of Riverside will:**

1. Perform NEPA, FAA, and transport the tower, shelter, generator, and fuel tank to Hollingsworth.
2. Provide all civil work.

3. Provide licensed frequencies.
4. Provide **installation of RF distribution systems**, removal, relocation and disposal of existing equipment, as needed.
5. Provide backhaul.
6. Provide optimization of Remote sites (excluding the new Remote site).
7. Make the subsystem operational.



SECTION 5

# PRICING SUMMARY

## 5.1 NORTHWEST SIMULCAST CELL SITE ADDITION

Equipment and Services	Pricing
Equipment	\$678,689
Equipment LA County Discount	(\$119,604)
LA County Discounted Equipment	\$559,085
Limited PM, Engineering and System Technologist Services	\$305,150
Tax (Equipment Only)	\$48,920
<b>Total Solution</b>	<b>\$913,155</b>
<b>System Incentive if Order is Received by November 14, 2020</b>	<b>(\$142,235)</b>
<b>Grand Total with System Incentive</b>	<b>\$770,920</b>

Lifecycle Services	Year 2	Year 3
Tech Support	\$364	\$382
SUA	\$9,996	\$10,002

21-059

**DAVE ROGERS**  
Assistant County Executive Officer  
Chief Information Officer



**GUSTAVO VAZQUEZ, ACIO**  
Converged Communications Bureau

**JENNIFER HILBER, ACIO**  
Enterprise Applications Bureau

**GIL MEJIA, ACIO**  
Technology Services Bureau

**JIM SMITH**  
Chief Technology Officer

**Date:** December 1, 2020

**From:** Dave Rogers, Chief Information Officer

**To:** Board of Supervisors/Purchasing Agent

**Via:** Monica Rossow, Procurement Contract Specialist

**Subject:** Sole Source Procurement; Request for the Purchase of Public Safety Enterprise Communication Equipment Shelter (PSEC)

The below information is provided in support of my Department requesting approval for a sole or single source.

1. **Supplier being requested:** Pioneer Energy Products dba Pepero, LLC.
2. **Vendor ID:** N/A
3.  **Single Source**                       **Sole Source**
4. **Have you previously requested and received approval for a sole or single source request for this vendor for your department?**  
  
 **Yes**                                       **No**  
 SSJ# N/A

- 4a. **Was the request approved for a different project?** N/A
- Yes**                                       **No**

5. **Supply/Service being requested:** PEPRO custom built cabinet to house PSEC equipment at the Grape Hill site. Typically the radio equipment is housed in a dedicated concrete shelter which has HVAC units, backup power units, grounding systems and equipment racks. Those shelters are installed on engineered concrete pads. This particular site location has limited space for a shelter. However, the location does have previous infrastructure that can accommodate equipment cabinets.  
 The PEPRO cabinet being supplied as part of this project, provides all the equipment shelter benefits in a small and modular cabinet configuration. This includes equipment racking, backup power systems, grounding system and redundant HVAC units. Furthermore, due to the modular nature; the cabinet can be sized to match the current onsite infrastructure.

**6. Unique features of the supply/service being requested from this supplier.**

- The PERPO cabinet meets the Motorola R56 standards for site and shelters. The Motorola R56 standards define strict grounding, cabling and equipment bracing requirements. Adherence to the standards helps to assure that the radio site will meet its various performance criteria under varied extreme conditions that occur at radio sites; resistance to equipment damage during lightning strikes, minimize interference that can impact the radio equipment and all other radio equipment at the site, resistant to damage from earthquakes, resistance to damage from extreme weather. All the PSEC site shelters are required to meet these R56 standards. The Pepro solution provides those same results in this cabinet format.
  
- The PEPRO cabinet is unique in that it comes equipped with a faraday cage that allows for installation of the equipment without providing a separate ground ring. This eliminates the need to invest in construction costs to install a ground ring or upgrade an existing ground ring at the location.
  
- The PEPRO cabinet meets PSEC redundancy requirements by supplying DC power redundancy and redundant HVAC equipment.
  
- The PERPO cabinet provides the bay and size configurability that meets the existing pad constraints at the Grape Hill site.

**7. Reasons why my department requires these unique features from the vendor and what benefit will accrue to the county:** The cabinet meets the specifications for mitigation of interference necessary for a PSEC radio site. This allows for the site to provide the quality of voice communications necessary for Public safety operations resulting in their safety and the public's safety in general. Additionally, the redundant systems of the cabinet ensure that the site remains available during adverse conditions including failure of external power systems. Availability of communications, especially during emergency situations, is key to providing reliable Public safety communications. Finally, the scalability and sizing of the cabinets allows the deployment onto existing equipment pads allowing the County to save the cost of developing new equipment design, permitting and construction.

**8. Period of Performance:** From: 01/01/2021 to 06/30/2021

Is this an annually renewable contract?     No     Yes  
Is this a fixed-term agreement:             No     Yes

**9. Identify all costs for this requested purchase. In addition, please include any single or sole source amounts previously approved and related to this project and vendor in the**

THE COUNTY OF RIVERSIDE

AND THE CITY OF CORONA

MEMORANDUM OF UNDERSTANDING

FOR GRAPE HILL SITE SIMULCAST CELL INSTALLATION

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**THE COUNTY OF RIVERSIDE**

**AND THE CITY OF CORONA**

**MEMORANDUM OF UNDERSTANDING**

**FOR GRAPE HILL SITE SIMULCAST CELL INSTALLATION**

**1.0 PURPOSE**

This Memorandum of Understanding ("MOU") is entered into by and between the County of Riverside, on behalf of its Riverside County Information Technology ("COUNTY"), and the City of Corona ("AGENCY"). This MOU provides the mechanism, and defines the roles and responsibilities, through which these parties will work together to accomplish the goal of installing and maintaining one additional radio site in the PSEC system.

