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

a43

FROM: Riverside County Information Technology (RCIT)

SUBMITTAL DATE: June 25, 2013

SUBJECT: APPROVAL OF THE AGREEMENT WITH MOTOROLA, Inc. FOR TOWER INSTALLATION SERVICES

RECOMMENDED MOTION: That the Board of Supervisors:
1. Approve and execute the agreement with Motorola Inc., for an amount not to exceed $2,856,038.00; and
2. Authorize the Chairman of the Board to sign the attached agreement; and
3. Direct the Clerk of the Board to return three (3) original signed agreements to RCIT.

BACKGROUND: The Indio communication site will require to be relocated due to the expansion of the East County Detention Center. The communication site will be relocated to the County Sherriff's Station located one-half mile south of the current site. RCIT and the Economic Development Agency recommend that the county enter into an agreement with Motorola for the construction of the replacement tower and equipment relocation. The PSEC Steering Committee concurs with this recommendation.

(Continued on page 2)

Kevin K Crawford
Chief Information Officer

13/Jun 13

FINANCIAL DATA				
	Current F.Y. Total Cost:	$0	**In Current Year Budget:**	Yes
	Current F.Y. Net County Cost:	$0	**Budget Adjustment:**	No
	Annual Net County Cost:	$0	**For Fiscal Year:**	13/14

SOURCE OF FUNDS: Eastern Region Detention Center Project Budget

Positions To Be Deleted Per A-30 ☐

Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION: APPROVE

County Executive Office Signature BY: Christopher M. Hans

FORM APPROVED COUNTY COUNSEL
BY: NEAL R. KIPNIS DATE 6/13/13

Purchasing: Mark Seiler, Assistant Director — *Departmental Concurrence*

☒ Policy ☐ Consent — Dep't Recomm.:
☒ Policy ☐ Consent — Per Exec. Ofc.:

Prev. Agn. Ref.: 3/23/13, 3-62

District: All

Agenda Number:

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

3-30

BACKGROUND: (Continued)
As Motorola is currently contracted to enhance the County's 800 MHz radios systems conducting site/tower construction and equipment installation at 76 sites the county will ensure uniformity of design requirements for voice, data and microwave and maintain consistency and overall system operability my utilizing Motorola for this site relocation. All detailed design requirements of the PSEC project will apply to the tower construction and equipment relocation at the new communication site.

The attached agreement with Motorola is within the scope of the overall PSEC project; however it is not an amendment to the existing project contract. This is a new contract for the specific work to be performed as a result of the eastern detention center expansion and because Motorola has installed the County's towers and related radio equipment, the transition will be seamless and expedient. Completion of the new tower and relocation of equipment is scheduled for December 10, 2013 to meet the project timeline for the expansion of the detention center. The funding for the tower relocation project was approved by the Board on March 23, 2013 (M.O. 3-62) funded by the Eastern Region Detention Center project budget.

Price Reasonableness:
In 2005, the County issued RFP PUARC-645 for the purchase and installation of the new PSEC radio communication system. On January 22, 2007, Agenda # 3.62, the Board approved the contract with Motorola for the entire PSEC radio project. For this Indio Communication relocation, Motorola has agreed to extend all discount pricing and terms and conditions of the original agreement.

AGREEMENT BETWEEN
THE COUNTY OF RIVERSIDE
AND
MOTOROLA SOLUTIONS, INC.
(INDIO TOWER)

This Agreement is made between the County of Riverside ("County") and Motorola Solutions, Inc., ("Motorola") as of June ____, 2013. The parties agree as follows:

1. County engages Motorola for the tower construction and equipment installation/relocation of the County's Indio Communication Site based on the same terms and conditions as stated in the Public Safety Enterprise Communication System Agreement between the parties including any amendments and approved by the County Board of Supervisors on January 22, 2007 (the "Agreement").

2. The new site location shall be at 82695 Doctor Carreon Blvd., Indio,

3. The work and further obligations of Motorola are described in the attached Exhibit A.

4. Motorola shall complete the work no later than December 10, 2013.

County of Riverside

By: _____

Name: John. J. Benoit

Title: Chairman, Board of Supervisors

Date: _____

Motorola Solutions, Inc.

By: _____

Name:

Title:

Date: _____

FORM APPROVED COUNTY COUNSEL
BY: _____ 6/13/13
NEAL R. KIPNIS DATE

EXHIBIT A

Motorola / Indio Tower

TABLE OF CONTENTS

SYSTEM DESCRIPTION

1.1 INTRODUCTION

MOTOROLA shall assist PSEC as stated in this document.

1.2 SYSTEM OVERVIEW

In response to the system recommendation involved with the relocation of Indio Control Point equipment to the new Indio AEOC facility, MOTOROLA is proposing various elements to best suit the County of Riverside communication needs.

1.3 INDIO PRIME SITE RELOCATION

There are currently two racks of equipment for the Indio Cell prime site located at Indio Control Point. These two racks of equipment will be relocated to the new Indio AEOC facility. The GPS antennas required for the prime site will also be relocated and new cable runs provided as part of the relocation. In addition, the existing 9170 UPS will be relocated. A new UPS is not being provided as part of this proposal. Updated drawings will be provided for the Indio AEOC.

1.4 IN-BUILDING DISTRIBUTED ANTENNA SYSTEMS (DAS)

An extensive DAS is currently installed at the Indio Jail and the Larsen Justice Center in which the Head End equipment for these buildings is located at the Indio Control Point. As part of this proposal, MOTOROLA will decommission the current DAS and relocate the Head End equipment from the Indio Control Room, over to Larsen Justice Center Basement, and spot check to confirm the operational status of the newly configured system. In addition, MOTOROLA will reconfigure the current DAS equipment at Indio Jail to a standalone passive DAS which will include the integration of a dedicated donor antenna, and off-Air Repeater in the form of Node-A. The existing DAS infrastructure that feeds the single Omni antenna will remain as it. New equipment will include two separate donor runs to provide better isolation from existing County 800 MHz coverage, as well as a new repeater, upgraded UPS and associated components to complete the standalone DAS system at the current Indio Jail.

Finally, a new DAS estimate is being provided for the new Indio Jail. The proposed design for the distributed antenna system required to meet the coverage objectives determined by the County is listed below:

- Tower 1 – 3 floors approx. 75,000 square footage covered
- Tower 2 – 3 floors approx. 75,000 square footage covered
- Tower 3 – 3 floors approx. 75,000 square footage covered
- Misc Tunnels – 1 floor approx. 20,000 square footage covered
- Basement Levels – 1 floor approx. 75,000 square footage covered

A site survey will be performed prior to installation and equipment ordering. The results of the survey will determine the final design and a change order to alter the total cost of the new DAS as needed for the new Indio jail will be provided to the County.

Services for the implementation of the DAS systems at these 3 locations include conducting a Coverage Acceptance Test for each High Priority Building.

1.5 MICROWAVE

There are 3 current microwave paths to Indio. These paths are to Cactus City, Santa Rosa, and Indio Hill. New microwave radios will be provided for Indio AEOC to facilitate a microwave cutover to the new location.

The cutover will involve downtime and will require a plan be developed to minimize the downtime as much as possible. The County will coordinate the licensing updates necessary for the relocation.

The cutover planning for the microwave will entail identifying other sites or traffic impacted by the downtime.

1.6 TOWER

A 180' tower is included in this proposal. The tower will accommodate 4 microwave dishes for the 3 paths mentioned above and the antennas identified in the spreadsheet provided by the County (*Indio ECC-EOC tower requirements Ver 6 Feb 27th 2013.xls*).

1.7 SYSTEM COMPONENTS

MOTOROLA's proposed solution includes the new equipment summarized in the following sections.

