



AGENDA

LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

BOARD OF DIRECTORS SPECIAL MEETING

Tuesday, July 31, 2018 • 9:00 a.m.

Los Angeles County Sheriff's Department
The Hertzberg Davis Forensic Science Center
Conference Room 223 through 227
1800 Paseo Rancho Castilla, Los Angeles, CA 90032

Los Angeles Regional Interoperable Communications System Authority (the "Authority")

AGENDA POSTED: July 26, 2018

Complete agendas are made available for review at the designated meeting location. Supporting documentation is available at the LA-RICS Office located at 2525 Corporate Place, Suite 100, Monterey Park, CA 91754 during normal business hours and may also be accessible on the Authority's website at <http://www.la-rics.org>.

Members:

1. **Sachi Hamai**, CEO, County of Los Angeles
2. **Daryl L. Osby**, Vice-Chair, Fire Chief, County of Los Angeles Fire Dept.
3. **Jim McDonnell**, Chair, Sheriff, Los Angeles County Sheriff's Dept.
4. **Cathy Chidester**, Dir., EMS Agency, County of LADHS
5. **Chris Donovan**, Fire Chief, City of El Segundo Fire Dept.
6. **Joe Ortiz**, Chief of Police, City of Sierra Madre Police Dept.
7. **Mark R. Alexander**, City Manager, CA Contract Cities Assoc.
8. **Mark Fronterotta**, Chief of Police, City of Inglewood Police Dept.
9. **Chris Nunley**, Chief of Police, City of Signal Hill Police Dept.
10. **John Curley**, Chief of Police, City of Covina Police Dept.

Alternates:

John Geiger, General Manager, CEO, County of Los Angeles
Chris Bundesen, Asst., Fire Chief, County of Los Angeles Fire Dept.
Dean Gialamas, Division Dir., Los Angeles County Sheriff's Dept.
Kay Fruhwirth, Asst., Dir., EMS Agency, County of LADHS
Scott Haberle, Fire Chief, City of Monterey Park Fire Dept.
Donna Cayson, Captain, City of Sierra Madre Police Dept.
Marcel Rodarte, Executive Dir., CA Contract Cities Assoc.
Louis Perez, Deputy Chief, City of Inglewood Police Dept.
Brian Leyn, Captain, City of Signal Hill Police Dept.
David Povero, Captain, City of Covina Police Dept.

Officers:

Scott Edson, Executive Director
John Naimo, County of Los Angeles Auditor-Controller
Joseph Kelly, County of Los Angeles, Treasurer and Tax Collector
Priscilla Lara, Board Secretary



NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA

I. CALL TO ORDER

II. ANNOUNCE QUORUM – Roll Call

III. APPROVAL OF MINUTES (A)

A. June 27, 2018 – Special Meeting Minutes

Agenda Item A

IV. PUBLIC COMMENTS

V. CONSENT CALENDAR – (None)

VI. REPORTS (B-E)

B. Director's Report – Scott Edson

- Executive Summary

Agenda Item B

C. Project Manager's Report – Justin Delfino

Agenda Item C

D. Joint Operations and Technical Committee Report

E. Finance Committee Report

VII. DISCUSSION ITEMS (F-G)

F. Outreach Update

Agenda Item F

G. PSBN Onboarding Update

Agenda Item G



VIII. ADMINISTRATIVE MATTERS (H-J)

H. APPROVE THE FISCAL-YEAR 2018-19 PROPOSED LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY OPERATING BUDGET

It is recommended that the Los Angeles Regional Interoperable Communications System Authority (Authority) approve the enclosed Fiscal-Year 2018-19 Proposed Operating Budget of \$80,618,000 to be utilized for the continued operation of the Authority.

Agenda Item H

I. AMENDMENT NO. 14 FOR PROFESSIONAL BROADBAND ENGINEERING CONSULTING SERVICES

It is recommended that your Board:

1. Approve Amendment No. 14, substantially similar in form to the Enclosure, which contemplates allowing Televate to assist the Authority with ongoing transition of the PSBN to AT&T including assisting local agencies' successful APN connection to the NPSBN, assisting with local control and governance of the NPSBN including service level agreements, managing the deployment and testing of vehicular router replacements and installs and other associated work, for a cost increase in the amount of \$1,722,525.
2. Approve an increase to the Maximum Contract Sum in the amount of \$1,722,525 from \$12,516,500 to \$14,239,025 to cover the cost of work contemplated in Amendment No. 14.
3. Delegate authority to the Executive Director to execute Amendment No. 14, in substantially similar form to the enclosed Amendment.

Agenda Item I

J. APPROVE AMENDMENT NO. 34 TO AGREEMENT NO. LA-RICS 007 FOR LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM – LAND MOBILE RADIO SYSTEM

It is recommended that your Board:



1. Take the following actions with respect to the LMR System Site Industry Water Tanks (INDWT) project:
 - a. Consider the Mitigated Negative Declaration for the LMR INDWT project, find that the Mitigation Monitoring Program (MMP) is adequately designed to ensure compliance with the mitigation measures during project implementation, find on the basis of the whole record before the Board that there is no substantial evidence that the INDWT project will have a significant effect on the environment, and that the Mitigated Negative Declaration (MND) prepared for the INDWT project reflects the Authority's independent judgment and analysis, and adopt the Mitigated Negative Declaration included as Enclosure 1 and adopt the MMP included as Enclosure 2 as a condition of approval for the project.
 - b. Find that inclusion of one (1) LMR System Site (INDWT) into Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), and Phase 4 (LMR System Implementation), and exercising of the Unilateral Options to align with the updated LMR System Design which would authorize the Authority to proceed with construction, implementation, operation, and maintenance of LMR infrastructure at Site INDWT, are within the scope of the MND recommended for adoption above.
2. Make the following findings with respect to other items included in Amendment No. 34 (Enclosure 3) to Agreement No. LA-RICS 007 for a LMR System with Motorola Solutions, Inc. (Motorola):
 - a. Find that removal of certain Authority equipment, in particular, an Uninterruptible Power Supply (UPS) from Los Angeles Police Department's Valley Dispatch Center does not have the potential to result in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and therefore is exempt from review under the California Environmental Quality Act (CEQA) as it is not a project pursuant to CEQA Guidelines Section 15061(b)(3) and 15378(a), and the Public Resources Code Section 21065.
 - b. Find that (a) approval of the LMR Change Order Modifications necessary to reflect reconciliation of one (1) LMR System Site (Agoura Hills [AGH]) to align with updated LMR System Design is within the scope of the Final Environmental Impact Report (EIR) for the LA-RICS LMR System, which was previously certified by the Board under CEQA on March 29, 2016; and (b) that there are no changes to the project at this site or to the circumstances under which the project is undertaken that require revisions



to the previous EIR due to new significant effects or substantial increase in the severity of previously identified significant effects.

- c. Find that approval of the LMR Change Order Modifications necessary to reflect reconciliation of one (1) LMR System Site (Hauser Peak [HPK]) to align with the updated LMR System Design is within the scope of design, construction, implementation, operation, and maintenance activities for the LMR System previously authorized at this one (1) site. The LMR activities at Site HPK were previously found by your Board to be statutorily exempt from review pursuant to Public Resources Code Section 21080.25, the exemption adopted specifically for the LA-RICS project, and any leased circuit work that may occur outside of Site HPK if needed to provide network connectivity to the LMR System, was previously found to be categorically exempt under CEQA pursuant to State CEQA Guidelines Sections 15301, 15303, and 15304.
3. Approve Amendment No. 34 (Enclosure 3), in substantially similar form to the enclosure, to Agreement No. LA-RICS 007 for a LMR System with Motorola Solutions, Inc. (Motorola), which revises the Agreement to reflect the following:
 - a. Inclusion of one (1) LMR System Site (INDWT) into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercising the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,016,780
 - b. Removal of certain equipment, in particular a UPS, from Los Angeles Police Department's Valley Dispatch Center for a cost increase in the amount of \$6,010.
 - c. Make changes necessary to incorporate LMR Change Order Modifications related to LMR System Sites AGH and HPK for a cost increase in the amount of \$90,744.
 - d. Extend a bridge warranty for certain Early Deployment/Specified Equipment to bridge the warranty gap for this equipment commencing on August 1, 2018 up to and including December 31, 2019 for a cost increase in the amount of \$430,800.
4. Authorize an increase to the Maximum Contract Sum in the amount of \$1,544,334 from \$295,919,379 to \$297,481,203 when considering the cost increase.



5. Allow for the issuance of one or more Notices to Proceed for the Work contemplated in Amendment No. 34.
6. Delegate authority to the Executive Director to execute Amendment No. 34, in substantially similar form, to the enclosed Amendment (Enclosure).

Agenda Item J

K. APPROVE AMENDMENT NO. 30 FOR AGREEMENT NO. LA-RICS 008 FOR LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM PUBLIC SAFETY BROADBAND NETWORK

It is recommended that your Board:

1. Approve Amendment No. 30 to Agreement No. LA-RICS 008 for the PSBN with Motorola Solutions, Inc. (Motorola), in substantially similar form to the (Enclosure), which extends the Term of the Agreement for an additional sixty (60) days from August 1, 2018, until September 30, 2018, unless sooner terminated or extended in whole or in part, at no cost.
2. Delegate Authority to the Executive Director to execute an amendment to extend the term for an additional thirty (30) days, at no cost, should the need exist, to allow for the finalization of scope for the PSBN Round 2 buildout, provided such amendment is approved as to form by Counsel to the Authority.
3. Delegate authority to the Executive Director to execute Amendment No. 30, in substantially similar form to the enclosed Amendment.

Agenda Item K

IX. MISCELLANEOUS - NONE

X. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE BOARD

XI. CLOSED SESSION REPORT - NONE

XII. ADJOURNMENT and NEXT MEETING:

Thursday, September 13, 2018, at 9:00 a.m., location forthcoming.



BOARD MEETING INFORMATION

Members of the public are invited to address the LA-RICS Authority Board on any item on the agenda prior to action by the Board on that specific item. Members of the public may also address the Board on any matter within the subject matter jurisdiction of the Board. The Board will entertain such comments during the Public Comment period. Public Comment will be limited to three (3) minutes per individual for each item addressed, unless there are more than ten (10) comment cards for each item, in which case the Public Comment will be limited to one (1) minute per individual. The aforementioned limitation may be waived by the Board's Chair.

(NOTE: Pursuant to Government Code Section 54954.3(b) the legislative body of a local agency may adopt reasonable regulations, including, but not limited to, regulations limiting the total amount of time allocated for public testimony on particular issues and for each individual speaker.)

Members of the public who wish to address the Board are urged to complete a Speaker Card and submit it to the Board Secretary prior to commencement of the public meeting. The cards are available in the meeting room. However, should a member of the public feel the need to address a matter while the meeting is in progress, a card may be submitted to the Board Secretary prior to final consideration of the matter.

It is requested that individuals who require the services of a translator contact the Board Secretary no later than the day preceding the meeting. Whenever possible, a translator will be provided. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. (323) 881-8291 or (323) 881-8295

SI REQUIERE SERVICIOS DE TRADUCCION, FAVOR DE NOTIFICAR LA OFICINA CON 72 HORAS POR ANTICIPADO.

The meeting is recorded, and the recording is kept for 30 days.



BOARD OF DIRECTORS SPECIAL MEETING MINUTES

**LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY**

Thursday, June 27, 2018 • 9:00 a.m.
Los Angeles County Sheriff's Department
The Hertzberg Davis Forensic Science Center
Conference Room 263
1800 Paseo Rancho Castilla, Los Angeles, CA 90032

Board Members Present:

Cathy Chidester, Dir., EMS Agency, County of LADHS
Chris Donovan, Fire Chief, City of El Segundo Fire Dept.
John Curley, Chief of Police, City of Covina Police Dept.