COUNTY and AGENCY agree to the following roles, responsibilities, and accompanying terms and conditions, which will be effective immediately and remain in effect until terminated or modified as defined in Section 4.0 of this MOU.

**2.0 SCOPE**

COUNTY, in partnership with AGENCY, shall purchase and install one additional simulcast remote site into the Northwest simulcast cell of the COUNTY of Riverside Public Safety Enterprise Communications ("PSEC") system ("Project").

This scope of the Project includes installation of Motorola radio equipment ("Radio Equipment") for an additional simulcast remote site with eight channels, as further described in Attachment B "Detailed Statement of Work and Additional Contributions" on certain real property owned by the AGENCY generally located at 742 John Circle, City of Corona, County of Riverside (Assessor's Parcel Number 115-100-047-1) and generally referred to as Grape Hill ("Grape Hill Site"). On the Grape Hill Site, the AGENCY also owns an existing sixty (60) foot high self-supporting lattice structure used for telecommunications purposes ("Existing Tower").

The addition of the Grape Hill Site increases the Northwest simulcast cell site count to quantity 14.

The COUNTY will be responsible for the following items:

1. COUNTY will provide procurement services for the Motorola equipment and services and the Pepro cabinet. The Motorola services will include design changes to the radio system, build, testing and shipment of the radio equipment.
2. The COUNTY will provide payment for the Motorola equipment and services and the Pepro cabinet as defined in Attachment A "City of Corona and County of Riverside Radio Equipment Procurement"
3. The COUNTY will install the equipment, test and optimize the Motorola equipment.
4. The COUNTY will provide services and all necessary resources to integrate and provision the Grape Hill Site into the PSEC system.
5. The COUNTY will install the Pepro equipment cabinet onto the existing equipment pads at the site.

**THE COUNTY OF RIVERSIDE**

**AND THE CITY OF CORONA**

**MEMORANDUM OF UNDERSTANDING**

**FOR GRAPE HILL SITE SIMULCAST CELL INSTALLATION**

- 1 6. The County will install radio equipment in the Pepro cabinet.
- 2 7. The COUNTY will install Radio antennas on the Existing Tower.
- 3 8. The COUNTY will procure and install the NOKIA microwave backhaul link between the
- 4 Grape Hill site and the COUNTY's Arlington site.
- 5 9. The COUNTY will assemble, configure and optimize the NOKIA microwave backhaul
- 6 link.
- 7 10. COUNTY will provide FCC and AQMD licensing services.
- 8 11. The COUNTY will participate with the COUNTY in testing the Radio Equipment for
- 9 functionality and coverage performance.
- 10
- 11 12. The COUNTY will update the PSEC system documentation to include the Radio
- 12 Equipment at the Grape Hill Site.
- 13
- 14 13. The COUNTY will remove the existing temporary site trailer from the Grape Hill site.
- 15 14. The COUNTY will provide ongoing maintenance for the equipment.
- 16 15. The COUNTY will assume financial obligation for ongoing power costs.
- 17 16. The COUNTY will provide fuel.
- 18 The AGENCY will provide the following equipment and services
- 19 1. The AGENCY shall pay to COUNTY in the amounts set forth in Section 14
- 20 "COMPENSATION" and Attachment A.
- 21 2. The AGENCY will provide unencumbered access to the Grape Hill Site, as described
- 22 further in Section 13 "LICENSE FOR RADIO EQUIPMENT AT GRAPE HILL SITE."
- 23 3. The AGENCY will provide access to the existing equipment cabinet pad including
- 24 access to power and underground conduits.
- 25 4. The AGENCY will provide commercial power from the existing meter on the Grape Hill
- 26 Site to the existing electrical switch gear located within the site cage area (previous
- 27 cell carrier site).
- 28 5. The AGENCY will provide access to the existing 60-foot tower including providing
- 29 adequate mount spaces, at the specified heights, for all the site's antennas and
- 30 corresponding transmission lines.
- 31 6. The AGENCY will provide access to the conduits connecting the tower to the radio site.
- 32 7. The AGENCY will provide the site 25-kilowatt generator and 500-gallon fuel tank.
- 33 8. The AGENCY will provide and install equipment pads for the 25-kilowatt generator
- 34 and 500-gallon fuel tank.
- 35 9. The AGENCY will connect the site generator's power and alarm lines to the ATS via
- 36 underground conduit.
- 37 10. The AGENCY will provide fuel lines between the generator and the fuel tank.