1.7.1 Indio Prime Site

Equipment Cables
GPS Antenna Cables and Polyphasers

1.7.2 Indio Microwave

MDR-8000 Radios
5 each MDR-8000 3-DS3 Radios
1 each MDR-8000 1-DS3
Ancillary Equipment
10 each Adtran (MX-2800)
6 each ELF Shelves (ELF 0000-2400)
16 each Telect DS3 Modules (ELF 3206-1900)
7 each Telect DSXes (010-0000-4000)
112 each Telect 4 Port Modules (T1PQ9AU1AA)
Channel banks not included
Dehydrator not included
Battery Plant
C&D Sageon Sentry
C&D AT-15P 840 amps

2 Microwave Dishes and Waveguide

1.7.3 In-Building Distributed Antenna System Reconfigurations

Existing Indio Jail
1 each Node A4 Subrack AC Powered
1 each (700-806) 8-Element Yagi donor antenna
1 each 800/900 MHz Yagi (12 dBd)
1 each UPS rack mount for Head End
Larsen Justice Center
1 each (700-806) 8-Element Yagi donor antenna
1 each 800/900 MHz Yagi (12 dBd)
1 each UPS rack mount for Head End

1.7.4 In-Building Distributed Antenna System (New Indio Jail)

1 each Node A4 Subrack AC Powered
1 each (700-806) 8-Element Yagi donor antenna
1 each 800/900 MHz Yagi (12 dBd)
1 each UPS rack mount for Head End
10 each UPS Tower for Fiber Remotes
10 each ION-B LMR 700/800 Remote (LP)
35 each 698-2700 MHz Indoor Omni
6 each 698-2.7 GHz Panel Antenna (3.85 dBd)

1.7.5 Antennas and Transmission Line

34 Antennas and Transmission Line
3 Donor Antennas and Transmission Line
The following 8 Antennas will be provided by the County:
1 each Diamond A-144S5
1 each Diamond A430S10
1 each Diamond X-200A
2 each Diamond F-22A
1 each Hustler G7-220
1 each Antennacraft FMSS antenna
1 each B&W BWDS-90N with FDMK kit

1.7.6 Tower

180' Self-supported
120 MPH Maximum Basic Wind Speed – must meet TIA-222 Rev.G
Class 3
Exposure C
Category 1
Accessories (Ladders, Safety Climb)

1.7.7 Miscellaneous

9 each 7.5' Racks

There will be additional racks needed for the radio room. RCIT will provide the racks for their equipment room.

SECTION 2

EQUIPMENT SUMMARY

2.1 INDIO PRIME SITE

Qty	Nomenclature	Item Description
9	THN1013	RACK 7.5' OPEN
2	DSTRAKL70N	ANTENNA KIT FOR 9100 - 1 ANT, 100 F
8	DS576793	150.5-158.5 5.25dB Ant
11	DS576792	151.5-159.5 Fiberglass
1	DS69398	150-158 MHz 7.1 dB Yagi
1	DS54935	450-470 MHz 7.5 dB Yagi
7	DS12283	146-164 Unity Fiberglass
1	ANT790F2	763-869 2.5dB Omni Ant
4	DSDB201L	OMNI, GRND PLANE ANT, 30?50 MHZ, 36
370	L1705	CABLE: 1/2" LDF HELIAX POLY JKT PE
37	TT05543AA	ADD: 7-16 DIN MALE PS FOR 1/2 IN LD
37	TT05542AA	ADD: 7-16 DIN MALE PS FOR 1/2 IN LD
37	TT04936AA	ADD: CONNECTOR ATTACHMENT FEE FOR L
37	TT04967AA	ADD: CONNECTOR ATTACHMENT LDF4 ANTE
5000	L3323	CABLE: 7/8" AVA HELIAX POLY JKT PER
76	DDN9496	7/8" 7-16 DIN FEMALE POSITIVE STO
37	DSVHF50DMAPGR	SPD, 100 TO 512MHZ, MALE ANTENNA CO
89	DSGSAKITD	GROUND STRAP KIT - DIN
2	DS7825700	MULTI BAND OMNI ANTENNA, 2.5 DBI GA
1	DSBA10120	118 TO 174 FIBERGLASS OMNI
30	L1705	CABLE: 1/2" LDF HELIAX POLY JKT PE
3	TT05542AA	ADD: 7-16 DIN MALE PS FOR 1/2 IN LD
3	TT05543AA	ADD: 7-16 DIN MALE PS FOR 1/2 IN LD
3	TT04936AA	ADD: CONNECTOR ATTACHMENT FEE FOR L
3	TT04967AA	ADD: CONNECTOR ATTACHMENT LDF4 ANTE
500	L3323	CABLE: 7/8" AVA HELIAX POLY JKT PER
9	DDN9496	7/8" 7-16 DIN FEMALE POSITIVE STO
3	DSVHF50DMAPGR	SPD, 100 TO 512MHZ, MALE ANTENNA CO
6	DSGSAKITD	GROUND STRAP KIT - DIN
13	DSSEC378	SNAP-SEAL ENTRY CUSHION 3 X 7/8", K

2.2 MICROWAVE

Qty	Nomenclature	Item Description
1	DQMWRIVINDIORF	RADIOS, RACKS, and DSX
1	DQMWRIVINDIOMX	ADTRAN M13 MUX
1	DQMWRIVINDIOCG	DC POWER
1	DQMWRIVINDIOAD	ANTENNA MATERIALS

2.3 TOWER

Qty	Nomenclature	Item Description
1	DQ114S1373583	SABRE 180 FOOT SELF SUPPORT TOWER
1	DQ114WB137383	SABRE ICE BRIDGES

2.4 IN-BUILDING DISTRIBUTED ANTENNA SYSTEMS

A detailed equipment list will be provided during the Final Design Review.

SECTION 3

STATEMENT OF WORK

3.1 OVERVIEW

This Statement of Work (SOW) describes the deliverables to be furnished to COUNTY. The tasks described herein will be performed by MOTOROLA, its subcontractors, and COUNTY to implement the solution described in the System Description. It describes the actual work involved in installation, identifies the installation standards to be followed, and clarifies the responsibilities for both MOTOROLA and COUNTY during the project implementation. Specifically, this SOW provides:

a) A summary of the phases and tasks to be completed within the project lifecycle.
b) A list of the deliverables associated with the project.
c) A description of the responsibilities for both MOTOROLA and COUNTY.
d) The qualifications and assumptions taken into consideration during the development of this project.

This SOW provides the most current understanding of the work required by both parties to ensure a successful project implementation. In particular, MOTOROLA has made assumptions of the sites to be used for the new system. Should any of the sites change, a revision to the SOW and associated pricing will be required. It is understood that this SOW is a working document, and that it will be revised as needed to incorporate any changes associated with contract negotiations, Contract Design Review (CDR), and any other change orders that may occur during the execution of the project.

For this project, MOTOROLA will provide to the County a 180' self-supporting tower, new antennas and associated coaxial lines, new microwave radios, Distributed Antenna Systems as described in the System Description. The demarcation points between the work performed by MOTOROLA and the County are as follows:

a) RF Cabling will be at the (County supplied) lightning arrestor
b) Microwave circuits will be at a (County supplied) T1 interface panel which feed the microwave radios.

MOTOROLA will also relocate the single Prime Site rack, including the GPS unit and its associated antennas.

3.2 ASSUMPTIONS

MOTOROLA has based the system design on information provided by COUNTY and an analysis of their system requirements. All assumptions have been listed below for review. Should MOTOROLA's assumptions be deemed incorrect or not agreeable to COUNTY, a revised proposal with the necessary changes and adjusted costs may be required. Changes to the equipment or scope of the project after contract may require a change order.

a) All work is to be performed during normal work hours, Monday through Friday 7:30 a.m. to 5:00 p.m.

If a site is deemed remote and difficult to access, MOTOROLA reserves the right to extend its working day to up to 13 hours per day.
Microwave work and the Prime Site move are based on a 10-hour work day length.

b) 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 Riverside experience interference, MOTOROLA can be contracted to investigate the source and recommend solutions to mitigate the issue.
c) Temporary site trailers (tower, housing, COWS, and generator) have not been included for cutovers. Cutover logistics will be determined on a case-by-case basis; any additional costs will be negotiated prior to the execution of cutover tasks.
d) All recurring and non-recurring utility costs [including, but not limited to, generator fuel (except first fill), electrical, Telco] will be borne by the COUNTY or site owner.
e) All utility installations 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.
f) Site has adequate electrical service for the new shelter and tower. Utility transformer, transformer upgrades, line, or pole extensions have not been included.
g) Pricing has been based on National codes such IBC or BOCA. Local codes or jurisdictional requirements have not been considered in this proposal.
h) Hazardous materials are not present at the work location. Testing and removal of hazardous materials, found during site investigations, construction or equipment installation will be the responsibility of the COUNTY.
i) 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.
j) No improvements are required for concrete trucks, drill rigs, shelter delivery, and crane access.
k) 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.
l) As applicable (based on local jurisdictional authority), the COUNTY will be responsible for any installation or up-grades of the electrical system in order to comply with NFPA 70, Article 708
m) In absence of geotechnical reports, foundations and subsurface conditions for tower design are based on Geotech Report soil parameters, as defined by EIA-222-G. Also, rock coring, piling,

extensive dewatering of foundations, permanent casings or hazardous material removal has not been included.