Alternates For Board Members Present:

Michael Iwanaga, CEO, County of Los Angeles
Chris Bundesen, Asst., Fire Chief, County of Los Angeles Fire Dept.
Dean Gialamas, Division Dir., Los Angeles County Sheriff's Dept.
Louis Perez, Deputy Chief, City of Inglewood Police Dept.
Brian Leyn, Captain, City of Signal Hill Police Dept.

Officers Present:

Scott Edson, LA-RICS Executive Director
Priscilla Lara, LA-RICS Board Secretary

Absent:

Joe Ortiz, Chief of Police, City of Sierra Madre Police Dept.
Mark Alexander, City Manager, CA Contract Cities Assoc.



NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA

I. CALL TO ORDER

Director Dean Gialamas called the Special Meeting of the Board to order at 9:01 a.m., and started with a brief moment of silence for Fire Captain David Rosa of Long Beach Fire Department who was tragically killed this week responding to an incident.

II. ANNOUNCE QUORUM – Roll Call

Director Dean Gialamas acknowledged a quorum was present and asked for a roll call.

III. APPROVAL OF MINUTES (A)

A. May 17, 2018 – Special Meeting Minutes

Board Member Chidester motioned first, seconded by Director Gialamas.

Ayes 8: Chidester, Donovan, Curley, Iwanaga, Bundesen, Gialamas, Perez and Leyn

MOTION APPROVED

IV. PUBLIC COMMENTS – (NONE)

V. CONSENT CALENDAR – (NONE)

VI. REPORTS (B-D)

B. Director's Report – Scott Edson

Executive Director Scott Edson stated that today is an exciting day and will get into that in a minute, included in your package is an Executive Summary in dashboard format on the Long Term Evolution (LTE) and Land Mobile Radio (LMR) projects, grant status and agency onboarding.

In regards to the grants, the Urban Areas Security Initiative (UASI) 2008 – UASI 2016 audit is almost over. We spent many hours providing the auditors with countless documents supporting grant-funded transactions incurred and/or funded over the past eight years. Executive Director Edson stated he has a call scheduled with the auditors this afternoon regarding sustainment of the LMR system. We expect a report back from them in mid-July. Executive Director Edson certain we did well, not perfect, but well, as we are not aware of any significant issues to date.



As for LTE, we are on schedule to close the Asset Transfer and Business Agreement with AT&T on June 30, 2018, and an announcement has been written and will go out to the media this afternoon in anticipation of closing. AT&T will assume Operations and Maintenance of the Network as is, until a cut over to the Nationwide Public Safety Broadband Network (NPSBN) can occur that will minimize disruption. Executive Director Edson stated before the cut over could occur and so we can take advantage of all the AT&T spectrum, new SIMs and modems/routers need to be in place. The planning has been ongoing for months and we expect the equipment transition process to begin soon. Executive Director Edson stated we continue to meet with cities, updating them on FirstNet governance and the NPSBN future here in the region, as well as the public safety grade aspect of what we built here for our public safety first and secondary responders.

As for LMR, we are still on schedule under the 20/20/20/20 plan. We are pushing the Jacobs Team and Motorola Solutions Inc., to tighten up the schedule to ensure construction completion of all sites by December 31, 2019.

Executive Director Edson stated the operations and technology committee are focusing on a plan for the early onboarding of agencies that may have expressed an interest in using our LMR system. That plan has to follow the build schedule so we know when a site can go active in a specific geographical area that has a proper backhaul in place, and correlate that to agencies in that area to benefit from that site. LA-RICS also needs to determine the cost to turn on that site prior to final system acceptance and how we can fund and ensure sufficient resources to operate and maintain that site. Once the committees review the pros/cons and assess the fiscal impact of early deployment of site(s), they will bring a recommendation to your Board for policy consideration.

Executive Director Edson went on to point out some key items before the Board today: Item G requires your approval to accept over \$31m in BTOP funds for LA-RICS to continue moving forward with PSBN round 2, LTE coverage augmentation and rapid response vehicles; Item H is an addition to the Fiscal manual addressing interest earned; Item I is an increase in the contract sum to Televate to help LA-RICS with successful completion the PSBN round 2, completion of coverage augmentation and deployment of rapid response vehicles objectives; Item K relates to the business agreement with AT&T. Since the agreement was approved by your Board and while we continue to work with AT&T on the cutover of users to the NPSBN, we evaluated the number of LTE devices, routers, phones, sims, etc. that do not provide full AT&T FirstNet functionality and it was determined that an additional 1,000 devices were needed. AT&T agreed to provide an additional 1,000 at no charge, as reflected in the



amendment before your Board; Item L is a Site Access agreement (SAA) for the LMR site at Saddle Peak, which is in the Santa Monica mountains area.

Lastly, Item M is the transfer of nine Cell on Wheels (COW) on Southern California Edison (SCE) property to AT&T FirstNet. This is the first of many transfers you can expect in the future.

Executive Director Edson stated we anticipate that your next Board meeting will be the last week of July and we will likely cancel the August meeting.

This concludes the Director's Report.

Director Gialamas acknowledged the closing of the Asset Transfer and Business Agreement with AT&T as a significant accomplishment and stated he appreciates staff for their efforts working with AT&T.

C. Project Manager's Report – Justin Delfino

Project Manager Delfino presented a PowerPoint presentation to the Board that included the following updates:

Active LMR Site Work June 2018 – UASI 16 Work are listed below:

1. CCB: Ph.4, Ph.2 change work
2. FCCF: Ph.4
3. HPK: Ph.4, Ph.2 change work
4. LA-RICS-HQ: Ph.2
5. LDWP243: Ph.4
6. MMC: Ph.4
7. ONK: Ph.4, Ph.2 change work
8. PLM: Ph.4 - Milestone – CORE Connection to FCCF
9. POM: Ph.1 Geo-tech generator
10. SPN: Ph.1 Geo-tech tower scheduled 6/28/18
11. TPK: Ph.4
12. VPK: Ph.2

The next sites on the PowerPoint presentation are listed below:

- LA-RICSHQ - (rack delivery for this site)



- LDWP243 – (RF fingerprint, completed tower, stacked generator and this is a finished site)
Project Manager Delfino acknowledge Motorola on their quality of finished work to the sites.
- MMC – (drone technology with a view of the tower, antennas and sheltered installed)
- TPK – (180 foot tower structure, shelter and generator all installed. Glendale Water and Power Vault Location scheduled to install and complete Ph. 2 Under UASI 16))

The next sites on the PowerPoint presentation are the 20/20/20/20 Track:

Sites with targeted start dates for the end of summer 2018

1. UCLA
2. POM
3. LA-RICSHQ
4. SGH
5. LAN
6. UNIV
7. CRN
8. DPW038

Sites with targeted start dates for the end of Year 2018

1. BHS
2. RHT
3. MIR
4. OAT
5. AGH
6. LACFDEL
7. INDWT

This concludes the Program Manager's Report and there was no further discussion.

D. Joint Operations and Technical Committee Chairs Report – Tanya Roth

Deputy Program Manager Roth stated that the Joint Operations and Technical Committees convened their regular meeting on May 22, 2018, at which three administrative items were brought forth with the recommended action approved.



The first administrative item was the Early Onboarding Policy and MOU, which would allow agencies to onboard to the LMR system prior to the contract term "Final System Acceptance." Deputy Program Manager Roth explained that the MOU has been reviewed by Counsel and recommended by the Joint Tech and Ops Committees to the JPA Board. Deputy Program Manager Roth echoed Chief Edson's comments from the Director's Report explaining that once the Committees identify the pro and cons, and determine fiscal impact; the Committees' intent is to present the Early Onboarding Policy and MOU along with a policy addressing fiscal impact for board consideration.

The second administrative item was the Information Technology and Security Program Policy, which would be the first in a batch of policies that together will constitute a Security Program ensuring that Authority IT Resources are protected against all forms of unauthorized access, use, disclosure and modification. Deputy Program Manager Roth explained that intent of the Committees is to gather a logical batch of the security policies together and then present to the Board for approval. Deputy Program Manager Roth stated that topics covered in the upcoming security policies would be Use of IT Resources, Antivirus, Cybersecurity Threat Response and Use of Electronic Communications. She went on to explain that the working groups have been hard at work drafting policies for the Security Program and expect to present a batch later this summer for Board consideration.

The third administrative item was the nomination and election of Lt. Tab Rhodes for the Operations Committee Vice-Chair position that was recently vacated. Deputy Program Manager Roth informed the Board that Lt. Rhodes has jumped into this new role and is quickly becoming immersed in all things Tech and Ops.

Deputy Program Manager Roth stated that outside of the administrative items discussed at the last Joint Committee Meeting, the SOP working group remains on task with weekly drafting sessions and expects to release the next section to the Ad Hoc committee shortly for review.

Transitioning the discussion to the upcoming schedule, Deputy Program Manager Roth stated that the next Joint Committee Meeting per the regular schedule is July 20, 2018. She explained that staff and Committee Chairs see these meetings as a great opportunity to address policy and procedure but also to inform and market to a captive audience. As a creative approach to leverage this time, she went on to state that staff is exploring the feasibility to take the Joint Committee Meetings on the road and ideally include tours of real LMR installations.

Executive Director Edson addressed the Board requesting that notification of Joint Operations and Technical meetings be forwarded to all parties who might be



interested not just member agencies. Executive Director Edson emphasized that we want the Los Angeles region to get involved and participate in Tech and Ops activities, as LA-RICS will benefit the entire region.

Board Member Donovan inquired on the status of County security policy and procedures that LA-RICS was initially considering to adopt. Deputy Program Manager Roth clarified that a separate working group is in fact developing LA-RICS security policies, which is separate from the Standard Operating Procedures (SOP) Manual. The first security policy, LA-RICS Information Technology Security Program, was second administrative item approved by the Joint Committees at the May meeting.

VII. DISCUSSION ITEMS (E-F)

E. Outreach Update

Executive Assistant Wendy Stallworth-Tait presented the Outreach Update, Agenda Item E and stated that she will highlight a few of the key outreach activities, which are displayed in your update.

Executive Assistant Stallworth-Tait stated members of the LA-RICS Outreach Team made a presentation to residents near LMR site Los Angeles County Fire Station 72 located in the unincorporated area of Malibu. Members of the LA-RICS Outreach Team made a presentation to stakeholders regarding LMR site Green Mountain (GRM), located on state park land as requested by State Parks and Recreation Management. Members of the LA-RICS Team attended the Rancho Palos Verdes Planning Commission Meeting to respond to questions/concerns regarding the LMR Rolling Hills Transmit (RHT) site. Executive Director Edson and Program Manager Odenthal met with representatives from Pasadena to continue ongoing discussions regarding a LMR site and to provide an update on the AT&T Asset Transfer Agreement for PSBN sites. Lastly, the LA-RICS Communication Team released Volume 3, Issue 10 of the LA-RICS Newsletter on June 5, 2018.

There was no further discussion.

F. PSBN Onboarding Update

Executive Assistant Stallworth-Tait presented Agenda Item F and stated this month's update focused on our transition of various sites to AT&T, which will continue to coordinate joint testing with agencies listed on the table. The transition of the PSBN sites to AT&T is ongoing. We are coordinating joint testing with the above-mentioned agencies to minimize any service impacts due to the transition. Device vendor evaluations are underway to help determine the router transition. All the questions

have been answered and everyone is onboard and ready for that to take place at the end of the month.

Executive Director Edson ask the Board to forward the the LA-RICS Newsletter upon receipt.

There was no further discussion.