**THE COUNTY OF RIVERSIDE  
AND THE CITY OF CORONA  
MEMORANDUM OF UNDERSTANDING  
FOR GRAPE HILL SITE SIMULCAST CELL INSTALLATION**

1 11. The AGENCY will participate with the COUNTY in testing the Radio Equipment for  
2 functionality and coverage performance.  
3

4 **3.0 OWNERSHIP AND MAINTENANCE OF RADIO EQUIPMENT.**

5 COUNTY will assume full ownership of the Radio Equipment, including, without limitation,  
6 all ancillary support equipment (i.e. generators, fuel tanks etc), which will be integrated  
7 into the PSEC system. To this end, upon completion of the installation of the ancillary  
8 support equipment to be purchased and installed by AGENCY, COUNTY shall be the sole  
9 owner of such equipment. AGENCY shall execute a deed, bill of sale or other document  
10 evidencing AGENCY's transfer to COUNTY of ownership of such equipment.  
11

12 COUNTY will monitor, maintain and repair the Radio Equipment subsequent to  
13 installation and integration into the PSEC system. COUNTY will provide fuel for the PSEC  
14 backup generators and COUNTY will assume financial responsibility for the reoccurring  
15 monthly electric bill to provide power to the Radio Equipment at the Grape Hill Site. Once  
16 the Radio Equipment becomes operational and is connected to the PSEC system, COUNTY  
17 will request the related electric service account be transferred to the COUNTY and  
18 AGENCY shall transfer said account to COUNTY. The Radio Equipment located at Grape  
19 Hill Site will undergo software upgrades in alignment with the existing PSEC upgrade  
20 schedule.  
21

22 **4.0 TERM**

23 This MOU shall be effective upon execution by the signature of the COUNTY's Assistant  
24 COUNTY Executive Officer/CIO and the AGENCY's City Manager or their respective  
25 designees. The term of this MOU shall be coterminous with the term of the PSEC Use  
26 Agreement with the City of Corona, on behalf of its Police Department (the "PSEC Use  
27 Agreement"), which is set to expire on December 30, 2026. In the event of termination  
28 or expiration of the PSEC Use Agreement, this MOU shall automatically renew subsequent  
29 to the PSEC Use Agreement renewal.  
30

31 **5.0 AMENDMENT OR TERMINATION OF MOU**

32 This MOU, along with any incorporated attachments, fully expresses all understandings  
33 of the parties concerning all matters covered and shall constitute the total MOU. No  
34 addition to, or alteration of, the terms of this MOU whether by written or verbal  
35 understanding of the parties, their officers, agents or employees, shall be valid unless  
36 made in the form of a written amendment to this MOU formally approved and executed  
37 by both COUNTY and AGENCY.  
38

**THE COUNTY OF RIVERSIDE**

**AND THE CITY OF CORONA**

**MEMORANDUM OF UNDERSTANDING**

**FOR GRAPE HILL SITE SIMULCAST CELL INSTALLATION**

1 This MOU may be amended at any time with the written concurrence of all parties. This  
2 MOU can be terminated with or without cause by either party upon thirty (30) days  
3 written notification to the other party. Termination of the MOU will take effect thirty (30)  
4 days following receipt of the written notice of termination or upon effective date of  
5 funding expiration. AGENCY will be responsible for making payment for any equipment  
6 ordered or services delivered prior to cancellation.  
7

8 **6.0 AGENCY REPRESENTATIVES**

9 The following agency representatives will serve as the primary points of contact to  
10 accomplish the terms of this MOU.  
11

12 COUNTY: Public Safety Enterprise Communication  
13 ATTN: PSEC Manager  
14 3450 Fourteenth Street  
15 Riverside, CA 92501  
16

17  
18 AGENCY: City of Corona  
19 ATTN: Corona PSEC Representative  
20 730 Public Safety Way  
21 Corona, CA 92880  
22

23 **7.0 ROLES AND RESPONSIBILITIES**

24 7.1 AGENCY shall:

25 As defined in Attachment A "City of Corona and County of Riverside Radio Equipment  
26 Procurement "

27 7.2 COUNTY shall:

- 28 • As defined in Attachment A "City of Corona and County of Riverside  
29 Radio Equipment Procurement"

30 **8.0 AUDITS**

31 AGENCY agrees that any duly authorized representative of the Federal, State, or County  
32 Government shall have the right to audit, inspect, excerpt, copy or transcribe any  
33 pertinent records and documentation relating to this MOU. Any audit exception, as it  
34 relates to this MOU, resulting from an audit conducted by any duly authorized  
35 representative of the Federal, State, or COUNTY Government shall be responsibility of  
36 AGENCY. Any audit disallowance adjustments must be paid in full upon demand if  
37 required or may be withheld at the discretion of the Assistant COUNTY Executive  
38 Officer/CIO against amounts due to AGENCY under this MOU.



**THE COUNTY OF RIVERSIDE  
AND THE CITY OF CORONA  
MEMORANDUM OF UNDERSTANDING  
FOR GRAPE HILL SITE SIMULCAST CELL INSTALLATION**

1  
2 **9.0 RECORDS RETENTION**

3 Each party agrees to retain all records pertaining to the MOU for the period indicated in  
4 their respective records retention schedule unless otherwise indicated by the source of  
5 funds or program legislation. If, at the end of the retention period, there is ongoing  
6 litigation or an audit involving those records, each party shall retain the original records  
7 until resolution of such litigation or audit.  
8

9 **10.0 CONFIDENTIALITY**

10 All parties agree to maintain the confidentiality of all client information in accordance  
11 with all applicable Federal, State, and local laws and regulations. Both parties will ensure  
12 names, addresses, phone numbers, and any other individually identifiable information  
13 concerning clients and services received are kept confidential.  
14