n) For zoning approvals, a maximum of 60 days will be required from time of submittal with attendance at maximum of two (2) required planning meetings.
o) The new tower location will pass the FAA hazard study, zoning, FCC and environmental permitting.
p) The restoration of the site surroundings by fertilizing, seeding and strawing the disturbed areas will be adequate. Additional landscaping or aesthetic improvements (decorative fencing, tree plantings, stealth towers etc.) will not be required.
q) Tower and foundation sizing is based on the tower loading requirements as a result of the RF Antenna System design and the Microwave Antenna System design (i.e. - dish sizes and locations obtained from paper path studies). If after physical path studies, the dish sizes and locations change, then MOTOROLA will then review the impact to tower structure and foundations and revise applicable costs.
r) If as a result of NEPA studies, any jurisdictional authority should determine that a proposed communications facility "may have a significant environmental impact", the environmental impact studies or field testing and evaluation related to such determination have not been included.
s) Painting of lighting of the tower has not been included; it is assumed that the tower is not in a flight path and that the tip of the highest antenna will be less than 200' above ground level.
t) The site location can be finalized and lease agreement can be reached with the property owner within 60 calendar days after the start of the site acquisition effort.
u) A waiver to zoning requirements like setbacks, tower height limitations, etc. can be obtained.
v) The soil resistivity at the site is sufficient to achieve resistance of ten (10) ohms or less. Communications site grounding will be designed and installed per MOTOROLA's Standards and Guidelines for Communications Sites (R56).
w) Underground utilities are not present in the construction area, and as such no relocation will be required.
x) Spoils from the tower foundations can be dispersed on the property and will not be required to be transported to a dump location.
y) Foundations for the shelter, generator and fuel tank are based "normal soil" conditions as defined by TIA/EIA 222-F. Footings deeper than 30 inches, raised piers, rock coring, dewatering, or hazardous material removal have not been included.
z) Alarming at existing sites will be limited to new component installations and will have to be discussed and agreed to on a site-by-site basis.
aa) The site will have adequate room for installation of proposed equipment, based on applicable codes and MOTOROLA's R56 standards.
bb) The existing utility service and backup power facilities (UPS, generators) have sufficient extra capacity to support the proposed new equipment load.
cc) A clear obstruction-free access exists from the antenna location to the equipment room.
dd) The COUNTY does not desire to upgrade the balance of the site to meet MOTOROLA's R56 standards, beyond the work described under "MOTOROLA will, as required".
ee) The floor can support the proposed new loading. Physical or structural improvements to the existing room will not be required.
ff) The tower can be constructed for the intended antenna loading.
gg) The term "as required" is agreed to mean "as required by regulating authority".
hh) Training is not included.
ii) Existing microwave licenses for all 3 paths can be re-used at the new Indio Prime site location.
jj) The existing satellite earth station antenna does not interfere with the Cactus City path.
kk) County will provide a dish for the Cactus City path.

ll) County will provide a dehydrator at the Indio Prime Site.
mm) County will provide channel banks.
nn) Donor antenna for head end DAS equipment at the existing jail can be mounted on the rooftop of the Indio Jail equipment room.
oo) There is sufficient power and space available in the existing Indio Jail equipment room for necessary DAS equipment.
pp) Any change of location can impact the re-use of existing frequencies if there are other licensees in the area. Frequency analysis should be done before assuming that the licensed frequencies can be re-used.
qq) The radios on the existing 6 GHz path to Cactus City use ATPC. Generally, this would indicate that some interference case(s) in the area prevented the use of full power on the path unless it was under the conditions of ATPC operation.
rr) INDIO--SANTA ROSA PK: The original 11 GHz frequency path from Indio to Santa Rosa Pk was operating with +27 dBm, MDR-8000 radios. At the time of the overbuild, the original and overbuild channels were coordinated for +29 dBm power amps. The County is to confirm the power amps for the original frequencies were upgraded to +29 dBm.
ss) INDIO--INDIO HILL: A 30-MHz, 11 GHz channel (3 DS3) had been cleared for the overbuild channel in December 2009. However, it would have required a change to dual-pol antennas on the path. The COUNTY then changed their requirement to a 10-MHz, overbuild channel (1 DS3) on the same polarization as the original 3 DS3 channel to avoid changing the antennas to a dual-pol model.
tt) The County provided M/W Dishes that should be in operational capability or County will replace.
uu) A site survey will be performed prior to installation and equipment ordering for the In-Building Distributed Antenna Systems. The results of the survey may significantly alter the total price of the new Indio Jail DAS.
vv) Earthquake top bracing is not included. Only Hilti bolts are included.
ww) There are no plenum environments at the site where equipment will be installed.
xx) Existing grounding meets R56. Quote does not include cost to upgrade site to R56 standards
yy) UPS equipment is not included in this quote for Indio AEOC. County will provide UPS equipment.
zz) AC power circuits are available above rack locations.
aaa) Lightning arrestors will be provided by the County.
bbb) Any temporary power requirement will be provided by County.
ccc) Distributed Antenna System (DAS) scope assumes:
i. No core boring is required
ii. End-user will allow use of existing 110 VAC for all DAS equipment
iii. An existing roof penetration is available for donor antenna cabling. In the event that rooftop cabling cannot utilize existing penetrations, the owner of the roof system warranty must create an additional penetration.
iv. Donor signal must be of useable quality and strength, which is -80 dBm or greater, with Line of Sight.
v. A site survey will be performed prior to installation and equipment ordering. The results of the survey may significantly alter the design resulting in a change to total price of the project.

3.3 CONTRACT

3.3.1 Contract Award (Milestone)

The COUNTY and MOTOROLA execute the contract and both parties receive all the necessary documentation.

3.3.2 Contract Administration

MOTOROLA Responsibilities:

a) Assign a Project Manager, as the single point of contact with authority to make project decisions.
b) Assign resources necessary for project implementation.
c) Set up the project in the MOTOROLA information system.
d) Schedule the project kickoff meeting with the COUNTY.

COUNTY Responsibilities:

a) Assign a Project Manager, as the single point of contact responsible for COUNTY-signed approvals.
b) Assign other resources necessary to ensure completion of project tasks for which the COUNTY is responsible.

Completion Criteria:

a) MOTOROLA internal processes are set up for project management.
b) Both MOTOROLA and the COUNTY assign all required resources.
c) Project kickoff meeting is scheduled.

3.3.3 Project Kickoff

MOTOROLA Responsibilities:

a) Conduct a project kickoff meeting during the CDR phase of the project.
b) Ensure key project team participants attend the meeting.
c) Introduce all project participants attending the meeting.
d) Review the roles of the project participants to identify communication flows and decision-making authority between project participants.
e) Review the overall project scope and objectives with the COUNTY.
f) Review the resource and scheduling requirements with the COUNTY.
g) Review the Project Schedule with the COUNTY to address upcoming milestones and/or events.
h) Review the teams' interactions (MOTOROLA and the COUNTY), meetings, reports, milestone acceptance, and the COUNTY's participation in particular phases.

COUNTY Responsibilities:

a) The COUNTY's key project team participants attend the meeting.
b) Review MOTOROLA and COUNTY responsibilities.

Completion Criteria:

a) Project kickoff meeting completed.
b) Meeting notes identify the next action items.

3.4 CONTRACT DESIGN REVIEW

3.4.1 Review Contract Design

MOTOROLA Responsibilities:

a) Meet with the COUNTY project team.

b) Review the operational requirements and the impact of those requirements on various equipment configurations.
c) Establish a defined baseline for the system design and identify any special product requirements and their impact on system implementation.
d) Review the System Design, Statement of Work, Project Schedule, and acceptance criteria, and update the contract documents accordingly.
e) Discuss the proposed Cutover Plan and methods to document a detailed procedure.
f) Submit design documents to the COUNTY for approval. These documents form the basis of the system, which MOTOROLA will manufacture, assemble, stage, and install.
g) Finalize site acquisition and development plan.