VIII. ADMINISTRATIVE MATTERS (G-M)

G. ACCEPT BROADBAND TECHNOLOGY OPPORTUNITY PROGRAM GRANT FUNDS

Administrative Deputy Orellana-Curtiss presented Agenda Item G, and stated as Executive Director Edson reported we have received a verbal confirmation from the Federal grantor NTIA that we will be awarded for augmentation of grant funds for the build out of LTE. However, when we presented this item to your Board on May 17, 2018, the action item before your Board was for the acceptance of \$34.5 million in grant funds, as reflected in our PIP for Round 2. Since that date, our Federal Program Officer notified LA-RICS of its partial Round 2 PIP approval, including funding for Objective No 1, Coverage Augmentation and Objective No. 2, Rapid Response Vehicles only. Administrative Deputy Orellana-Curtiss stated it is our intention to return to your Board to address the remaining balance of BTOP grant funds as we plan to pursue a modification of Objective No. 3 for submittal to the grantor for approval/award. At this time, we are recommending your Board:

1. Accept \$31,969,477 in grant funds from the BTOP Grant; and
2. Delegate authority to the Executive Director to execute any grant-required documents resulting from BTOP grant augmentation.

Administrative Deputy Orellana-Curtiss stated once we receive written approval, we will move forward with any NTP's and amendments.

Board Member Donovan asked if the COLTS would remain in the region for use by LA-RICS and its members once the COWs are established and the transfer to AT&T is complete. Administrative Deputy Orellana-Curtiss stated the COLTs would remain property of the Authority; they will not be transferred.

Alternate Board Member Iwanaga asked about the expiration date of these grant funds. Administrative Deputy Orellana-Curtiss responded that the expiration date is September 30, 2020.



Board Member Donovan motioned first, seconded by Board Member Curley.

Ayes 8: Chidester, Donovan, Curley, Iwanaga, Bundesen, Gialamas, Perez and Leyn

MOTION APPROVED

H. APPROVE AMENDMENT NO. 3 TO THE LA-RICS FISCAL MANUAL

Administrative Deputy Orellana-Curtiss presented Agenda Item H and recommended that the Board approve adoption of an amendment to the Fiscal Manual, which we utilize to manage all Fiscal transactions and processes for the Authority. LA-RICS has established a separate interest bearing account to track those funds and we felt it was necessary for an amendment referencing policy on how to manage any interest earned and remittance process for funds earned back to the grantor.

Administrative Deputy Orellana-Curtiss asked the Board to turn to page 5 of the enclosure and note the section proposed to be amended:

4.1.1 Interest Earned on Advanced Grant Funds

Administrative Deputy Orellana-Curtiss went on to state the Authority will monitor all grant requirements with respect to the treatment of interest for all interest earned on advanced grant funding. If required by the grant, the Authority will remit interest earned to the grantor on advanced grant funds at least quarterly, or as required by the grant. Authority staff in conjunction with Authority Fiscal Agent will develop and implement procedures to ensure compliance.

Board Member Chidester asked at what interest does the grantor require the funds to be returned. Administrative Deputy Orellana-Curtiss stated the BTOP grant is the only grant that provides advance grant funds and thus is the only one that requires the interest to be returned.

Board Member Donovan motioned first, seconded by Alternate Board Member Bundesen.

Ayes 8: Chidester, Donovan, Curley, Iwanaga, Bundesen, Gialamas, Perez and Leyn

MOTION APPROVED



I. AMENDMENT NO. 13 FOR PROFESSIONAL BROADBAND ENGINEERING CONSULTING SERVICES

Contracts Manager Jeanette Arismendez presented Agenda Item I and recommended that your Board:

1. Approve Amendment No. 13, substantially similar in form to the enclosed amendment, which contemplates the following:
 - a. Increase the scope of work to allow Televate to assist the Authority in completing certain work contemplated in the PSBN Round 2 Project Implementation Plan (PIP), in particular assistance with PIP objectives for Coverage Augmentation and Rapid Response Vehicles as well as allow Televate to support the Authority with broadband-related activities relevant to the Authority's mission.
 - b. Extend the term of the Televate Agreement to December 31, 2020, to align with the completion of certain work contemplated in the PSBN Round 2 PIP, in particular PIP objectives for Coverage Augmentation and Rapid Response Vehicles, as well as allow Televate to support the Authority with broadband related activities relevant to the Authority's mission.
2. Approve an increase to the Maximum Contract Sum in the amount of \$1,010,190 from \$11,506,310 to \$12,516,500 to allow for increase in scope and the term extension. No work will be authorized until appropriate funds are secured.
3. Delegate authority to the Executive Director to execute Amendment No. 13, in substantially similar form to the enclosed amendment.

Director Gialamas motioned first, seconded by Alternate Board Member Bundesen.

Ayes 8: Chidester, Donovan, Curley, Iwanaga, Bundesen, Gialamas, Perez and Leyn

MOTION APPROVED

J. AMENDMENT NO. 27 TO THE PROJECT AND CONSTRUCTION MANAGEMENT SERVICES AGREEMENT

Contracts Manager Arismendez presented Agenda Item J and recommended that your Board:



1. Approve Amendment No. 27, substantially similar in form to the enclosed amendment, which contemplates a decrease in the scope of work to remove Application Interoperability from the PSBN Round 2 (PIP) from consideration resulting in a decrease to the Maximum Contract Sum in the amount of \$59,200.
2. Approve a decrease to the Maximum Contract Sum in the amount of \$59,200 from \$62,098,834 to \$62,039,634 when taking the revisions contemplated in Amendment No. 27 into consideration.
3. Delegate authority to the Executive Director to execute Amendment No. 27, in substantially similar form to the enclosed Amendment.

Board Member Donovan motioned first, seconded by Board Member Curley.

Ayes 8: Chidester, Donovan, Curley, Iwanaga, Bundesen, Gialamas, Perez and Leyn

MOTION APPROVED

K. APPROVE AMENDMENT NO. 1 TO THE BUSINESS AGREEMENT WITH AT&T CORP.

Contracts Manager Arismendez presented Agenda Item K and recommended that the Board:

1. Approve Amendment No. 1 to the Business Agreement between AT&T and the Authority, substantially similar in form to the enclosed amendment, to allow the Authority to accept an increased amount of routers, SIMS, and devices of the Authority's choosing from 3,300 to 4,300.
2. Delegate authority to the Executive Director to execute Amendment No. 1 to the Agreement, substantially similar in form to the enclosed amendment.
3. Delegate authority to the Executive Director to execute additional amendments to the Business Agreement to accept additional devices that may be needed by the Authority and its members to utilize the FirstNet NPSBN, with an estimated not to exceed collective value of \$800,000, which will be substantially similar in form to the enclosed amendment. The Executive Director will report back to your Board if any such amendments are executed.

Board Member Donovan requested Executive Director Edson to provide outreach to other agencies on best management practices recommendations on types of devices



to purchase as other cities transition to PSBN. Executive Director stated that he would proceed to do so.

Board Member Bundesen motioned first, seconded by Alternate Board Member Perez.

Ayes 8: Chidester, Donovan, Curley, Iwanaga, Bundesen, Gialamas, Perez and Leyn

MOTION APPROVED

L. APPROVE SITE ACCESS AGREEMENT WITH SADDLE PEAK COMMUNICATIONS FOR A LAND MOBILE RADIO SYSTEM SITE

Executive Assistant Stallworth-Tait presented Agenda Item L and recommended that the Board:

1. Find that (a) the approval and execution of the SAA for the Saddle Peak (SPN) site listed in Enclosure 1 to allow for all Land Mobile Radio (LMR) system work to occur at this site for the design, construction, implementation, operation, and maintenance of the LMR infrastructure at this site as covered by the SAA is within the scope of the Final Environmental Impact Report (EIR) prepared for the Los Angeles Regional Interoperability Communications System (LA-RICS) LMR System which was previously certified under the California Environmental Quality Act (CEQA) on March 29, 2016; (b) there are no changes to the project at this site or to the circumstances under which the project is undertaken that require revisions to the previous EIR due to new significant effects or a substantial increase in the severity of previously identified significant effects.
2. Authorize the Executive Director to finalize and execute, substantially similar in form to the enclosed, one SAA with the Saddle Peak Communications (The Owner).

Director Gialamas motioned first, seconded by Alternate Board Member Curley.

Ayes 8: Chidester, Donovan, Curley, Iwanaga, Bundesen, Gialamas, Perez and Leyn

MOTION APPROVED



M. APPROVE AMENDMENT, CONSENT, ASSIGNMENT AND ASSUMPTION OF COMMUNICATIONS SITE LICENSE AGREEMENTS (FOR CELL ON WHEELS) WITH SOUTHERN CALIFORNIA EDISON (SCE) AND AT&T NCW

Executive Assistant Stallworth-Tait presented Agenda Item L and recommended that the Board:

1. Find that approval and execution of the Assignment Agreement is not a project under Section 21065 of the California Public Resources Code and 15378 (b)(5) of the California Environmental Quality Act (CEQA).
2. Approve and delegate authority to the Executive Director to execute the Assignment Agreement, substantially similar in form to Enclosure 1, to allow AT&T NCW to access and absorb the nine (9) COW sites with SCE for the NPSBN.

Board Member Bundesen motioned first, seconded by Board Member Donovan.

Ayes 8: Chidester, Donovan, Curley, Iwanaga, Bundesen, Gialamas, Perez and Leyn

MOTION APPROVED

IX. MISCELLANEOUS – NONE

X. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE BOARD

XI. CLOSED SESSION REPORT - NONE

XII. ADJOURNMENT and NEXT MEETING:

The Board meeting adjourned at 9:42 a.m., and the next meeting is on a date to be determined.

Executive Summary

June 27, 2018

LTE Update

- PSBN Round 1 sites have all been transferred to AT&T. The Authority is accompanying AT&T to all sites to determine what needs to be accomplished at each site in order for AT&T to fully deploy.
- PSBN Round 2 is underway with site selection and vendor negotiation. The environmental team has begun its analysis and we are expecting to deliver a round of sites for environmental consideration in the next 90 days.
- Site walks have occurred with MSI and Bechtel to determine costs and feasibility of sites in order to develop scope and costs.

LMR Update

- Zoning Drawing – 26 Sites are at ZD level.
 - 50% Construction Drawings – 4 Sites are at 50% level.
 - 75% Construction Drawings – 3 Sites are at 75%.
 - 100% Construction Drawings – 6 sites are at 100% level.
 - Building Permit Received – 19 Sites to date.
 - Sites Eligible to Construct: (Includes Completed Sites, Sites Under Construction and/or Equipment Installs & Locations).
- | | |
|---|---|
| 1. APC – Junction of I-105 and I-405 | 10. LA-RICS HQ, - Monterey Park |
| 2. BMT – Angeles, overlooking CA-138 and I-5 | 11. MLM – Mira Loma Detention Center |
| 3. CCB – Compton | 12. MMC – Palmdale – Sierra Pelona Mountain Way |
| 4. CCT – Downtown | 13. MVS – Whittier |
| 5. CLM – Claremont | 14. ONK – Oat Nike |
| 6. FCCF – 1320 Eastern Ave | 15. PHN – Puente Hills |
| 7. HPK – Northern Angeles, overlooking Palmdale | 16. PLM – Palmdale |
| 8. LDWP243 – Junction of I-5 and CA-14 | 17. SDW – San Dimas Water Tank |
| 9. LASDTEM – Temple City | 18. TPK – Gorman |
| | 19. VPK – Verdugo Peak - Glendale |

LA-RICS GRANT STATUS					
Grant	Award	Costs Incurred/NTP Issued	Invoiced / Paid	Remaining Balance	Performance Period
UASI 12	\$18,263,579	\$18,263,579	\$18,263,579	\$-	3/31/17
UASI 13	\$13,744,067	\$13,744,067	\$13,744,067	\$-	3/31/18
UASI 14	\$4,997,544	\$4,997,544	\$4,997,544	\$-	7/31/17
UASI 16	\$5,240,456	\$5,240,456	\$772,283	\$-	5/31/19
UASI 17	\$34,763,750	\$21,579,174	\$-	\$-	5/31/20
UASI 18	\$34,763,750	\$-	\$-	\$-	Not yet awarded
UASI 19	\$35,000,000	\$-	\$-	\$-	Not yet awarded
BTOP	\$120,117,137	\$-	\$116,465,524	\$3,651,613	9/30/20

STATUS OF PSBN AGENCY ONBOARDING		
Agency	Onboarding Status	Number of Units Installed/Demo Kit/SIM cards Received
LASD	Installations in progress.	1208
LACoFD	Installations in progress.	672
Inglewood PD	FirstNet connection is complete. Joint testing of the APN is being scheduled.	23
Claremont PD	FirstNet connection is complete. Joint testing of the APN is being scheduled.	2
Bell PD	Two routers in use. Working directly with FirstNet/AT&T	2
Covina PD	Two routers in use. Transition options from the LA-RICS APN are under review.	2
UCLA Health	Mobile Stroke Unit in operation using the LA-RICS connection. Transition options from the LA-RICS APN under review.	1
Health Services / EMS	Request for antennas for 3 routers approved pending procurement of installation services and antennas. Transition options from the LA-RICS APN under review.	3
El Segundo Fire & PD	Two routers in use via LA-RICS connection. Routers in use over the LA-RICS APN and transition options from the LA-RICS APN under review..	2
Signal Hill PD	They will work directly with AT&T.	0

AGENDA ITEM B

Los Angeles Regional Interoperable Communications System

PROJECT DESCRIPTION

Events of September 11, 2001 highlighted the need for first responders to be able to communicate with each other. Emergency communications primarily address local jurisdictional needs and most agencies utilize separate radio towers, equipment, and radio frequencies. LA-RICS is designed to address each of these concerns.