15 **11.0 HOLD HARMLESS AND INDEMNIFICATION**

16 Each party (referred to as "indemnitor") shall indemnify and hold harmless the other  
17 party including its officers, employees and agents (referred to as "indemnities") from any  
18 liability, damage, claim, or action based on or asserted upon any negligence or willful  
19 misconduct of indemnitor, its officers, employees, or agents related to this MOU,  
20 including but not limited to property damage, bodily injury or death. Indemnitor shall  
21 defend, at its sole expense (including all costs and fees, including but not limited to  
22 attorney fees, cost of investigation, defense and settlements or awards) in any claim or  
23 action based upon such acts or services.  
24

25 **12.0 ASSIGNMENT**

26 This MOU shall not be assigned by any party hereto, either in whole or part, without prior  
27 written consent of the other party. Any assignment or purported assignment of this MOU  
28 without the prior written consent will be deemed void and of no force or effect.  
29

30 **13.0 LICENSE AND CERTIFICATIONS**

31 All parties verify upon execution of this MOU, that all work performed pursuant to this  
32 MOU will, when applicable, possess a current and valid license/certification in compliance  
33 with any local, State, and Federal laws and will be performed by properly trained and  
34 licensed/certified staff.  
35

36 **14.0 LICENSE FOR RADIO EQUIPMENT AT GRAPE HILL SITE**

37 Subject to the terms and conditions of this MOU, AGENCY hereby grants to COUNTY and  
38 its employees and agents a non-exclusive right to use the Existing Tower for the purpose

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1 of installing constructing, operating, maintaining and repairing the Radio Equipment,  
2 including any ancillary support equipment in accordance with this MOU. Subject to the  
3 terms and conditions of this MOU, AGENCY hereby grants to COUNTY and its employees  
4 and agents a non-exclusive right for pedestrian and vehicular ingress and egress from a  
5 public right-of-way across the Grape Hill Site to the Existing Tower.

6 COUNTY shall have the right of access without escort to the Existing Tower for its  
7 employees and agents twenty-four (24) hours a day, seven (7) days per week. In  
8 exercising its right of access, COUNTY agrees to cooperate with any reasonable security  
9 procedures utilized by the AGENCY, and further agrees not to unduly disturb or interfere  
10 with the AGENCY's use of the Grape Hill Site or the Existing Tower. In the event COUNTY  
11 desires to have a contractor or other third party, who is not an employee of COUNTY,  
12 access the Grape Hill Site or the Existing Tower, said contractor or third party shall be  
13 accompanied at all times by an official or employee of COUNTY. If COUNTY or its  
14 employees, agents, contractors or subcontractors cause any damage to the Grape Hill Site  
15 or the Existing Tower, COUNTY shall promptly repair the same at its sole expense.

16 **15.0 INSURANCE**

17 **15.1 COUNTY**

18 **A. Workers' Compensation:**

19 If the COUNTY has employees as defined by the State of California, the COUNTY shall  
20 maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the  
21 laws of the State of California. Policy shall include Employers' Liability (Coverage B)  
22 including Occupational Disease with limits not less than \$1,000,000 per person per  
23 accident. The policy shall be endorsed to waive subrogation in favor of The County of  
24 Riverside.

25 **B. Commercial General Liability:**

26 Commercial General Liability insurance coverage, including but not limited to, premises  
27 liability, unmodified contractual liability, products and completed operations liability,  
28 personal and advertising injury, and cross liability coverage, covering claims which may  
29 arise from or out of COUNTY'S performance of its obligations hereunder. Policy shall  
30 name the COUNTY as Additional Insured. Policy's limit of liability shall not be less than  
31 \$2,000,000 per occurrence combined single limit. If such insurance contains a general  
32 aggregate limit, it shall apply separately to this agreement or be no less than two (2)  
33 times the occurrence limit.

34 **C. Vehicle Liability:**

35 If vehicles or mobile equipment are used in the performance of the obligations under  
36 this Agreement, then COUNTY shall maintain liability insurance for all owned, non-  
37 owned or hired vehicles so used in an amount not less than \$1,000,000 per occurrence  
38 combined single limit. If such insurance contains a general aggregate limit, it shall apply

THE COUNTY OF RIVERSIDE

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1 separately to this agreement or be no less than two (2) times the occurrence limit.

2 Policy shall name the COUNTY as Additional Insureds.

3 **General Insurance Provisions - All lines:**

- 4 1) The COUNTY must declare its insurance self-insured retention for each coverage  
5 required herein. If any such self-insured retention exceed \$500,000 per occurrence each  
6 such retention shall have the prior written consent of the County Risk Manager before  
7 the commencement of operations under this Agreement. Upon notification of self-  
8 insured retention unacceptable to the COUNTY, and at the election of the County's Risk  
9 Manager, COUNTY'S carriers shall either; 1) reduce or eliminate such self-insured  
10 retention as respects this Agreement with the COUNTY, or 2) procure a bond which  
11 guarantees payment of losses and related investigations, claims administration, and  
12 defense costs and expenses.
- 13 2) In the event of a material modification, cancellation, expiration, or reduction in  
14 coverage, this Agreement shall terminate forthwith, unless the County of Riverside  
15 receives, prior to such effective date, another properly executed original Certificate of  
16 Insurance and original copies of endorsements or certified original policies, including all  
17 endorsements and attachments thereto evidencing coverage's set forth herein and the  
18 insurance required herein is in full force and effect. COUNTY shall not commence  
19 operations until the COUNTY has been furnished original Certificate (s) of Insurance and  
20 certified original copies of endorsements and if requested, certified original policies of  
21 insurance including all endorsements and any and all other attachments as required in  
22 this Section. An individual authorized by the insurance carrier to do so on its behalf shall  
23 sign the original endorsements for each policy and the Certificate of Insurance.
- 24 3) It is understood and agreed to by the parties hereto that the COUNTY'S insurance shall  
25 be construed as primary insurance, and the COUNTY'S insurance and/or deductibles  
26 and/or self-insured retention's or self-insured programs shall not be construed as  
27 contributory.
- 28 4) If, during the term of this Agreement or any extension thereof, there is a material  
29 change in the scope of services; or, there is a material change in the equipment to be  
30 used in the performance of the scope of work; or, the term of this Agreement, including  
31 any extensions thereof, exceeds five (5) years; the COUNTY reserves the right to adjust  
32 the types of insurance and the monetary limits of liability required under this  
33 Agreement, if in the County Risk Management's reasonable judgment, the amount or  
34 type of insurance carried by the COUNTY has become inadequate.
- 35 5) COUNTY shall pass down the insurance obligations contained herein to all tiers of  
36 subcontractor working under this Agreement.
- 37 6) The insurance requirements contained in this Agreement may be met with a program(s)  
38 of self-insurance acceptable to the COUNTY.