COUNTY Responsibilities:

a) The COUNTY's key project team participants attend the meeting.
b) Make timely decisions, according to the Project Schedule.
c) Frequency Licensing and Interference:

As mandated by FCC, the COUNTY, as the licensee, has the ultimate responsibility for providing all required radio licensing or licensing modifications for the system prior to system staging. This responsibility includes paying for FCC licensing and frequency coordination fees.
Provide the FCC "call sign" station identifier for each site prior to system staging.

Completion Criteria:

a) Complete Design Documentation, which may include updated System Description, Equipment List, system drawings, or other documents applicable to the project.
b) Incorporate any deviations from the proposed system into the contract documents accordingly.
c) The system design is "frozen" in preparation for subsequent project phases such as Order Processing and Manufacturing.
d) A Change Order is executed in accordance with all material changes resulting from the Design Review to the contract.

3.4.2 Design Approval (Milestone)

The COUNTY executes a Design Approval milestone document.

3.4.3 Site Development at Indio A.E.O.C. Site

The new COUNTY Alternative Emergency Communications Center will be the location of the Indio Prime Site. As part of its upgrade MOTOROLA Solutions is being asked to provide civil site development in the forms of a new 180' tower structure for up to 37 RF antennas and 4 microwave dishes. Exterior grounding around the building which will tie into the tower ground and enter the facility at the RF/Telecom Room and terminate at the MGB (Main Ground Buss). Provide interior grounding in the RF/Telecom Room, the RCIT Technician Work Room, and finally the Telecom Room. These interior efforts will terminate at the SGB (Secondary Ground Buss) bars within each room. Each SGB will be run to the MGB. Further we will be providing interior cable tray within the RF/Telecom room.

References within this offering as to sizes, quantities, and particulars of the effort are noted herein and do not imply any other scope or responsibilities. All work described under Site Development will comply with MOTOROLA's R56 Standards where it is feasible.

During the Contract Design Review, COUNTY may request that some of this scope of work to be moved to the "COUNTY Will" section, at their discretion, and will be negotiated thru a Contract Change Order.

3.4.3.1 Site Scope Summary

a) Engineering services for site drawings and regulatory approvals – Included.
b) Site acquisition services – Not included.
c) Zoning Services – Not included.
d) New fenced compound/expansion size approximately – 40-foot x 60-foot.
e) Clearing type – Light.
f) New Rev. G Tower to be used for antennas – 180-foot self-supported tower.
g) New tower foundation approximate size – 74 cubic yard, Type – Drilled Pier/Pad.

3.4.3.2 MOTOROLA Will, as required:

Site Engineering

a) Prepare site construction drawings showing the layout of various new and existing site components.
b) Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.)
c) Perform a boundary and topographic survey for the property on which the communication site is located or will be located.
d) 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.
e) Prepare record drawings of the site showing the as-built information.
f) Conduct flood plain analysis of the site location.
g) Perform construction staking around the site to establish reference points for proposed construction.
h) Prepare photo renderings of how a specific site or sites would look after completion.
i) Conduct a balloon test to prepare site line graphs showing potential visibility of the proposed communication site.
j) Provide an expert witness for up to 1 day(s) to attend or testify at public meetings and/or hearings to provide expert testimony to assist in obtaining zoning approvals.
k) Perform NEPA Threshold Screening, including limited literature and records search and brief reporting, as necessary to identify sensitive natural and cultural features referenced in 47 CFR Chapter 1, subsection 1.1307 that may potentially be impacted by the proposed construction activity. This does not include the additional field investigations to document site conditions if it is determined that the proposed communication facility "may have a significant environmental impact" and thus require additional documentation, submittals, or work. Regional Environmental Review (RER) report submittals if required by FEMA have not been included. Perform Cultural Resource study as needed to identify sensitive historical and archaeological monuments that might be impacted by proposed construction
l) Perform a ASTM E 1527-05 certified Phase I Environmental Site Assessment (ESA), to identify obvious and reasonably likely on-site and/or off-site potential sources of contamination that might pose a potential risk of leasing and building on a piece of property, and whether further environmental investigations are warranted. This study does not include Phase II assessments, risk/cost evaluations, and permitting assistance that may be required if risk factors are indicated.

m) Conduct up to 40-foot deep soil boring test at tower location and prepare geotechnical report of soil conditions at locations of the tower foundation. Grouting of boring holes or access by Automatic Traction Vehicle (ATV) - mounted rig is not included.
n) Conduct construction inspection of foundation steel prior to pour, materials testing of concrete and field density tests of backfill to ensure quality construction.
o) Check tower erection for plumbness, linearity and alignment after installation.
p) Perform inspection of the site and the work performed by the Contractor to document that the site is built in accordance with the "Site Plans" and document any deviations or violations.
q) Prepare, submit and track application for local permit fees (zoning, electrical, building etc.), prepare FAA filings and procure information necessary for filing.

Site Preparation

a) Obtain the permits such as electrical, building, and construction permits, and any inspections that may need to be coordinated with the local authorities to complete site development work.
b) 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.
c) Perform clear light brush, grub roots and dispose vegetation and shrub growth in the site compound area and a 20-foot path around it (not to exceed 8100 square feet).
d) Grade the site compound and 10-foot path around it to provide a level, solid, undisturbed surface for installation of site components (not to exceed 4900 square feet).
e) Supply and install gravel surfacing to a depth of 6 inches, underlain with geotextile fabric in site compound area, and a 3-foot path around it (not to exceed 3136 square feet).
f) Supply and install 20 guard posts.
g) Supply and install 8-foot high chain-link fencing with a ten-foot wide gate around the shelter compound (not to exceed 200 linear feet).
h) Perform site touchup (fertilize, seed and straw) disturbed areas not covered with gravel after completion of construction work. Landscaping, decorative fencing or any other aesthetic improvement that may be required by local jurisdictions has not been included and will be handled through a negotiated contract change notice.

Site Components Installation

a) Supply and install a perimeter grounding system around the building, compound, and tower. The ground system is to tie to the fence and all new metal structures within the compound to meet current County of Riverside standards of <5 Ohms, providing the soil composition can achieve this standard through the scope described herein.
b) Supply and install 2 freestanding 24-inch-wide cable/ice bridges from the tower to the shelter (up to 20 linear feet each).

Tower Work

a) Construct drilled pier/pad type tower foundations, as recommended by tower manufacturer, including excavation, rebar and concrete (not to exceed 74 cubic yards).
b) Erect new 180-foot self-supported tower.

Antenna and Transmission Line Installation

a) Final antenna/dish counts/model numbers and transmission line lengths will be determined during the Contract Design Review prior to ordering or installing.
b) Install 37 antenna(s) for the RF system.
c) Install 2 GPS antenna(s).

d) Install 1 4-foot microwave dishes.
e) Install 1 6-foot microwave dishes.
f) Install 2 8-foot microwave dishes.
g) Install 100 linear feet of 3/8-inch transmission line.
h) Install up to 4000 linear feet of 7/8-inch transmission line.
i) Install up to 300 linear feet of EW63 waveguide for microwave dishes.
j) Install up to 100 linear feet of EW90 waveguide for microwave dishes.
k) Perform sweep tests on transmission lines.
l) Provide and install six hole standoffs and attachment hardware for supporting transmission lines on antenna support structure every three feet.
m) Provide and install six hole hanger blocks and attachment hardware for supporting transmission lines on antenna support structure every three feet.
n) Supply and install 6 ground buss bar at the bottom of the antenna support structure for grounding RF cables before they make horizontal transition.
o) Supply and install #2/0 stranded copper ground (not to exceed 200 linear feet) for grounding the antennas to the Master Ground Buss.

Existing Facility Improvement Work

a) Supply and install 18-inch-wide cable runway (up to 160 linear feet) inside the existing RF/Telecom room.
b) Supply and install up to 4 cable entry panels with 12 ports outside the RF/Telecom room.
c) Ground all metallic objects, at the time of installation, in the interior of the existing RF/Telecom room, to meet current MOTOROLA's Standards and Guidelines for Communications Sites (R56) requirements and terminate near equipment locations.
d) Supply and install 2 telco board (48 inch x 96 inch).
e) Supply and install 2 wall-mounted 10-pound CO2 fire extinguishers and 2 wall-mounted 20-pound ABC fire extinguishers RF/Telecom room.
f) Supply and install "No smoking", RF, Hazardous, EME signage in the RF/Telecom room.