Currently, there is duplication of costs and first responders cannot communicate with each other. Many legacy systems around the County are obsolete and well beyond their useful life. The LA-RICS Project vision is to provide innovative solutions for the public safety community by removing barriers to interoperable voice and data communications and allow individuals and agencies to focus on accomplishing their mission with the tools necessary to provide excellent service to their communities. To accomplish this vision, the program will establish a County-wide public safety wireless voice and data radio system for all first and secondary responders. Existing radio frequencies will be pooled and the current infrastructure utilized wherever practical. New FCC licensed broadband spectrum will be utilized.

Design, construction, and deployment of two County-wide systems (1) Land Mobile Radio (LMR) voice network utilizes 60 sites in its System Design and (2) Long Term Evolution (LTE) broadband data network is deployed at 76 sites. Both systems comply with CEQA and NEPA standards.

Project and Construction Management Services will provide network, infrastructure, project, and advisory services across four of the five program phases (Phase 5 – Maintenance is excluded) for each of the LMR and LTE projects:

- Phase 1 - System design
- Phase 2 - Site construction and modification
- Phase 3 - Supply telecommunication system components
- Phase 4 - Telecommunications system implementation
- Phase 5 - Telecommunications system maintenance

Location:

2525 Corporate Place, Suite 100
Monterey Park, CA 91754

Authority:

Los Angeles Regional Interoperable
Communications System

Management:

LA-RICS Project Team

Consultant:

Jacobs Program Management Company

Communications Vendor:

LMR - Motorola Solutions, Inc.
LTE - Motorola Solutions, Inc.



Monthly Report No. 75
For June 2018
Submitted July 26, 2018

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LTE-1 UPDATES

Site/Civil/Closeout

- All sites for PSBN system are functioning at the levels intended and monitored by both MSI and the LA-RICS operations team.

PSBN OnBoarding

- No new activity

Operations/Governance

The LA-RICs Operations team is holding meetings three (3) times a week to focus on the following:

1. Manage and Govern MSI
2. Ensure PSBN operational performance
3. Ensure internal LA-RICS operational aspects are in place
4. Develop and Implement Policies
5. Govern Change Management

The weekly Operations meetings are scheduled as follows:

- **Tuesdays - Network Fault and Performance:** (Joint LA-RICs and MSI meeting) The session provides updates and resolutions for Network deficiencies, trouble tickets including system alarms occurring throughout the Radio Access Network (RAN) as well as the Core. This one (1) hour meeting focuses on reviewing and examining all incidents identified during the past week that affect and determine Service Level Agreements (SLAs) and KPIs. Areas of operational performance governance include trouble identification, sectionalization, resolution including processes and activities MSI could improve to effectively manage the network.
- **Wednesday - Internal Operations Meeting:** This internal meeting encompasses a pool of objectives formulated to address internal functional and resource structures, assignments, process and procedures as well as strategies to govern MSI and work through their deficiencies. Included are progress reports on daily functions, change management as well as updates on assigned action items.
- **Thursday - Process Improvements, Policy and Governance:** The team (Joint LA-RICS and MSI meeting) meets once a week to discuss Governance and resources focused on improving MSI processes specifically targeted towards alarms, trouble ticketing including Radio Access Network (RAN) and Core upgrades and functionality.

Special Events

Current preparations and activities:

• Testing

- ◊ ATT – Priority
- ◊ 75 phones
- ◊ 25 Routers
- ◊ ATT Sims (LASD connections only)
- ◊ Verizon Sims and Mobile cards
- ◊ Initial Test for POD-Runner (LTE Mobile site)

• Devices

- ◊ Antennas for testing
- ◊ Camera/video placement
- ◊ Testing scenarios
 - ◆ Video comparison
 - ◆ UL & DL

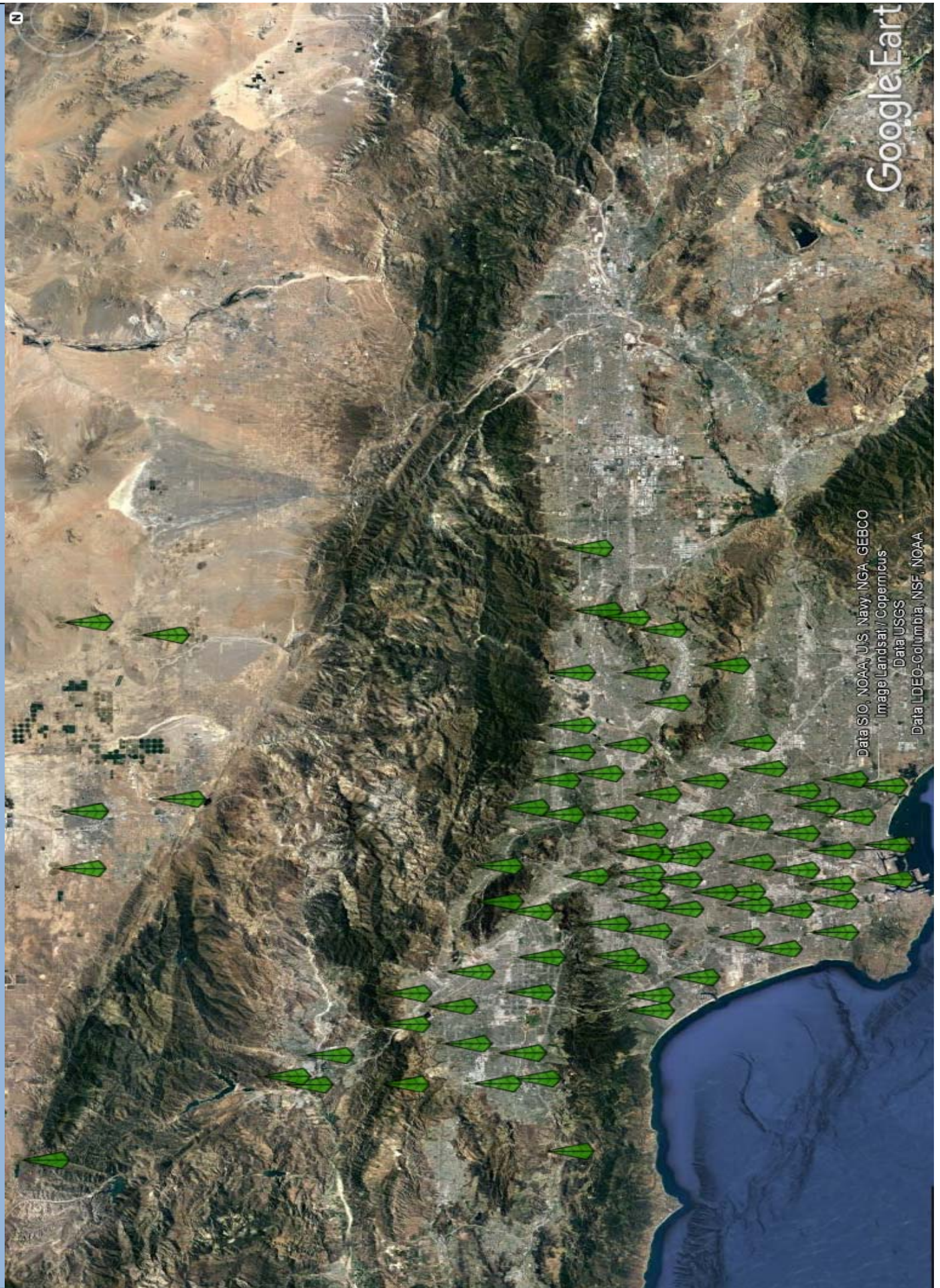
LTE 2 Updates

The Authority submitted the LA-RICS PSBN Round 2 Project Implementation Plan (PIP) to NTIA on February 15. After the Authority answered the initial comments from NTIA, we are now awaiting final decision or formal approval from National Oceanic Atmospheric Administration (NOAA). The Authority has had both in person and phone conversations with HTIA over the timeline for this decision and requested a final response from NTIA by the end of June. Other agreements between ATT and the Authority are on track for execution awaiting this formal decision. NTIA asked additional follow-up questions regarding Objective 3 (Interoperable Applications). The Authority responded to the questions on April 23, but has yet to receive a formal approval. The PIP contains three Objectives: 1) Coverage Augmentation, 2) COLTs, and 3) Interoperable Applications. A pool of 40 candidates (site locations) will be the focus of Objective 1 all of which will be subjected to the environmental process. Out of the 40 candidates, 26 plus sites will be selected for construction. The candidates are a mix of both new locations and existing, or to be constructed, LMR sites. These sites were elected for the PSBN Round 2 project by both ATT engineers and LARICS in order to address the needs of public safety in both the mountains as well as in the urban areas based on the existing commercial AT&T footprint. AT&T provided a letter of support of the PIP to NTIA and the letter was submitted as part of the Authority's overall submission. Both LARICS and ATT are committed to moving forward without delay to bring the resources needed to make Round 2 a successful program. LA-RICS has weekly ongoing meetings with ATT to continue narrowing down any outstanding items supporting the previous requirements for transition of all users from the current PSBN Core to the ATT network Core as well as devices previously chosen to support Public Safety .

Weekly calls between ATT and LARICS are on-going focused on the transition plan for the existing PSBN system from the LARICS core to the ATT core. Additional discussions, activities and meetings:

- Technical meetings with MSI (Cardlepoint and Sierra Wireless)
- Device, routers, PSBN sims products and next steps
- Backhaul and APNs
- County Service contracts
- Device demo's

LTE-1 SITES



LMR UPDATES

Environmental Update

- Continued to review Pyramid's and FCS's pre-construction forms and weekly and daily compliance reports.
- Continued visits to LMR sites.
- Began revision of the EMIS Group 7 data package that will be submitted to FEMA.
- Assisting in preparation of the Board letter for the July 2018 meeting.
- Drafted an NOD for an LMR site for June 27 Board meeting CEQA action (i. e., approving an SAA).
- Began preparation of documentation for a polygon change at Site LACFDEL for submittal to SHPO and USFWS.
- Have accomplished Worker Environmental Awareness Program (WEAP) training for 799 persons as of June 21.