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**FOR GRAPE HILL SITE SIMULCAST CELL INSTALLATION**

1 7) COUNTY agrees to notify COUNTY of any claim by a third party or any incident or event  
2 that may give rise to a claim arising from the performance of this Agreement

3 **Waiver of Subrogation**

4 Vendor/Contractor/Operator hereby grants to Entity a waiver of subrogation which any insurer  
5 may acquire against Entity, its officers, officials, employees, and volunteers, from  
6 Vendor/Contractor/Operator by virtue of the payment of any loss. Vendor/Contractor/Operator  
7 agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation  
8 but this provision applies regardless of whether or not the Entity has received a waiver of  
9 subrogation endorsement from the insurer.

10 The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of  
11 the Entity for all work performed by the Vendor/Contractor/Operator, its employees, agents,  
12 and subcontractor.

13 **15.2 AGENCY**

14 A. Workers' Compensation:

15 If the AGENCY has employees as defined by the State of California, the AGENCY shall  
16 maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the  
17 laws of the State of California. Policy shall include Employers' Liability (Coverage B)  
18 including Occupational Disease with limits not less than \$1,000,000 per person per  
19 accident. The policy shall be endorsed to waive subrogation in favor of The AGENCY of  
20 Riverside.

21 B. Commercial General Liability:

22 Commercial General Liability insurance coverage, including but not limited to, premises  
23 liability, unmodified contractual liability, products and completed operations liability,  
24 personal and advertising injury, and cross liability coverage, covering claims which may  
25 arise from or out of AGENCY'S performance of its obligations hereunder. Policy shall  
26 name the AGENCY as Additional Insured. Policy's limit of liability shall not be less than  
27 \$2,000,000 per occurrence combined single limit. If such insurance contains a general  
28 aggregate limit, it shall apply separately to this agreement or be no less than two (2)  
29 times the occurrence limit.

30 C. Vehicle Liability:

31 If vehicles or mobile equipment are used in the performance of the obligations under  
32 this Agreement, then AGENCY shall maintain liability insurance for all owned, non-  
33 owned or hired vehicles so used in an amount not less than \$1,000,000 per occurrence  
34 combined single limit. If such insurance contains a general aggregate limit, it shall apply  
35 separately to this agreement or be no less than two (2) times the occurrence limit.

36 Policy shall name the AGENCY as Additional Insureds.

37 **General Insurance Provisions - All lines:**

38 1) The AGENCY must declare its insurance self-insured retention for each coverage  
39 required herein. If any such self-insured retention exceed \$500,000 per occurrence each

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1 such retention shall have the prior written consent of the AGENCY Risk Manager before  
2 the commencement of operations under this Agreement. Upon notification of self-  
3 insured retention unacceptable to the AGENCY, and at the election of the AGENCY's Risk  
4 Manager, AGENCY'S carriers shall either; 1) reduce or eliminate such self-insured  
5 retention as respects this Agreement with the AGENCY, or 2) procure a bond which  
6 guarantees payment of losses and related investigations, claims administration, and  
7 defense costs and expenses.

8 2) In the event of a material modification, cancellation, expiration, or reduction in  
9 coverage, this Agreement shall terminate forthwith, unless the AGENCY of Riverside  
10 receives, prior to such effective date, another properly executed original Certificate of  
11 Insurance and original copies of endorsements or certified original policies, including all  
12 endorsements and attachments thereto evidencing coverage's set forth herein and the  
13 insurance required herein is in full force and effect. AGENCY shall not commence  
14 operations until the AGENCY has been furnished original Certificate (s) of Insurance and  
15 certified original copies of endorsements and if requested, certified original policies of  
16 insurance including all endorsements and any and all other attachments as required in  
17 this Section. An individual authorized by the insurance carrier to do so on its behalf shall  
18 sign the original endorsements for each policy and the Certificate of Insurance.

19 3) It is understood and agreed to by the parties hereto that the AGENCY'S insurance shall  
20 be construed as primary insurance, and the AGENCY'S insurance and/or deductibles  
21 and/or self-insured retention's or self-insured programs shall not be construed as  
22 contributory.