Grounding Enhancement

a) All work described under Ground Enhancement will comply with current County of Riverside standards of <5 Ohms, providing the soil composition can achieve this standard through the scope described herein.
b) Supply and install one exterior building ground ring around A.E.O.C. building using #2 solid tinned copper conductor (not to exceed 760 linear feet), exothermically welded to ground rods and tied to Master Ground Buss.
c) Supply and install ¾" x 10' copper-clad ground rods (not to exceed 38 ground rods).
d) Supply and install grounding on the rooftop and tie it to the building ground. Rooftop grounding is intended for future possible antenna installations and for grounding HVAC units. It is not intended for lightning protection.

Miscellaneous Work

a) SWPPP Plan & Implementation
b) Deputy Inspector - 3rd party inspector to verify work – approved by County & MOTOROLA

COUNTY Will, as required:

a) If required, prepare and submit EME plans for the site (as a licensee) to demonstrate compliance with FCC RF Exposure guidelines. [Note: Should the COUNTY desire guidance with this task,

MOTOROLA is able to recommend resources. Additionally, Appendix A of MOTOROLA's Standards and Guidelines for Communication Sites (R56) discusses Electromagnetic Energy and provides a basic methodology for structuring an FCC compliant program. If the COUNTY does not have a copy of MOTOROLA's Standards and Guidelines for Communication Sites (R56) v 2005, one will be provided.]

b) Assist MOTOROLA with permitting for sites as owner/lessee.
c) As applicable, coordinate, prepare, submit, and pay for all required permits and inspections for the work that is the COUNTY's responsibility.
d) Pay for all utility connection, pole or line extensions, and any easement or usage fees.
e) Review and approve site design drawings within 14 calendar days of submission by MOTOROLA or its subcontractor(s). Should a re-submission be required, the COUNTY shall review and approve the re-submitted plans within 7 calendar days from the date of submittal. Should drawing not be approved within these time frames then drawings will be approved by default.
f) Pay for the usage costs of power, leased lines and generator fueling both during the construction/installation effort and on an on-going basis.
g) Pay for application fees, taxes and recurring payments for lease/ownership of the property.
h) Provide personnel to observe construction progress and testing of site equipment according to the schedule provided by MOTOROLA.
i) As applicable (based on local jurisdictional authority), the COUNTY will be responsible for any installation or up-grades of the electrical system in order to comply with NFPA 70, Article 708
j) Secure clear and unencumbered title, MOU, or Lease Agreement with the property owner.
k) Provide approved, standardized lease language and negotiation guidelines to assist MOTOROLA in site acquisition.
l) 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.
m) Provide a right of entry letter from the site owner for MOTOROLA to conduct field investigations.
n) Provide clear and stable access road to the site for heavy-duty construction vehicles, cement trucks and cranes. Sufficient space must be available at the site for these vehicles to maneuver under their own power, without assistance from other equipment.
o) Conduct all the testing and documentation (balloon tests, photo simulations, zoning application, expert testimony, zoning drawings etc.) required for the zoning the proposed new tower sites.
p) Secure power connection to the site, associated permitting and installation of a meter and disconnect within 50 feet of the proposed shelter location.
q) Provide space, HVAC, backup power (UPS, generator), outlets, grounding, surge suppression, lighting, fire suppression and cabling facilities for the equipment room per MOTOROLA's R56 specifications. Ceiling and cable tray heights in the equipment rooms should be such as to accommodate 7-1/2-foot equipment racks, and the ceiling should be 9 feet or greater.
r) Confirm that there is adequate utility service to support the new equipment and ancillary equipment.
s) Confirm that the existing generator is sufficient to support the new equipment and ancillary equipment loads.
t) If required, remove or relocate any existing facilities, equipment, and utilities to create space for new site facilities and equipment.
u) If required, provide any physical improvements (walls, roofing, flooring, painting, etc.) necessary to house the equipment in the existing room.
v) Provide backup power (UPS / Generator) for the new equipment, and UPS sub-distribution panel(s) with breakers wired to dedicated outlets above the proposed equipment locations.

w) Supply required standby generator power to support the additional proposed equipment. This power source shall be adequate to back up all radio equipment, future equipment growth, and ancillary equipment such as, but not limited to, interior lighting, tower lighting and HVAC.
x) Supply required UPS Power to support the additional proposed equipment. This uninterruptible power source shall be adequate to back-up all radio equipment as well as future equipment growth.
y) Supply dedicated 20 Amp simplex A. C. outlets at for each major piece of proposed equipment within six (6) feet of the equipment location wired to individual breakers in distribution panels.
z) Secure power connection to the room, associated permitting, and installation of a meter and disconnect within 50 feet of the proposed shelter location.
aa) As applicable (based on local jurisdictional authority), the COUNTY will be responsible for any installation or up-grades of the electrical system in order to comply with NFPA 70, Article 708
bb) County to provide County approved First Aid Kits
cc) County to provide any temporary power during construction
dd) Approve all punch lists within 10 working days or approval will be assumed – all punch lists will be made available within 5 working days

Assumptions, where relevant:

Completion Criteria

Site development completed and approved by COUNTY Indio Prime A.E.O.C.

3.5 ORDER PROCESSING

3.5.1 Process Equipment List

MOTOROLA Responsibilities:

a) Validate Equipment List by checking for valid model numbers, versions, compatible options to main equipment, and delivery data.
b) Enter order into MOTOROLA's COUNTY Order Fulfillment (COF) system.
c) Create Ship Views, to confirm with the COUNTY the secure storage location(s) to which the equipment will ship. Ship Views are the mailing labels that carry complete equipment shipping information, which direct the timing, method of shipment, and ship path for ultimate destination receipt.
d) Create equipment orders.
e) Reconcile the equipment list(s) to the Contract.
f) Procure third-party equipment if applicable.

COUNTY Responsibilities:

Approve shipping location(s).

Completion Criteria:

a) Verify that the Equipment List contains the correct model numbers, version, options, and delivery data.
b) Trial validation completed.
c) Bridge the equipment order to the manufacturing facility.

3.6 MANUFACTURING AND STAGING

3.6.1 Manufacture MOTOROLA Equipment

MOTOROLA Responsibilities:

Manufacture the equipment necessary for the system based on equipment order.

COUNTY Responsibilities:

None.

Completion Criteria:

Equipment shipped to either the field or the staging facility.

3.6.2 Ship Equipment to Field

MOTOROLA Responsibilities:

a) Pack system for shipment to final destination.
b) Arrange for shipment to the field.

COUNTY Responsibilities:

None.

Completion Criteria:

Equipment ready for shipment to the field.

3.6.3 Ship Acceptance (Milestone)

All equipment shipped to the field.

3.7 SYSTEM INSTALLATION

3.7.1 Install Fixed Network Equipment

MOTOROLA Responsibilities:

a) MOTOROLA will be responsible for the installation of the microwave radio links, exterior antenna systems, and the Distributed Antenna Systems.
b) MOTOROLA will re-locate the Prime Site equipment rack from its current location to the new one. This includes bolting the rack to a concrete slab floor with isolation mats. Seismic anchors will be used: top bracing will not be utilized.
c) Provide a small antenna mount structure for the two GPS antennas and bond the mount. GPS antennas and lightning arrestors will be reused.
d) Bond the supplied equipment to the site ground system in accordance with MOTOROLA's R56 standards.

COUNTY Responsibilities:

Move all other equipment to site and install to R-56 standards.

Completion Criteria:
Fixed Network Equipment installation completed and ready for optimization.

3.7.2 Fixed Network Equipment Installation Complete

All fixed network equipment installed and accepted by the COUNTY.

3.7.3 System Installation Acceptance (Milestone)

All equipment installations are completed and accepted by the COUNTY.

3.8 SYSTEM OPTIMIZATION

3.8.1 Optimize System FNE

MOTOROLA Responsibilities:
MOTOROLA will optimize the microwave system, prime site equipment, and Distribution Antenna Systems only.

COUNTY Responsibilities:
Provide access/escort to the sites.
Optimize conventional and trunked systems as applicable

Completion Criteria:
System FNE optimization is complete.

3.8.2 Link Verification

MOTOROLA Responsibilities:
Perform test to verify site link performance, prior to the interconnection of the channel bank to the microwave equipment.

COUNTY Responsibilities:
None.

3.8.3 Completion Criteria:

Link verification successfully completed.

3.8.4 Optimization Complete

System optimization is completed. MOTOROLA and the COUNTY agree that the equipment is ready for acceptance testing.