Permitting Support

- Jacobs continues to review MSI's work and meet weekly with MSI to support MSI's developing and adhering to a P6 schedule for individual coastal development permit (CDP) submittal packages for sites included in the Santa Catalina Island, Santa Monica Mountains, and City of Malibu Local Coastal Plans (LCPs) and under State of California jurisdiction. This effort includes review of MSI-submitted zoning and construction parameters (e.g., proposed tower heights and other site design features) to verify these are consistent with Authority requirements and compliant with each applicable LCP, and directing MSI to modify design drawings as appropriate to meet program needs.
- Jacobs continues to drive the submittal of the Proposal and SF 299 special use permit (SUP) application packages for proposed construction and operations of LMR sites on the ANF. Jacobs continues to meet weekly with MSI to drive MSI in completing an LMR system design compliant with the ANF's Land Management Plan that meets system needs, and is working with MSI in developing a P6 schedule associated with successful Proposal and SUP submissions. Under the temporary SUP, the geotechnical investigation for the USFS sites is being re-accomplished at 3 sites where design alterations have resulted in tower relocations; radio spectrum fingerprinting-noise floor monitoring studies are also pending completion. Jacobs and Authority staff continue to meet with key ANF on a monthly basis.

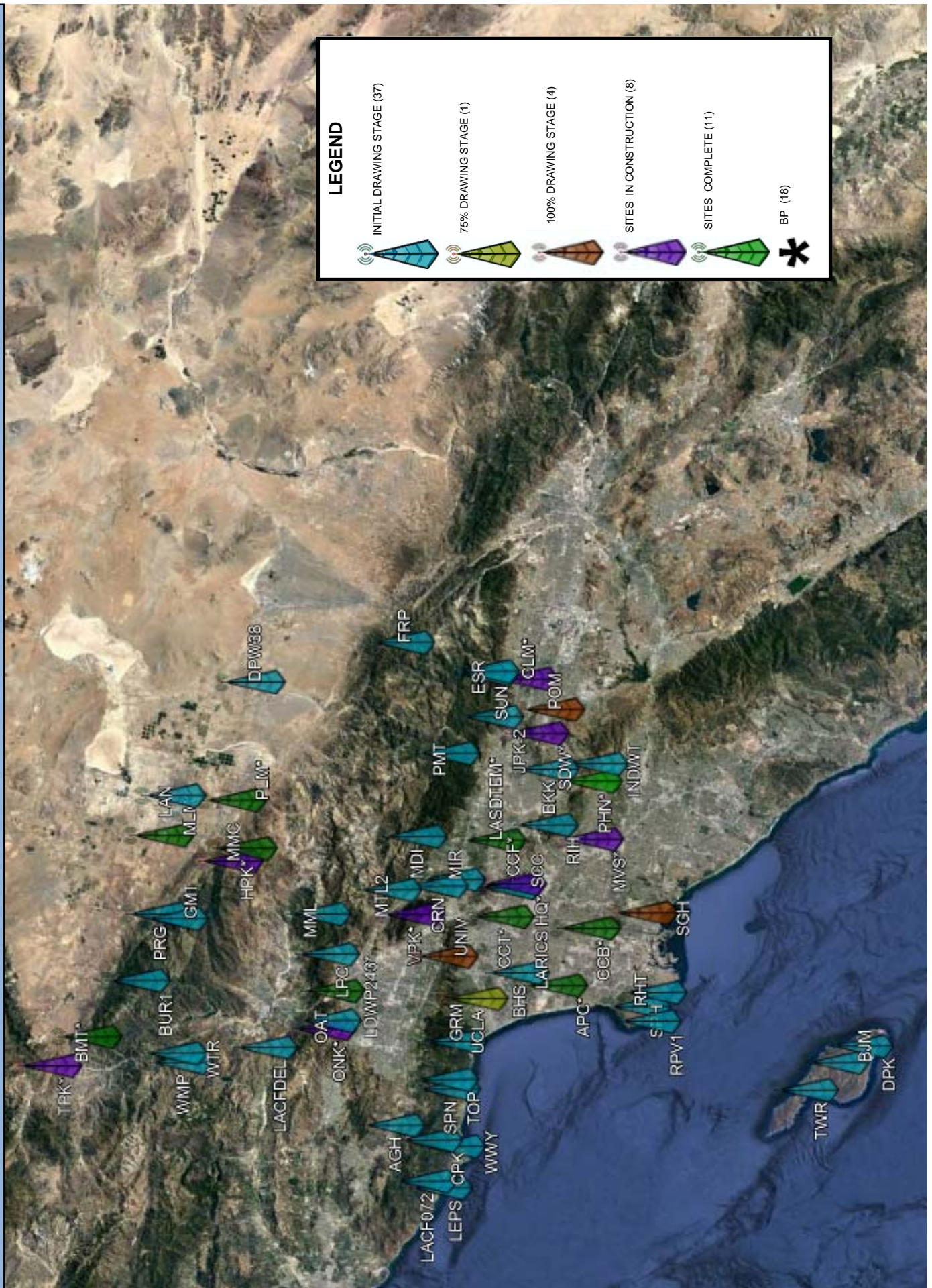
Budget

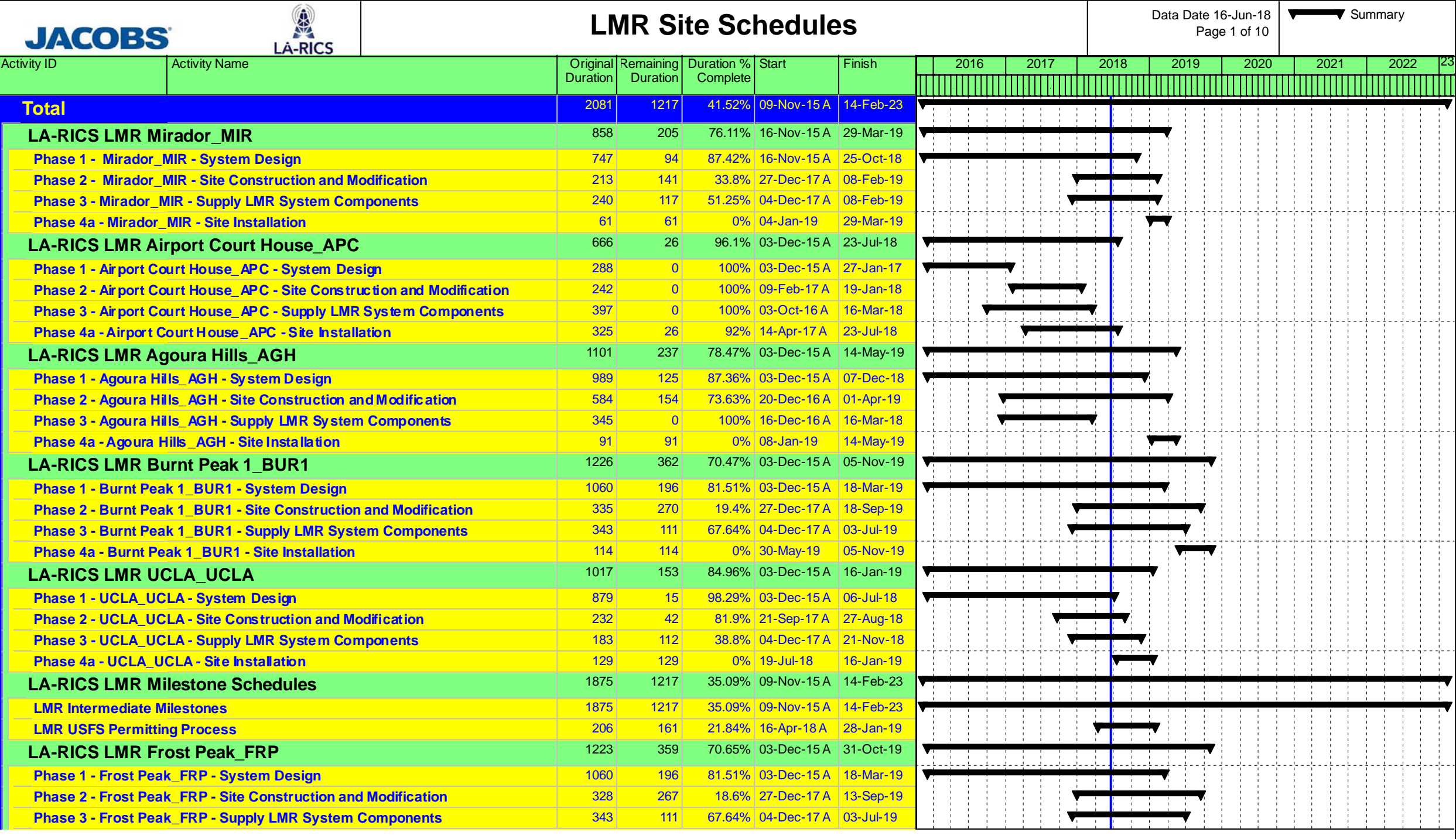
- Jacobs and MSI are currently working through contractual True-up for all remaining sites Phases 2-4.



Site/Civil

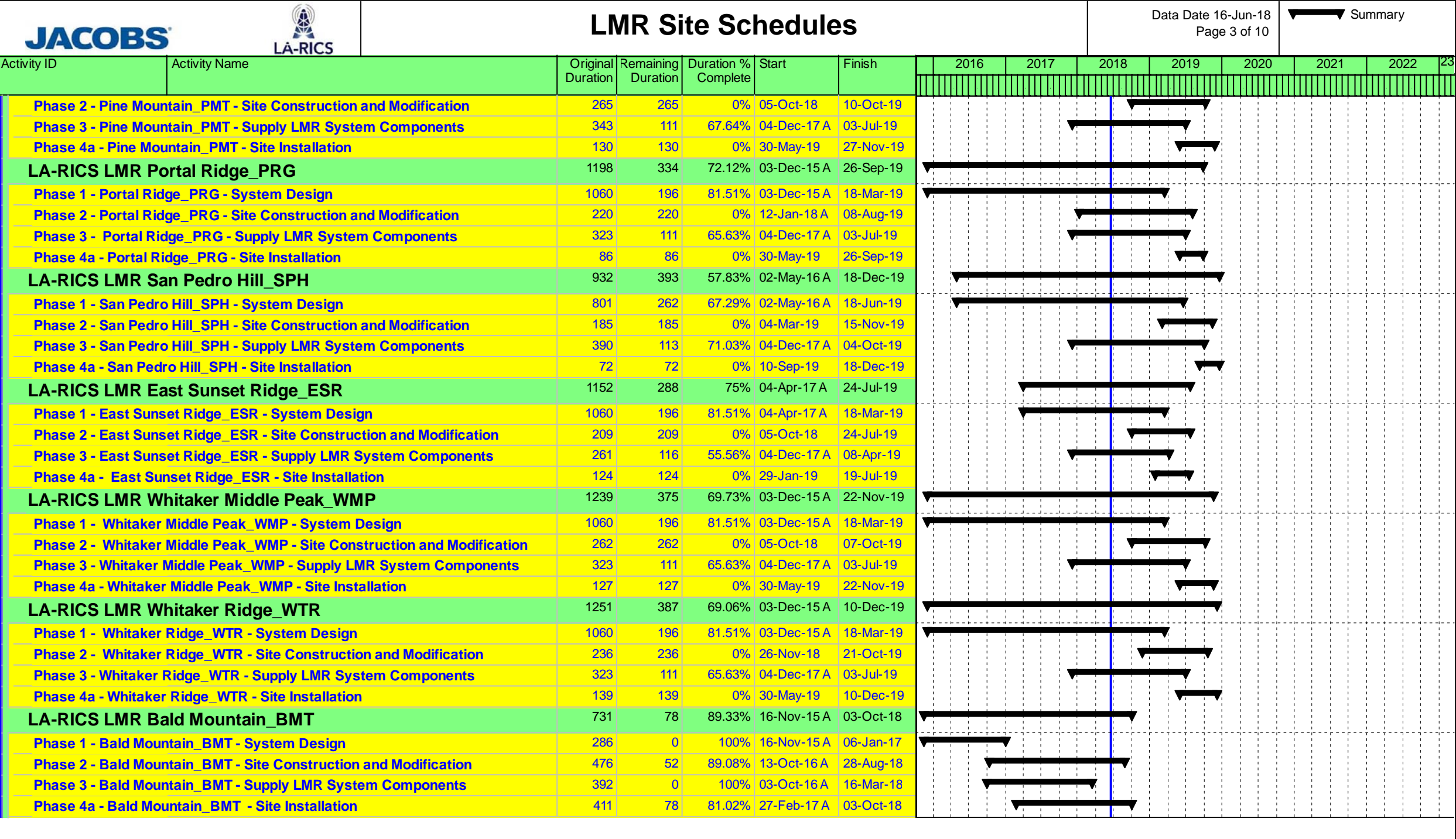
- The Authority and Motorola were able to achieve all UASI 13 spending requirements.
- The LMR Radio Frequency (RF) System Design is now receiving subtle tweaks as final tower heights and antenna orientations are established. All microwave links are confirmed except for San Pedro Hill (SPH), which has been isolated as a link outside the ring topography. All gathered data is currently under review by MSI engineers. MSI and the Authority met to review findings and any lingering issues.
- MSI efforts to complete drawings and submit sites into the jurisdiction for building permits are on-going. Twenty (20) building permit applications (PHN, BMT, HPK, LDWP243, LASDTEM, FCCF, APC, CCB, CCT, PLM, MLM, MVS, ONK, LARICSHQ, CLM, MMC, TPK, VPK, POM and SDW) have been submitted and approvals have been received for nineteen (19) of the twenty sites. Below is an update of the remaining LMR sites and the status or phase of which the drawings are in. As of 06/25/2018 nineteen LMR Building Permit Applications have been approved and construction is underway on all nineteen sites.
- 24 each 100% CD's have been received for review and approval by the authority as of 06/25/2018 of which 21 of them have been submitted to respective jurisdictional agencies for review and Building Permit issuance.
- The proposed LMR Rio Hondo (RIH) site at Puente Hills Landfill has been relocated outside the LA County lease area and LA-RICS will be negotiating a Site Access Agreement (SAA) directly with LA County Sanitation District 18. With the addition of RIH, Jacobs is now tasked with obtaining SAA's for 18 LMR sites. SAA's for the remainder sites are being processed by LA County CEO-RED.
- As of 06/25/2018 twenty eight (28) executed SAA's are in place.