23 4) If, during the term of this Agreement or any extension thereof, there is a material  
24 change in the scope of services; or, there is a material change in the equipment to be  
25 used in the performance of the scope of work; or, the term of this Agreement, including  
26 any extensions thereof, exceeds five (5) years; the AGENCY reserves the right to adjust  
27 the types of insurance and the monetary limits of liability required under this  
28 Agreement, if in the AGENCY Risk Management's reasonable judgment, the amount or  
29 type of insurance carried by the AGENCY has become inadequate.

30 5) AGENCY shall pass down the insurance obligations contained herein to all tiers of  
31 subcontractor working under this Agreement.

32 6) The insurance requirements contained in this Agreement may be met with a program(s)  
33 of self-insurance acceptable to the AGENCY.

34 7) AGENCY agrees to notify AGENCY of any claim by a third party or any incident or event  
35 that may give rise to a claim arising from the performance of this Agreement

36 **Waiver of Subrogation**

37 Vendor/Contractor/Operator hereby grants to Entity a waiver of subrogation which any insurer  
38 may acquire against Entity, its officers, officials, employees, and volunteers, from

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1 Vendor/Contractor/Operator by virtue of the payment of any loss. Vendor/Contractor/Operator  
2 agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation  
3 but this provision applies regardless of whether or not the Entity has received a waiver of  
4 subrogation endorsement from the insurer.

5 The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of  
6 the Entity for all work performed by the Vendor/Contractor/Operator, its employees, agents,  
7 and subcontractor.

8  
9 **16.0 SEVERABILITY**

10 If any provision in this MOU is held by a court of competent jurisdiction to be invalid, void  
11 or unenforceable, the remaining provisions will nevertheless continue in full force  
12 without being impaired or invalidated in any way.

13  
14 **17.0 COMPENSATION**

15 **17.1 Maximum Amount:**

- 16 a) Equipment and Services procured by the COUNTY from Motorola  
17 \$629,420 as depicted in Table A  
18 b) Project contingency Funding \$34,161 as depicted in Table A

19 **17.2 Method, Time and Schedule/Condition of Payment:**

- 20 a) COUNTY will bill the AGENCY for payment of Motorola equipment and  
21 services once equipment has been shipped and received by the COUNTY.  
22 b) COUNTY will bill the AGENCY for contingency fund payment, if required, at  
23 conclusion of the project.  
24 c) AGENCY shall issue payment within 30 days of date of invoice.

25  
26 **18.0 NOTICES**

27 All notices, claims, correspondence, reports, and/or statements authorized or required by  
28 this MOU shall be addressed for each location as follows:

29  
30 Riverside COUNTY COUNTY Department  
31 Administrative Manger II-Fiscal  
32 3450 14<sup>th</sup> Street  
33 Riverside, CA 92501  
34 Main Number: (951) 955-3700

35  
36 AGENCY'S

37 Administrative Services Manager III  
38 AGENCY'S CONTACT INFORMATION

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FOR GRAPE HILL SITE SIMULCAST CELL INSTALLATION**

1  
2 All notice shall be deemed effective when they are made in writing, addressed, as  
3 indicated above, and deposited in the United States mail. Any notices, correspondence,  
4 reports, and/or statements authorized or required by this MOU addresses in any other  
5 fashion will ne be acceptable.

**SIGNATURE PAGE**

6  
7  
8 IN WITNESS WHEREOF, this MOU has been executed by and on behalf of COUNTY and  
9 AGENCY's by the signatures of the duly authorized respective agents, and the day and year  
10 herein below.

11  
12 COUNTY OF RIVERSIDE

CITY OF CORONA

13 3450 14<sup>th</sup> Street

**AGENCY CONTACT INFORMATION**

14 Riverside, CA 92501

15 **COUNTY OF RIVERSIDE,**  
16 a political subdivision of the State of California  
17 By:

18 \_\_\_\_\_  
19 V. Manuel Perez, Chairman  
20 Board of Supervisors

\_\_\_\_\_ **AGENCY Delegate,**

**Attachment A**

**Detailed Statement of Work Activities and Costs**

**ATTACHMENT A**

**City of Corona and County of Riverside Radio Equipment Procurement**

Equipment/ Service		Cost	AGENCY Contribut ion	COUNTY Contributi on
Motorola Simulcast	Motorola channel trunked Simulcast Site (include.es 8 base station, site controllers, combiners and multicouplers, site switches, site	\$770,920	\$629,420	\$141,500

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<b>Radio Equipment and Services</b>	routers, equipment racks RF routing equip, power supplies, SDM 3000 Alarm module. Cable Tray Ports, Motorola Coverage design, Network Update to include 2 new sites (TNCT file), Equipment order, equipment shipment, Installation of Racks into PEPRO Cabinet (includes shipment to site, bolt down, earthquake bracing, inter rack cable runs, grounding of equipment, RF cabling from Combiner/Multicoupler to Shelter L/A bridge, Power runs from Cabinet's Circuit Breaker Panel to Equipment racks, Power runs from Cabinet's Circuit Breaker Panel to Equipment racks			
<b>PEPRO Cabinet</b>	Tall CLP3 with redundant HVAC and DC backup, cable entry port, electrical system, seismic rating, ATS, 8 hrs backup.	\$107,525		\$107,525
<b>Project Contingency</b>		68,322	\$34,161	\$34,161
<b>Total</b>		<b>\$946,767</b>	<b>\$663,581</b>	<b>\$283,186</b>