3.9 AUDIT AND ACCEPTANCE TESTING

3.9.1 Perform R56 Installation Audit

MOTOROLA Responsibilities:

Perform R56 site-installation quality audits, verifying proper physical installation and operational configurations. Create site evaluation report to verify site meets or exceeds requirements, as defined in MOTOROLA's Standards and Guidelines for Communication Sites (R56).

COUNTY Responsibilities:

Provide access/escort to the sites.
Witness tests.

Completion Criteria:

All R56 audits completed successfully.

3.9.2 Perform Equipment Testing

MOTOROLA Responsibilities:

Test individual components of the system to verify compliance to the equipment specifications.
Repeat any failed test(s) once MOTOROLA (or the COUNTY) has completed the corrective action(s).
Prepare documentation of component tests to be delivered as part of the final documentation package.

COUNTY Responsibilities:

Witness tests if desired.

Completion Criteria:

Successful completion of equipment testing.

3.9.3 System Acceptance Test Procedures (Milestone)

COUNTY approves the completion of all the required tests.

3.10 FINALIZE

3.10.1 Cutover

MOTOROLA Responsibilities:

a) MOTOROLA and the COUNTY develop a mutually agreed upon cutover plan based upon discussions held during the CDR.
b) During cutover, follow the written plan and implement the defined contingencies, as required.
c) Conduct cutover meeting(s) with user group representatives to address both how to mitigate technical and communication problem impact to the users during cutover and during the general operation of the system.

COUNTY Responsibilities:

a) Attend cutover meetings and approve the cutover plan.
b) Notify the user group(s) affected by the cutover (date and time).

Completion Criteria:

Successful migration from the old system to the new system.

3.10.2 Resolve Punchlist

MOTOROLA Responsibilities:

Work with the COUNTY to resolve punchlist items, documented during the Acceptance Testing phase, in order to meet all the criteria for final system acceptance.

COUNTY Responsibilities:

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 item(s).

Completion Criteria:

All punchlist items resolved and approved by the COUNTY.

3.10.3 Transition to Service/Project Transition Certificate

MOTOROLA Responsibilities:

Review the items necessary for transitioning the project to warranty support and service.
Provide a COUNTY Support Plan detailing the warranty and post-warranty support, if applicable, associated with the Contract equipment.

COUNTY Responsibilities:

Participate in the Transition Service/Project Transition Certificate (PTC) process.

Completion Criteria:

All service information has been delivered and approved by the COUNTY.

3.10.4 Finalize Documentation

MOTOROLA Responsibilities:

MOTOROLA documentation will be limited to the new tower, antenna system documentation, microwave radios and Distributed Antenna Systems.

COUNTY Responsibilities:

Receive and approve all documentation provided by MOTOROLA.

Completion Criteria:

All required documentation is provided and approved by the COUNTY.

3.10.5 Final Acceptance (Milestone)

All deliverables completed, as contractually required. Final System Acceptance received from the COUNTY.

3.11 PROJECT ADMINISTRATION

3.11.1 Project Status Meetings

MOTOROLA Responsibilities:

MOTOROLA Project Manager, or designee, will attend all project status meetings with the COUNTY, as determined during the CDR.
Record the meeting minutes and supply the report.
The agenda will include the following:
Overall project status compared to the Project Schedule.
Product or service related issues that may affect the Project Schedule.
Status of the action items and the responsibilities associated with them, in accordance with the Project Schedule.
Any miscellaneous concerns of either the COUNTY or MOTOROLA.

COUNTY Responsibilities:

Attend meetings.
Respond to issues in a timely manner.

Completion Criteria:

Completion of the meetings and submission of meeting minutes.

3.11.2 Progress Milestone Submittal

MOTOROLA Responsibilities:

Submit progress (non-payment) milestone completion certificate/documentation.

COUNTY Responsibilities:

Approve milestone, which will signify confirmation of completion of the work associated with the scheduled task.

Completion Criteria:

The COUNTY approval of the Milestone Completion document(s).

3.11.3 Change Order Process

Either Party may request changes within the general scope of this Agreement. If a requested change causes an increase or decrease in the cost, change in system configuration or adds time to the project's timeline required to perform this Agreement, the Parties will agree to an equitable adjustment of the Contract Price, Performance Schedule, or both, and will reflect the adjustment in a change order. Neither Party is obligated to perform requested changes unless both Parties execute a written change order.

ACCEPTANCE TEST PLAN

As part of the Final Design review, MOTOROLA will prepare an Acceptance Test Plan that describes in detail each test to be performed, procedures for each test, set-up and personnel required for each test, desired results and a proposed schedule for testing. The Acceptance Test Plan will be reviewed with the County and agreed upon before commencement of testing.

In general, the ATP testing will include Functional Testing and Radio Coverage Verification Testing for the specified High Priority Buildings. Functional Testing will be performed as part of the Indio Prime Site relocation to verify the functionality of the prime site equipment and overall state of the Indio Cell. Functional Testing will also be performed for the Indio microwave paths. The Functional Testing will be performed and passed prior to the Coverage Acceptance Testing.

4.1 FUNCTIONAL TESTING

Functional Testing is the demonstration and documentation of the features and functions that will be available to users of the System when the Indio Prime Site and microwave relocation is fully installed and complete at the new Indio AEOC. The following tests can be performed as part of the functional testing, but will be identified during the Final Design process:

a) Talkgroup Call
b) Call Alert
c) Emergency Alarm and Call with Top of Queue
d) Busy Queuing and Callback with Ten Talkgroup Priority Levels
e) Continuous Assignment UpdatingTesting will be performed for the pressurization equipment for the microwave paths to Indio AEOC and a BER test. Details on the microwave functional testing will be finalized during the Final Design review.

4.2 HIGH PRIORITY BUILDING RADIO COVERAGE VERIFICATION TESTING

Purpose

The purpose of Radio Coverage Verification Testing as part of the Indio Prime Site relocation is to verify the voice coverage for the new Indio Jail, the current Indio Jail, and the Larsen Justice Center.

4.3 REQUIRED TESTS

The definitions of the various levels of DAQ will be the Subjective Performance Descriptions of each level of DAQ specified in TSB-88.

Since DAQ is, in part, evaluated on the need to repeat transmissions, the voice tests will be performed using a pre-prepared phrase structure that includes unique words. This is to prevent test participants from knowing in advance or guessing the content of a transmission and consequently scoring the transmission higher than it deserves because repetition was not required.

The phrases will be short in length and concise. The phrases will follow a structure so that each phrase will be repeated no more than once during the course of the test. The structure to be used is as follows:

Field-to-Dispatch: "Mobile Team '1' entering Grid ID at 'corner of 5th and Main.' Dispatch how do you copy?"
Dispatch-to-Field: "Dispatch Center' passes Grid ID in location 'x'. Evaluate this Outbound transmission."

4.3.1 Coverage Verification Testing Methodologies

Field-To-Dispatch (Inbound) Test and Dispatch-to-Field (Outbound) Test Methodology

a) A minimum of three individuals will be designated as Field Testers. The same will apply for the Dispatch Testers. Field and dispatch testers will operate in teams of not less than three persons. Two of the three will be a representative of the County; the other will be a MOTOROLA representative. Field testers will make and receive radio transmissions in the field and document the received audio quality. Dispatch testers will make and receive radio transmissions in a fixed location and document the received audio quality. Before subjectively testing, all personnel who will evaluate audio quality must receive training by listening to examples of static and faded audio of various Channel Performance Criteria (CPC) levels from the type of system being tested. Field testers will travel to the specified High Priority Building.

b) The following steps will be performed:

c) Identify County Field Team Members A and B. County Field Team Member A will carry a portable without a remote speaker microphone (RSM) and transmit at head level where called out in the following steps. County Field Team Member B will carry a portable with RSM in a swivel belt case worn at the hip level.
d) On a pre-prepared test results form, the Field Teams will record the identifier of the grid square in which they are located and another description of their location.
e) Utilizing the portable at head level, County Field Team Member A will report to the Dispatch Tester that the team has arrived to a test grid.
f) The Dispatch Tester will acknowledge the Field Team and will give authorization to start. If the authorization is not received by the Field Team, repeat Step 3 until authorization is received from the Dispatch Team.
g) Once authorization is provided, County Field Team Member B will transmit the test phrase while walking. The test phrase includes the grid identifier and location.
h) The Dispatch Tester will record the Inbound test result with either a PASS or a FAIL.
i) If the Inbound test passes, the Dispatch Tester will announce "Grid ID passes. Prepare for Outbound testing." While walking, Field Tester B will listen for the Dispatch Tester to say "'Dispatch Center' passes Grid ID in location 'x'. Evaluate this Outbound transmission." If the 1st attempt of the Inbound test fails, the Dispatch Tester will announce, "Test grid fails. Repeat transmission." Then repeat Steps 5 and 6. If the Inbound test fails the 2nd attempt, document the DAQ level (from 1 to 3) and move on to Step 8.
j) The Field Team will evaluate the Dispatch Tester's transmission and record the Outbound test result with either a PASS or a FAIL.
k) If the Outbound test passes, it concludes the Outbound test. The Field Team Member A will announce "Test concluded." If the 1st attempt of the Outbound test fails, the Field Team Member B will announce, "Test grid fails. Repeat transmission." Then repeat Step 8 following the Dispatch Testers re-transmission. If the Outbound test fails the 2nd attempt, document the DAQ level (from 1 to 3) and Field Team Member A will announce "Test concluded."
l) Move on to the next test grid and repeat Steps 2-9, above.
m) In the event that no agreement can be reached on whether a particular grid square test has passed or failed, audio recordings will be reviewed.