LMR SITES

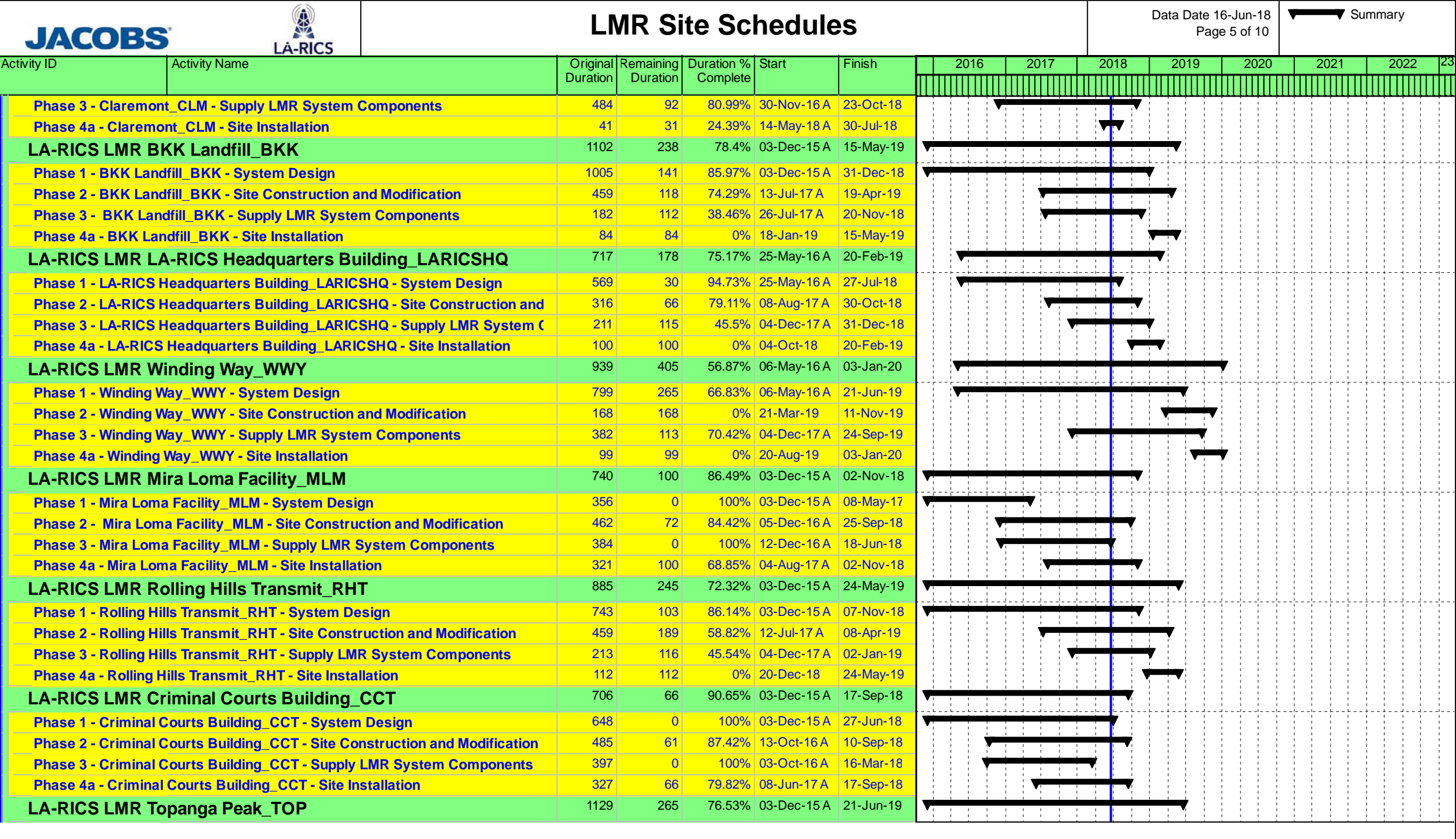






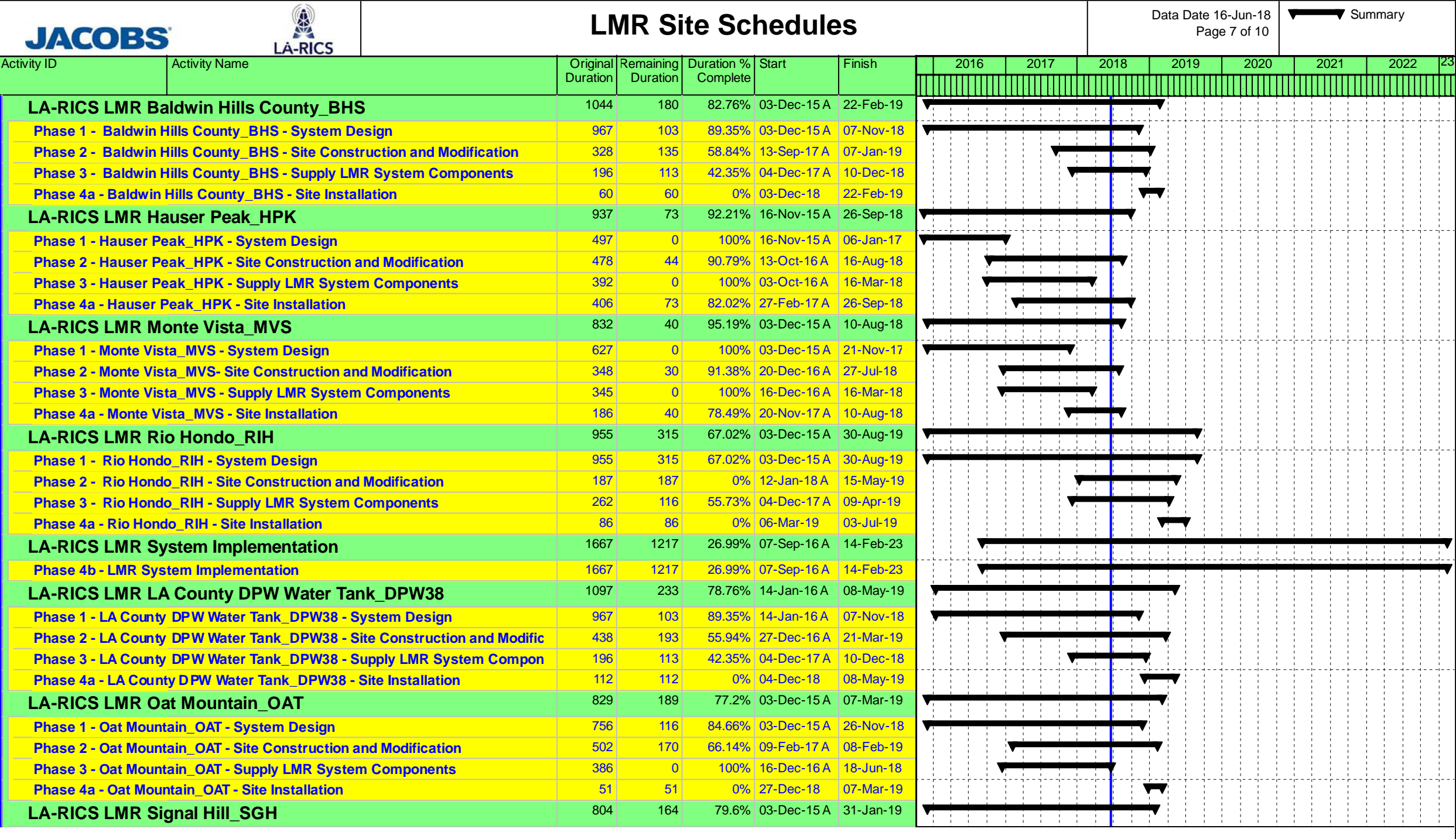
<div>   </div>		LMR Site Schedules					Data Date 16-Jun-18 Page 2 of 10					Summary		
Activity ID	Activity Name	Original Duration	Remaining Duration	Duration % Complete	Start	Finish	2016	2017	2018	2019	2020	2021	2022	23
	Phase 4a - Frost Peak_FRP - Site Installation	111	111	0%	30-May-19	31-Oct-19								
	LA-RICS LMR Grass Mountain_GMT	1257	393	68.74%	03-Dec-15 A	18-Dec-19								
	Phase 1 - Grass Mountain_GMT - System Design	1060	196	81.51%	03-Dec-15 A	18-Mar-19								
	Phase 2 - Grass Mountain_GMT - Site Construction and Modification	278	278	0%	05-Oct-18	29-Oct-19								
	Phase 3 - Grass Mountain_GMT - Supply LMR System Components	343	111	67.64%	04-Dec-17 A	03-Jul-19								
	Phase 4a - Grass Mountain_GMT - Site Installation	145	145	0%	30-May-19	18-Dec-19								
	LA-RICS LMR Johnstone Peak_JPK2	958	385	59.81%	21-Jan-16 A	06-Dec-19								
	Phase 1 - Johnstone Peak_JPK2 - System Design	780	207	73.46%	21-Jan-16 A	02-Apr-19								
	Phase 2 - Johnstone Peak_JPK2 - Site Construction and Modification	401	291	27.43%	27-Dec-17 A	17-Oct-19								
	Phase 3 - Johnstone Peak_JPK2 - Supply LMR System Components	343	111	67.64%	04-Dec-17 A	03-Jul-19								
	Phase 4a - Johnstone Peak_JPK2 - Site Installation	137	137	0%	30-May-19	06-Dec-19								
	LA-RICS LMR Loop Canyon_LPC	1201	337	71.94%	03-Dec-15 A	01-Oct-19								
	Phase 1 - Loop Canyon_LPC - System Design	1060	196	81.51%	03-Dec-15 A	18-Mar-19								
	Phase 2 - Loop Canyon_LPC - Site Construction and Modification	223	223	0%	12-Jan-18 A	13-Aug-19								
	Phase 3 - Loop Canyon_LPC - Supply LMR System Components	323	111	65.63%	04-Dec-17 A	03-Jul-19								
	Phase 4a - Loop Canyon_LPC - Site Installation	89	89	0%	30-May-19	01-Oct-19								
	LA-RICS LMR Mount Disappointment_MDI	1010	370	63.37%	03-Dec-15 A	15-Nov-19								
	Phase 1 - Mount Disappointment_MDI - System Design	836	196	76.56%	03-Dec-15 A	18-Mar-19								
	Phase 2 - Mount Disappointment_MDI - Site Construction and Modification	221	221	0%	26-Nov-18	30-Sep-19								
	Phase 3 - Mount Disappointment_MDI - Supply LMR System Components	323	111	65.63%	04-Dec-17 A	03-Jul-19								
	Phase 4a - Mount Disappointment_MDI - Site Installation	122	122	0%	30-May-19	15-Nov-19								
	LA-RICS LMR Magic Mountain Link_MML	1230	366	70.24%	03-Dec-15 A	11-Nov-19								
	Phase 1 - Magic Mountain Link_MML - System Design	1060	196	81.51%	03-Dec-15 A	18-Mar-19								
	Phase 2 - Magic Mountain Link_MML - Site Construction and Modification	359	274	23.68%	27-Dec-17 A	24-Sep-19								
	Phase 3 - Magic Mountain Link_MML - Supply LMR System Components	343	111	67.64%	04-Dec-17 A	03-Jul-19								
	Phase 4a - Magic Mountain Link_MML - Site Installation	118	118	0%	30-May-19	11-Nov-19								
	LA-RICS LMR Mount Lukens-2_MTL2	1189	325	72.67%	03-Dec-15 A	13-Sep-19								
	Phase 1 - Mount Lukens-2_MTL2 - System Design	1071	207	80.67%	03-Dec-15 A	02-Apr-19								
	Phase 2 - Mount Lukens-2_MTL2 - Site Construction and Modification	175	175	0%	26-Nov-18	26-Jul-19								
	Phase 3 -Mount Lukens-2_MTL2 - Supply LMR System Components	323	111	65.63%	04-Dec-17 A	03-Jul-19								
	Phase 4a - Mount Lukens-2_MTL2 - Site Installation	77	77	0%	30-May-19	13-Sep-19								
	LA-RICS LMR Pine Mountain_PMT	1242	378	69.57%	03-Dec-15 A	27-Nov-19								
	Phase 1 - Pine Mountain_PMT - System Design	1060	196	81.51%	03-Dec-15 A	18-Mar-19								