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**Attachment B**

**Detailed Statement of Work and Additional Contributions**

<b>Equipment/Service</b>	<b>Description</b>	<b>Cost or Value</b>	<b>AGENCY Contribution</b>	<b>COUNTY Contribution</b>
<b>Tower</b>	Existing tower	\$0.00	X	
<b>Generator</b>	25 KW Propane generator	\$17,000.00	X	



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<b>Propane tank</b>	500 Gallon Above ground Propane tank	\$5,000.00	X	
<b>Microwave Equipment (provided as part of the Microwave project)</b>		\$200,000.00		x
	Wavence Microwave radios			x
	Dish			x
	Boxes			x
	Ice Shields			x
<b>Design Documents (PSEC Staff Provided)</b>		\$2,000.00		x
	Space and Heat (BTU) design			x
	floor layout			x
	Rackface drawings.			x
<b>Equipment Transportation</b>	Cabinet transportation	\$0.00		x
<b>Site Acquisition</b>		\$6,000.00	x	
	Project Description			x
	Site Zoning		x	
	Topographic survey		x	
	Environmental CEQA/NEPA Threshold screening			
	GEOTECH			
	Air Survey			
	2A/1C Letter			
	Soil resistivity test	\$2,000.00		x

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	Obtain Electrical, Building and construction permits		x	
	Obtain AQMD Permit	\$3,000.00		x
<b>Frequency (PSEC Staff Provided)</b>		\$4,000.00		x
	FCC Licensing of PSEC frequencies at the Grape Hill site			x
	Frequency Coordination			x
	EME Study			x
<b>Construction Planning/Documents (PSEC Staff Provided)</b>		\$16,000		x
	Construction Drawing Package			x
	Cabinet Pad Structural			x
	Tower Structural			x
	Cabinet earthquake bracing structural			x
	Tower Erection drawing including pylons			
<b>Construction Activity</b>		\$8,000.00	x	
	Perform light clearing of brush, grubbing and disposal of vegetation and shrub growth in		x	
	Construct 1 concrete slab for 500 gallon above-ground Liquid Propane (LP) fuel tank at Construct 1 concrete slab for 500 gallon above-ground Liquid Propane (LP) fuel tank at 3000 psi with reinforcing		x	

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	steel necessary for foundations.			
	Supply and install 1 500-gallon Liquid Propane (LP) fuel tank(s), fill it with fuel and connect it to the generator.		x	
	Supply and install fuel tank monitors on the tanks to monitor low fuel in tanks and run alarm wiring to the building located within 50 feet of the tank.		x	
	Install 1 standby power generator (25kW) located within 20 feet of the ATS, including interconnection wiring between the generator, transfer switch, and site electrical service mains. E		x	
	Construct 1 concrete slab for 25 KW propane generator. ( psi with reinforcing steel necessary for foundations to be determined by structural).		x	
	Supply and install 120/240-volt, 200-amp, single-phase meter pedestal and hookup for electrical service by the local utility.		x	

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	Supply and install a perimeter grounding system around the compound and shelter. The ground system is to tie to the fence and all new metal structures within the compound to meet current Motorola Solutions' R56 standards.				x
	Conduct a three-point ground resistance test of the site. Should any improvements to grounding system be necessary after ground testing, the cost of such improvements shall be the responsibility of the COUNTY of Riverside PSEC				x
	Supply and install 1 freestanding 24-inch-wide cable/ice bridge from the tower to the shelter (up to 20 linear feet).				
	Bonding generator and fuel tank to existing site ground ring				x
<i>Cabinet Installation</i>					x
	Crane Cabinet onto pad				x
	Bolt Cabinet to Pad				x
	Bond Cabinet to existing Ground ring				x
<i>Tower Installation</i>					x

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	Supply and install 1 ground buss bar at the bottom of the antenna support structure for grounding RF cables before they make horizontal transition.			X
	Mount 3 RF antennas to existing tower at open mount locations made available by the city			X
	Install 7/8 cables from antennas to cable entry port on cabinet.			X
	Dress cables and strap down cables. Gnd cables.			X
	Install 2 GPS antennas on Ice bridge. Run antenna lines from ice bridge to equipment cabinet. Dress cables and ground cables.			X
	Sweep antenna lines			X
	<b>Microwave Installation (provided as part of the Microwave project)</b>	\$135,000.00		X
	Microwave Frequency Acquisition including FCC 601 application			X
	PCN Application			X
	Path surveys			X
	Dish and line installation			X
	DC rack installation			X
	Microwave rack installation and grounding			X
	Microwave alignment, programming and optimization			X
	Provisioning and testing			X

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<b>Optimization/Testing (PSEC Staff Provided)</b>		\$50,000.00		
	Set launch Delays at NW Cell sites			x
	Set power levels at all stations in simulcast cell			X
	Box level test			x
	Simulcast testing			x
	Coverage sampling test			x
<b>Documentation (PSEC Staff Provided)</b>		\$5,000.00		
	Design documents			x
	Update 20 site drawings			x
	Update infrastructure sheets			x
	Test Plans			x
	Method of Procedures			x
				x
<b>Project Management (PSEC Staff Provided)</b>		\$35,000.00		
				x

1

section designated below for current and future fiscal years. You do not need to include previous fiscal year amounts. If approval is for multiple years, ongoing costs must be identified below. If annual increases apply to ongoing costs such as CPI or other contract increases, provide the estimated annual cost for each consecutive year. If the annual increase may exceed the Purchasing Agent's authority, Board approval must be obtained.