High-Priority Building Testing Methodology

MOTOROLA and the County will perform an in-building Audio Quality test on the current Indio Jail, the new Indio Jail, and the Larsen Justice Center. MOTOROLA and the County will proceed to test it as follows:

a) Upon entering a High-Priority Building and after selecting at least 20 evenly distributed points (but up to a statistically valid number of test points) on each floor, the field team will initiate the test using a portable at the hip with swivel case and speaker microphone (a speaker microphone without an antenna). If 95% of the test points provide an audio quality of DAQ-3.4, the building is considered to have PASSED. If more than 5% of test points fail, MOTOROLA reserves the right to re-test the building using up to 100 test points per floor.
b) The tester will be in motion within the grid when the test is conducted. "Fishing" for the best coverage point within the grid is not permitted.
c) If a High-Priority Building fails the Audio Quality test, MOTOROLA will take all necessary steps to effect a remedy at no additional cost to the County.

4.3.2 Criteria for Success

Following the completion of the Field-To-Dispatch Test and the Dispatch-To-Field Test, the tabulated results of the Field-To-Dispatch Test and the Dispatch-To-Field Test will be evaluated on a building by building basis to determine whether the specified building PASSES or FAILS the Radio Coverage Verification Test.

Grid squares that have been tested and have achieved a DAQ of 3.4 or better and have achieved the specified reliability criteria separately in the Field-to-Dispatch and the Dispatch-to-Field Tests will be designated as PASSED and the number of PASSED grid squares will be totaled for each direction. Grid squares that have been tested during each of the tests and have not achieved a DAQ of 3.4 or better or have not achieved the specified reliability criteria (and have not been excluded from the determination of success or failure) will be designated as FAILED. The number of grid squares that were tested during each of the tests will also be totaled. Grid squares that are predicted not to achieve a DAQ of 3.4 or better and grid squares that have been identified as inaccessible will not be included in the total number of grid squares tested. The number of grid squares that have not been tested but have been designated by the County to be considered as PASSED will (unless ultimately elected by the County to be tested, in which case they will be counted like any tested grid square) be added to the total number of grid squares that have been tested and will also be added to the total number of grid squares that have been designated as PASSED. Radio Coverage Verification Testing of the specified building will be deemed successful (PASSED) if the total number of grid squares that have been designated as PASSED equals 95% or more of the total number of grid squares that have been tested (including grid squares designated as PASSED without actual testing) for each of the Dispatch-to-Field and Field-to-Dispatch tests. Upon determining PASSING coverage verification test results, the County will sign a Voice Radio Coverage Acceptance form for each of the three High Priority Buildings.

WARRANTY AND MAINTENANCE

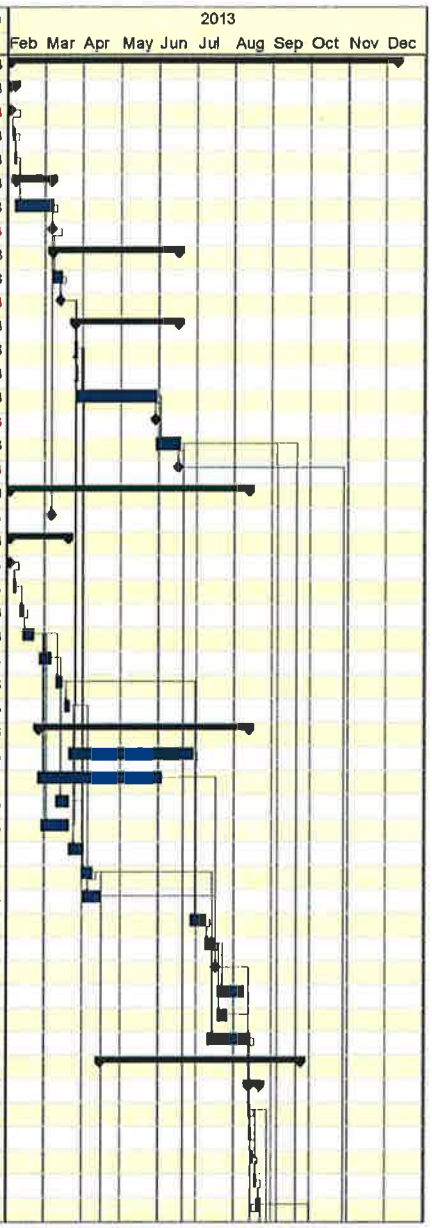
MOTOROLA has not included any additional warranty coverage or services as all equipment is produced by third parties. The warranty coverage of the original manufacturers will apply.

SECTION 6

PROJECT SCHEDULE

RIVERSDE PSEC INDIO CA-13Q114B - Project Gantt

RIVERSDE PSEC INDIO CA-13Q114B	Durati Days	Task Start	Task Finish
Civil Work Implementation Project	217	2/4/2013	12/10/2013
Contract	4	2/4/2013	2/7/2013
Contract Award	**0**	**2/4/2013**	**2/4/2013**
Contract Administration	2	2/5/2013	2/6/2013
Project Kick-Off	1	2/7/2013	2/7/2013
Contract Design Review (Gate 9 & 8)	20	2/8/2013	3/7/2013
Review Contract Design	20	2/8/2013	3/7/2013
Design Approval	**0**	**3/7/2013**	**3/7/2013**
Order Processing (Gate 7 - Procureme	71	3/8/2013	6/17/2013
Process Equipment list	5	3/8/2013	3/14/2013
Order Bridged	**0**	**3/14/2013**	**3/14/2013**
Manufacturing and Staging	59	3/26/2013	6/17/2013
Order Tower Materials based on fi	1	3/26/2013	3/26/2013
Place order for building based on	1	3/27/2013	3/27/2013
Manufacture Non-Motorola Equip	45	3/28/2013	5/30/2013
Ship to Staging	**0**	**5/30/2013**	**5/30/2013**
Ship Equipment to Field	12	5/31/2013	6/17/2013
CCSI Acceptance	**0**	**6/17/2013**	**6/17/2013**
PRE-CONSTRUCTION PHASE	136	2/4/2013	8/14/2013
Notice to proceed from customer	0	3/7/2013	3/7/2013
SITE ENGINEERING	34	2/4/2013	3/21/2013
Site location agreement between o	0	2/4/2013	2/4/2013
Site visit with A&E	1	2/7/2013	2/7/2013
Prepare site sketch/Lease Exhibit	2	2/12/2013	2/13/2013
Review and approval of lease exhi	5	2/14/2013	2/20/2013
Site survey and mapping	7	2/26/2013	3/6/2013
Preliminary drawings for zoning/C	5	3/11/2013	3/15/2013
Review and approval of drawings	4	3/18/2013	3/21/2013
PERMITTING AND FINAL DRAWING	121	2/25/2013	8/14/2013
New Tower Zoning application and	70	3/22/2013	6/28/2013
NEPA/SHPO studies and approval	70	2/25/2013	6/3/2013
Geotechnical Testing and Report	8	3/11/2013	3/20/2013
Phase 1 Environmental Study	15	2/28/2013	3/20/2013
Microwave Path Studies	7	3/22/2013	4/1/2013
Tower design and drawings	6	4/1/2013	4/8/2013
Site development contractor select	10	4/2/2013	4/15/2013
Complete Final Detailed drawings	7	6/27/2013	7/8/2013
Customer approval of Final Constr	5	7/9/2013	7/15/2013
Site release/ Construction NTP to	0	7/17/2013	7/17/2013
Building and construction permit a	15	7/19/2013	8/8/2013
Land Disturbance permit applicatio	5	7/19/2013	7/25/2013
Tower Manufacturing	25	7/11/2013	8/14/2013
CONSTRUCTION PHASE	113	4/16/2013	9/24/2013
SITE PREPARATION	8	8/14/2013	8/23/2013
Mobilization	1	8/14/2013	8/14/2013
Locate existing utilities	1	8/15/2013	8/15/2013
Construction staking	1	8/16/2013	8/16/2013
Light Clearing and Grubbing	1	8/19/2013	8/19/2013
Compound grading and silt fencing	3	8/21/2013	8/23/2013