<div>JACOBS</div> <div>LA-RICS</div>		LMR Site Schedules					Data Date 16-Jun-18 Page 4 of 10		Summary							
Activity ID	Activity Name	Original Duration	Remaining Duration	Duration % Complete	Start	Finish										
							2016	2017	2018	2019	2020	2021	2022	23		
LA-RICS LMR Cerro Negro_CRN		1047	183	82.52%	03-Dec-15 A	27-Feb-19										
Phase 1 - Cerro Negro_CRN - System Design		910	46	94.95%	03-Dec-15 A	20-Aug-18										
Phase 2 - Cerro Negro_CRN - Site Construction and Modification		481	140	70.89%	28-Feb-17 A	09-Jan-19										
Phase 3 - Cerro Negro_CRN - Supply LMR System Components		345	0	100%	16-Dec-16 A	16-Mar-18										
Phase 4a - Cerro Negro_CRN - Site Installation		91	91	0%	24-Oct-18	27-Feb-19										
LA-RICS LMR Del Valle Training_LACFDEL		1099	235	78.62%	03-Dec-15 A	10-May-19										
Phase 1 - Del Valle Training_LACFDEL - System Design		989	125	87.36%	03-Dec-15 A	07-Dec-18										
Phase 2 - Del Valle Training_LACFDEL - Site Construction and Modification		375	136	63.73%	16-Dec-16 A	14-Mar-19										
Phase 3 - Del Valle Training_LACFDEL - Supply LMR System Components		275	116	57.82%	04-Dec-17 A	29-Mar-19										
Phase 4a - Del Valle Training_LACFDEL - Site Installation		62	62	0%	14-Feb-19	10-May-19										
LA-RICS LMR Verdugo Peak County_VPK		974	100	89.73%	03-Dec-15 A	02-Nov-18										
Phase 1 - Verdugo Peak County_VPK - System Design		737	1	99.86%	03-Dec-15 A	18-Jun-18										
Phase 2 - Verdugo Peak County_VPK - Site Construction and Modification		454	76	83.26%	20-Dec-16 A	01-Oct-18										
Phase 3 - Verdugo Peak County_VPK - Supply LMR System Components		345	0	100%	16-Dec-16 A	16-Mar-18										
Phase 4a - Verdugo Peak County_VPK - Site Installation		110	100	9.09%	29-May-18 A	02-Nov-18										
LA-RICS LMR Universal Studios_UNIV		1019	155	84.79%	01-Jun-16 A	18-Jan-19										
Phase 1 - Universal Studios_UNIV - System Design		902	38	95.79%	01-Jun-16 A	08-Aug-18										
Phase 2 - Universal Studios_UNIV - Site Construction and Modification		337	132	60.83%	17-Aug-17 A	20-Dec-18										
Phase 3 - Universal Studios_UNIV - Supply LMR System Components		187	114	39.04%	26-Jul-17 A	27-Nov-18										
Phase 4a - Universal Studios_UNIV - Site Installation		65	65	0%	22-Oct-18	18-Jan-19										
LA-RICS LMR Industry Water Tank_INDWT		627	256	59.17%	12-Dec-16 A	10-Jun-19										
Phase 1 - Industry Water Tank_INDWT - System Design		505	134	73.47%	12-Dec-16 A	20-Dec-18										
Phase 2 - Industry Water Tank_INDWT - Site Construction and Modification		463	226	51.19%	12-Jul-17 A	29-Apr-19										
Phase 3 - Industry Water Tank_INDWT - Supply LMR System Components		216	119	44.91%	04-Dec-17 A	07-Jan-19										
Phase 4a - Industry Water Tank_INDWT - Site Installation		97	97	0%	25-Jan-19	10-Jun-19										
LA-RICS LMR Compton Court Building_CCB		671	31	95.38%	03-Dec-15 A	30-Jul-18										
Phase 1 - Compton Court Building_CCB - System Design		338	0	100%	03-Dec-15 A	18-Apr-17 A										
Phase 2 - Compton Court Building_CCB - Site Construction and Modification		434	10	97.7%	13-Oct-16 A	29-Jun-18										
Phase 3 - Compton Court Building_CCB - Supply LMR System Components		397	0	100%	03-Oct-16 A	16-Mar-18										
Phase 4a - Compton Court Building_CCB - Site Installation		299	31	89.63%	30-May-17 A	30-Jul-18										
LA-RICS LMR Claremont_CLM		732	92	87.43%	03-Dec-15 A	23-Oct-18										
Phase 1 - Claremont_CLM - System Design		586	0	100%	03-Dec-15 A	19-Apr-18 A										
Phase 2 - Claremont_CLM - Site Construction and Modification		215	0	100%	08-Aug-17 A	15-Jun-18										



<div>   </div>		LMR Site Schedules					Data Date 16-Jun-18 Page 6 of 10					Summary		
Activity ID	Activity Name	Original Duration	Remaining Duration	Duration % Complete	Start	Finish	2016	2017	2018	2019	2020	2021	2022	23
	Phase 1 - Topanga Peak_TOP - System Design	1008	144	85.71%	03-Dec-15 A	03-Jan-19								
	Phase 2 - Topanga Peak_TOP - Site Construction and Modification	315	174	44.76%	13-Jul-17 A	07-May-19								
	Phase 3 - Topanga Peak_TOP - Supply LMR System Components	271	116	57.2%	04-Dec-17 A	22-Apr-19								
	Phase 4a - Topanga Peak_TOP - Site Installation	69	69	0%	19-Mar-19	21-Jun-19								
	LA-RICS LMR County FS 72_LACF072	1338	474	64.57%	03-Dec-15 A	09-Apr-20								
	Phase 1 - County FS 72_LACF072 - System Design	1238	374	69.79%	03-Dec-15 A	21-Nov-19								
	Phase 2 - County FS 72_LACF072 - Site Construction and Modification	541	376	30.5%	27-Dec-17 A	03-Feb-20								
	Phase 3 - County FS 72_LACF072 - Supply LMR System Components	514	116	77.43%	04-Dec-17 A	27-Feb-20								
	Phase 4a - County FS 72_LACF072 - Site Installation	68	68	0%	07-Jan-20	09-Apr-20								
	LA-RICS LMR Saddle Peak_SPN	1144	280	75.52%	03-Dec-15 A	12-Jul-19								
	Phase 1 - Saddle Peak_SPN - System Design	1018	154	84.87%	03-Dec-15 A	17-Jan-19								
	Phase 2 - Saddle Peak_SPN - Site Construction and Modification	181	181	0%	12-Jan-18 A	23-May-19								
	Phase 3 - Saddle Peak_SPN - Supply LMR System Components	281	114	59.43%	04-Dec-17 A	06-May-19								
	Phase 4a - Saddle Peak_SPN - Site Installation	74	74	0%	02-Apr-19	12-Jul-19								
	LA-RICS LMR FCCF_FCCF	684	26	96.2%	09-Nov-15 A	23-Jul-18								
	Phase 1- FCCF_FCCF - System Design	318	0	100%	09-Nov-15 A	10-Feb-17								
	Phase 2 - FCCF_FCCF - Site Construction and Modification	349	0	100%	13-Oct-16 A	23-Feb-18								
	Phase 3 - FCCF_FCCF - Supply LMR System Components	382	0	100%	03-Oct-16 A	16-Mar-18								
	Phase 4a - FCCF_FCCF - Site Installation	336	26	92.26%	27-Feb-17 A	23-Jul-18								
	LA-RICS LMR Castro Peak_CPK	944	304	67.8%	03-Dec-15 A	15-Aug-19								
	Phase 1 - Castro Peak_CPK - System Design	821	181	77.95%	03-Dec-15 A	25-Feb-19								
	Phase 2 - Castro Peak_CPK - Site Construction and Modification	509	200	60.71%	23-Jun-17 A	27-Jun-19								
	Phase 3 - Castro Peak_CPK - Supply LMR System Components	328	112	65.85%	04-Dec-17 A	12-Jun-19								
	Phase 4a - Castro Peak_CPK - Site Installation	72	72	0%	08-May-19	15-Aug-19								
	LA-RICS LMR Pomona Court House_POM	1016	152	85.04%	03-Dec-15 A	15-Jan-19								
	Phase 1 - Pomona Court House_POM - System Design	854	10	98.83%	03-Dec-15 A	29-Jun-18								
	Phase 2 - Pomona Court House_POM - Site Construction and Modification	261	75	71.26%	21-Sep-17 A	28-Sep-18								
	Phase 3 - Pomona Court House_POM - Supply LMR System Components	182	112	38.46%	26-Jul-17 A	20-Nov-18								
	Phase 4a - Pomona Court House_POM - Site Installation	152	152	0%	18-Jun-18	15-Jan-19								
	LA-RICS LMR Mount McDill_MMC	953	89	90.66%	03-Dec-15 A	18-Oct-18								
	Phase 1 - Mount McDill_MMC - System Design	849	0	100%	03-Dec-15 A	15-May-18								
	Phase 2 - Mount McDill_MMC - Site Construction and Modification	427	56	86.89%	04-Dec-16 A	10-Sep-18								
	Phase 3 - Mount McDill_MMC - Supply LMR System Components	349	0	100%	01-Dec-16 A	16-Mar-18								
	Phase 4a - Mount McDill_MMC - Site Installation	188	89	52.66%	30-Jan-18 A	18-Oct-18								