Costs include cabinet, electrical power, HVAC, delivery, DC power plant batteries, and automatic transfer switch. These are one-time costs and there are no further costs to be incurred in subsequent fiscal years.

Description:	FY 20/21	Total
One-time Costs: See PEPRO Quote No. 120120-jp01 for breakdown	\$107,525.00	\$107,525.00
<b>Total Cost:</b>	<b>\$107,525.00</b>	<b>\$107,525.00</b>

**10. Price Reasonableness:**

The equipment cabinet provides a cost-effective approach that allows the project to leverage existing equipment cabinet concrete pads at the Grape Hill site. Using the cabinet in place of a shelter removes the need to incorporate expensive shelter costs, construction costs for a shelter pad, and A&E design and permitting costs.

**11. Projected Board of Supervisor Date (if applicable):** 12/15/2020

Gustavo G. Vazquez  
RCIT Bureau Approval

Tracy Gillman  
RCIT Deputy Director of Administration Approval

[Signature]  
Department Head Signature  
(or designee)

David Rivers  
Print Name

12-9-2020  
Date

-----  
The section below is to be completed by the Purchasing Agent or designee.  
-----

Purchasing Department Comments:

Approve

Approve with Condition/s

Disapprove

Condition/s:  
**SUZANNA HINCKLEY**

---



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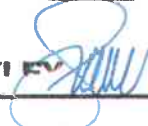
Not to exceed:

One-time \$ 107,525

Annual Amount \$ \_\_\_\_\_ / per fiscal year through \_\_\_\_\_ (date)  
(If Annual Amount Varies each FY)

FY \_\_\_\_\_ : \$ \_\_\_\_\_  
FY \_\_\_\_\_ : \$ \_\_\_\_\_  
FY \_\_\_\_\_ : \$ \_\_\_\_\_  
FY \_\_\_\_\_ : \$ \_\_\_\_\_  
FY \_\_\_\_\_ : \$ \_\_\_\_\_

**SUZANNA HINCKI**  
Purchasing Agent  
Assistant Director

 12/9/20

Date

21-059  
Approval Number  
(Reference on Purchasing Documents)





814-676-5688

Customer: Riverside Co CA  
 Location: Existing cellular site  
 Attn: Delano Anderson  
 Title: ITM II  
 Address:

Phone: 951-955-0570  
 E-Mail: [sdanderson@rwcoco.org](mailto:sdanderson@rwcoco.org)

Quote #: 120120-jp01  
 From: PEPRO, LLC.  
 671 Colbert Ave.  
 Oil City, PA 16301  
 Phone: 630-967-0648  
 Fax: (814)676-3729  
 Email: [jpeterick@peprollc.com](mailto:jpeterick@peprollc.com)  
 Date: 12/01/20

Qty		PRICE
	Tall CLP3 Solution with optional DC power plant and batteries	
	SPECIFICATIONS	
<b>Item 1</b>	<b>Tall CLP3 with dual HVAC Enclosure</b>	
1	Part Number: TallCLP3 CLP3 Shelter Faraday Cage Design with power bay - All welded unibody construction, lifting lugs on top 4 corners. - R-13 Foli Faced insulation in walls and ceiling. - 1/16" FRP Panel Interior Finish - (6) 23 3/4" x 86" CLP Doors with adjustable and lockable bar lock. - (1) 38" x 86" Power Module Door with adjustable and lockable bar lock - UV Resistant PEPRO Clay Powder Coat Exterior finish - Slesmic Zone 4 vibration accommodations	
	<b>Interior and Electrical Layout:</b>	
1	120VAC, 1ph, 3w Power Layout - (3) 100 amp power filters. - 24 Space, 60A Load Center - (6) 120 VAC Receptacles - (2) 120 VAC Lights - mounted Buss bar. - metric plug and connections	
	<b>HVAC:</b>	
2	Redundant 12,000 BTU (1 ton) Air Conditioners - lead lag system control	
	<b>Rack:</b>	
	Provision made for mounting Racks throughout	
3	(3) Riverside Co 7R Racks	
1	- Power Bay Rack included by Pepro	
	<b>Cable Entry:</b>	
5	- Shielded Cable Entry Gland System	
1	- Cable Entry Cover Plates	
	<b>Cable Entry Glands Drilled for the Following Cable:</b> three 7/8", two 1MR400 (3/2") and one EW6 microwave	
	<b>Mounting</b>	
1	- Includes Four (4) Angle brackets	
	<b>Delivery</b>	
1	- excludes offloading from delivery truck	
	<b>DC Power Plant:</b>	
1	- Includes two 3kw DC power plants, and rectifiers	
	<b>Batteries:</b>	
1	- a bank of eight DC batteries for 2hr battery backup	
	<b>Automatic Transfer Switch:</b>	
1	- Integrated ATS on the enclosure	
	<b>TOTAL UNIT PRICE:</b>	<b>\$107,525.00</b>
	<b>PEPRO Terms:</b>	
	- Delivery: 10-12 weeks ARO	
	- FOB Origin	
	- 30% down payable Net 30, remainder Net 30 after shipment	
	- Quote good for 60 Days	
	This product is covered under patent # 5,749,178; # 7,046,521; # 7,385,147; and # 7,688,595 All patents pending.	
	All PEPRO shelters feature our patented Faraday Cage Technology	
	All PEPRO enclosures have our patented and independent test laboratory lightning, RFI, PIM, and EMI protection.	
	All enclosure openings are gasketed and filtered for EMI and RFI protection.	