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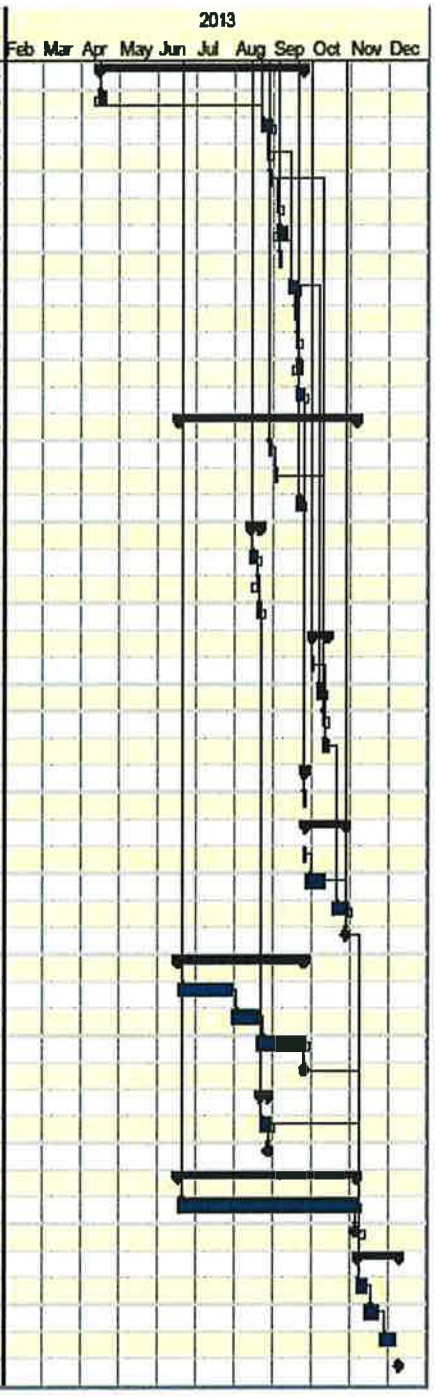
RIVERSDE PSEC INDIO CA-13Q114B - Project Gantt

RIVERSDE PSEC INDIO CA-13Q114B	Durati Days	Task Start	Task Finish
TOWER WORK	113	4/16/2013	9/24/2013
Ship anchor bolts and base plates	4	4/16/2013	4/19/2013
Drill, rebar and pour drilled pier fou	5	8/23/2013	8/29/2013
Foundation Inspection/concrete te	1	8/28/2013	8/28/2013
Tower grounding	2	8/29/2013	8/30/2013
Strip forms, backfill and compactio	1	9/5/2013	9/5/2013
Ship tower to site	4	9/5/2013	9/10/2013
Notify FAA of impending tower con	1	9/6/2013	9/6/2013
Tower assembly and stacking	4	9/13/2013	9/18/2013
Tower plumbness testing	1	9/18/2013	9/18/2013
Notify FAA of tower completion (74	1	9/19/2013	9/19/2013
Ship antennas, line and accessori	2	9/20/2013	9/23/2013
Install antennas and lines	4	9/19/2013	9/24/2013
SITE COMPONENTS INSTALLATION	100	6/18/2013	11/6/2013
Trench and install grounding	2	8/29/2013	8/30/2013
Grounding Inspection	1	9/3/2013	9/3/2013
Install ice bridge from shelter to the t	2	9/20/2013	9/23/2013
EXISTING FACILITY IMPROVEMEN	6	8/15/2013	8/22/2013
Install Cable Trays	3	8/15/2013	8/19/2013
Install Cable Entry Ports	2	8/20/2013	8/21/2013
Install Internal Grounding	3	8/20/2013	8/22/2013
SITE RESTORATION	10	10/1/2013	10/14/2013
Finish Grade and gravel compoun	2	10/1/2013	10/2/2013
Fencing of tower compound	3	10/7/2013	10/9/2013
Complete grounding connections	1	10/10/2013	10/10/2013
Site touchup and restoration	2	10/11/2013	10/14/2013
ADDITIONAL ITEMS	1	9/25/2013	9/25/2013
Grounding Enhancement	1	9/25/2013	9/25/2013
FINAL CIVIL TESTING	24	9/26/2013	10/29/2013
Punch List with Customer	1	9/26/2013	9/26/2013
Punch List completion	11	9/27/2013	10/11/2013
As-Built drawings from A&E	8	10/18/2013	10/29/2013
Site Development Completion	0	10/29/2013	10/29/2013
DIST ANT SYS	70	6/18/2013	9/25/2013
Install New Indio Jail	30	6/18/2013	7/30/2013
Move Head End	15	7/31/2013	8/20/2013
Recofigure Passive System	25	8/21/2013	9/25/2013
Distributed Antenna Systems Com	0	9/25/2013	9/25/2013
PRIME SITE RELOCATION	5	8/23/2013	8/29/2013
Move Prime Site	5	8/23/2013	8/29/2013
Prime Site Move Complete	0	8/29/2013	8/29/2013
MICROWAVE SYSTEM	100	6/18/2013	11/6/2013
Engineer, Install, Complete 3 Hops	100	6/18/2013	11/6/2013
Microwave System Acceptance	0	11/6/2013	11/6/2013
Finalize (Gate 4 - Implementation Close	22	11/7/2013	12/10/2013
Final Inspection w/Customer	5	11/7/2013	11/13/2013
Resolve Punchlist	7	11/14/2013	11/22/2013
Finalize Documentation	8	11/25/2013	12/6/2013
Final Acceptance	0	12/10/2013	12/10/2013



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SECTION 7

PRICING SUMMARY

Indio Relocation Estimates	Equipment & Service Costs
Alcatel Equipment	$580,000.00
Installation and Service	$215,000.00
BDA Equipment	$278,000.00
Installation and Services	$196,000.00
Antenna and Transmission Equipment	$180,000.00
Antenna Installation	$156,000.00
Prime Site Relocation	$9,200.00
UPS Relocation	$62,660.00
Project Management	$180,000.00
Engineering and System Technologist	$185,000.00
Spectrum Fingerprinting	$14,000.00
Total	**$2,055,860.00**
Tower and Grounding Estimates	
Tower including Ice Bridge	$158,000.00
A&E Associated with Tower & Building	$54,000.00
Tower Installation Services	$158,000.00
Tower and Building Ground System	$157,000.00
Site Prep for Tower and Building Ground System	$59,000.00
Tenant Improvements	$28,000.00
Special Remediation and Inspection	$12,600.00
Construction Management	$41,500.00
Total	**$668,100.00**
Sub-Total $	$2,723,960.00
Freight	$ 16,878.00

Indio Relocation Estimates	Equipment & Service Costs
Estimated Tax's 8%	$ 115,200.00
Total	**$ 2,856,038.00**

7.1 PAYMENT TERMS

Except for a payment that is due on the Effective Date, COUNTY will make payments to MOTOROLA within thirty (30) days after the date of each invoice. COUNTY will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution and in accordance with the following milestones.

20% on order.
30% on Tower and Foundation installation.
20% on Prime Site and M/W installation.
20% completion of ATP/conditional acceptance.
10% on final.

SECTION 8

TERMS AND CONDITIONS

This proposal is subject to the terms and conditions of the PSEC System Agreement and subject to the payment terms included in the proposal. The County may accept the proposal by issuing a purchase order with the following statement: This purchase order is subject exclusively to the terms and conditions of the PSEC System Agreement.