<div>JACOBS</div> <div>LA-RICS</div>		LMR Site Schedules					Data Date 16-Jun-18 Page 8 of 10		Summary					
Activity ID	Activity Name	Original Duration	Remaining Duration	Duration % Complete	Start	Finish	2016	2017	2018	2019	2020	2021	2022	23
Phase 1 - Signal Hill_SGH - System Design		674	34	94.96%	03-Dec-15 A	02-Aug-18								
Phase 2 - Signal Hill_SGH - Site Construction and Modification		374	126	66.31%	23-Jun-17 A	10-Dec-18								
Phase 3 - Signal Hill_SGH - Supply LMR System Components		182	112	38.46%	26-Jul-17 A	20-Nov-18								
Phase 4a - Signal Hill_SGH- Site Installation		77	77	0%	17-Oct-18	31-Jan-19								
LA-RICS LMR LA Sheriff Temple Station_LASDTEM		895	31	96.54%	03-Dec-15 A	30-Jul-18								
Phase 1 - LA Sheriff Temple Station_LASDTEM - System Design		616	0	100%	03-Dec-15 A	28-Apr-17 A								
Phase 2 - LA Sheriff Temple Station_LASDTEM - Site Construction and Modific		361	0	100%	13-Oct-16 A	20-Mar-18								
Phase 3 - LA Sheriff Temple Station_LASDTEM - Supply LMR System Compor		392	0	100%	03-Oct-16 A	16-Mar-18								
Phase 4a - LA Sheriff Temple Station_LASDTEM - Site Installation		328	31	90.55%	18-Apr-17 A	30-Jul-18								
LA-RICS LMR Lancaster_LAN		514	153	70.23%	17-Jan-17 A	16-Jan-19								
Phase 1 - Lancaster_LAN - System Design		385	24	93.77%	17-Jan-17 A	19-Jul-18								
Phase 2 - Lancaster_LAN - Site Construction and Modification		59	59	0%	12-Jan-18 A	03-Oct-18								
Phase 3 - Lancaster_LAN - Supply LMR System Components		183	112	38.8%	04-Dec-17 A	21-Nov-18								
Phase 4a - Lancaster_LAN - Site Installation		94	94	0%	07-Sep-18	16-Jan-19								
LA-RICS LMR LDWP243_Sylmar_LDWP243		890	26	97.08%	03-Dec-15 A	23-Jul-18								
Phase 1 - LDWP243 Sylmar_LDWP243 - System Design		500	0	100%	03-Dec-15 A	06-Jan-17								
Phase 2 - LDWP243 Sylmar_LDWP243 - Site Construction and Modification		333	0	100%	13-Oct-16 A	02-Feb-18								
Phase 3 - LDWP243 Sylmar_LDWP243 - Supply LMR System Components		397	0	100%	03-Oct-16 A	16-Mar-18								
Phase 4a - LDWP243 Sylmar_LDWP243 - Site Installation		366	26	92.9%	16-Feb-17 A	23-Jul-18								
LA-RICS LMR Oat Mountain Nike_ONK		780	140	82.05%	03-Dec-15 A	28-Dec-18								
Phase 1 - Oat Mountain Nike_ONK - System Design		491	0	100%	03-Dec-15 A	02-Nov-17								
Phase 2 - Oat Mountain Nike_ONK - Site Construction and Modification		418	78	81.34%	20-Dec-16 A	03-Oct-18								
Phase 3 - Oat Mountain Nike_ONK - Supply LMR System Components		345	0	100%	16-Dec-16 A	16-Mar-18								
Phase 4a - Oat Mountain Nike_ONK - Site Installation		246	140	43.09%	19-Jan-18 A	28-Dec-18								
LA-RICS LMR Puente Hills_PHN		679	26	96.17%	16-Nov-15 A	23-Jul-18								
Phase 1 - Puente Hills_PHN - System Design		271	0	100%	16-Nov-15 A	30-Aug-17								
Phase 2 - Puente Hills_PHN - Site Construction and Modification		265	0	100%	12-Dec-16 A	16-Jan-18								
Phase 3 - Puente Hills_PHN - Supply LMR System Components		392	0	100%	03-Oct-16 A	16-Mar-18								
Phase 4a - Puente Hills_PHN - Site Installation		366	26	92.9%	16-Feb-17 A	23-Jul-18								
LA-RICS LMR Black Jack Peak_BJM		1051	411	60.89%	03-Dec-15 A	13-Jan-20								
Phase 1 - Black Jack Peak_BJM - System Design		940	300	68.09%	03-Dec-15 A	09-Aug-19								
Phase 2 - Black Jack Peak_BJM - Site Construction and Modification		180	180	0%	04-Apr-19	11-Dec-19								
Phase 3 - Black Jack Peak_BJM - Supply LMR System Components		415	112	73.01%	04-Dec-17 A	08-Nov-19								
Phase 4a - Black Jack Peak_BJM - Site Installation		71	71	0%	07-Oct-19	13-Jan-20								

<div>JACOBS</div> <div>LA-RICS</div>		LMR Site Schedules					Data Date 16-Jun-18 Page 9 of 10		Summary						
Activity ID	Activity Name	Original Duration	Remaining Duration	Duration % Complete	Start	Finish		2016	2017	2018	2019	2020	2021	2022	23
LA-RICS LMR Tejon Peak_TPK		943	79	91.62%	03-Dec-15 A	04-Oct-18									
Phase 1 - Tejon Peak_TPK - System Design		711	0	100%	03-Dec-15 A	08-Nov-17									
Phase 2 - Tejon Peak_TPK - Site Construction and Modification		383	51	86.68%	20-Dec-16 A	27-Aug-18									
Phase 3 - Tejon Peak_TPK - Supply LMR System Components		345	0	100%	16-Dec-16 A	16-Mar-18									
Phase 4a - Tejon Peak_TPK - Site Installation		229	79	65.5%	14-Nov-17 A	04-Oct-18									
LA-RICS LMR Dakin Peak_DPK		1153	513	55.51%	03-Dec-15 A	03-Jun-20									
Phase 1 - Dakin Peak_DPK - System Design		1032	392	62.02%	03-Dec-15 A	17-Dec-19									
Phase 2 - Dakin Peak_DPK - Site Construction and Modification		281	281	0%	21-Mar-19	16-Apr-20									
Phase 3 - Dakin Peak_DPK - Supply LMR System Components		510	116	77.25%	04-Dec-17 A	20-Mar-20									
Phase 4a - Dakin Peak_DPK - Site Installation		78	78	0%	17-Feb-20	03-Jun-20									
LA-RICS LMR San Dimas_SDW		794	109	86.27%	16-Nov-15 A	15-Nov-18									
Phase 1 - San Dimas_SDW- System Design		663	10	98.49%	16-Nov-15 A	29-Jun-18									
Phase 2 - San Dimas_SDW - Site Construction and Modification		324	85	73.77%	11-Jul-17 A	12-Oct-18									
Phase 3 - San Dimas_SDW - Supply LMR System Components		314	0	100%	26-Jul-17 A	16-Mar-18									
Phase 4a - San Dimas_SDW - Site Installation		141	109	22.7%	05-Feb-18 A	15-Nov-18									
LA-RICS LMR Palmdale Sheriff Station_PLM		895	31	96.54%	03-Dec-15 A	30-Jul-18									
Phase 1 - Palmdale Sheriff Station_PLM - System Design		698	0	100%	03-Dec-15 A	20-Nov-17									
Phase 2 - Palmdale Sheriff Station_PLM - Site Construction and Modification		138	0	100%	08-Aug-17 A	08-Mar-18									
Phase 3 - Palmdale Sheriff Station_PLM - Supply LMR System Components		397	0	100%	03-Oct-16 A	16-Mar-18									
Phase 4a - Palmdale Sheriff Station_PLM - Site Installation		164	31	81.1%	11-Dec-17 A	30-Jul-18									
LA-RICS LMR Tower Peak_TWR		1177	537	54.38%	03-Dec-15 A	07-Jul-20									
Phase 1 - Tower Peak_TWR - System Design		1032	392	62.02%	03-Dec-15 A	17-Dec-19									
Phase 2 - Tower Peak_TWR- Site Construction and Modification		305	305	0%	19-Mar-19	18-May-20									
Phase 3 - Tower Peak_TWR- Supply LMR System Components		510	116	77.25%	04-Dec-17 A	20-Mar-20									
Phase 4a - Tower Peak_TWR - Site Installation		102	102	0%	17-Feb-20	07-Jul-20									
LA-RICS LMR Green Mountain_GRM		1292	428	66.87%	03-Dec-15 A	05-Feb-20									
Phase 1 - Green Mountain_GRM - System Design		1162	298	74.35%	03-Dec-15 A	07-Aug-19									
Phase 2 - Green Mountain_GRM - Site Construction and Modification		235	235	0%	29-Jan-19	23-Dec-19									
Phase 3 - Green Mountain_GRM - Supply LMR System Components		413	112	72.88%	04-Dec-17 A	06-Nov-19									
Phase 4a - Green Mountain_GRM - Site Installation		90	90	0%	03-Oct-19	05-Feb-20									
LA-RICS LMR Rancho Palos Verdes City Hall_RPV1		1155	291	74.81%	03-Dec-15 A	29-Jul-19									
Phase 1 - Rancho Palos Verdes City Hall_RPV1 - System Design		1027	163	84.13%	03-Dec-15 A	30-Jan-19									
Phase 2 - Rancho Palos Verdes City Hall_RPV1 - Site Construction and Modifi		305	210	31.15%	22-Sep-17 A	10-Jun-19									

Data Date 16-Jun-18
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Summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Duration % Complete	Start	Finish	2016	2017	2018	2019	2020	2021	2022	23
	Phase 3 - Rancho Palos Verdes City Hall_RPV1 - Supply LMR System Compo	289	114	60.55%	04-Dec-17 A	16-May-19								
	Phase 4a - Rancho Palos Verdes City Hall_RPV1 - Site Installation	77	77	0%	12-Apr-19	29-Jul-19								



Monthly Report #58

Reporting Period: 5/22/18 thru 6/13/18

**Los Angeles Regional Interoperable Communications
System (LA-RICS) - Land Mobile Radio System**

Motorola Solutions, Inc.



MOTOROLA SOLUTIONS

AGENDA ITEM C

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1. Executive Summary

The Los Angeles Regional Interoperable Communications System Land Mobile Radio (LA-RICS LMR) program consists of the following five (5) phases; Phase 1 LMR System Design, Phase 2 LMR Site Construction and Site Modification, Phase 3 Supply LMR System Components, Phase 4 LMR System Implementation, and Phase 5 LMR System Maintenance. Phases 1-4 span over a five (5) year period which includes one (1) year of system warranty. Phase 5 provides the Authority with fifteen (15) one year options for Motorola Solutions Inc. (MSI) to provide system monitoring and maintenance services.

The LA-RICS LMR program is currently in Phase 1 LMR System Design. Notices-To-Proceed numbers 1 through 16 have been issued authorizing distinct work for system Design services, the design and implementation of the initial deployment of the LMR system elements termed “Early Equipment”, “Specified Equipment and System on Wheels”, and “Station B Equipment”, “Frequency Licensing”, “UPS System”, and “Portable Radios, Consolettes and Consoles”, “Portable Radio Equipment”, alternate sites “Project Descriptions”, “Frequency Licensing for the Base System”, “Bridge Warrant for Early”, “Retuning of SOW & Station B UHF Frequencies”, “Project descriptions for Nine Potential Replacement Sites” and “LMR System Redesign and Relocation of Core 2”.

On April 25 the Authority executed **Amendment 17** to make necessary changes to Phase 1 for additional project descriptions, to make changes to reflect the Work in the applicable Phases for the change in the number of sites in the LMR system, to exercise the Unilateral Options for all Work pertaining to Phases 2-4.

On April 27, 2016 the Authority issued **NTP17** authorizing specific Work related Phases 2, 3, and 4 for ten (10) LMR sites.

On May 4, 2016 the Authority executed **Amendment 18** to make necessary changes to Phase 1 for additional project descriptions and to make adjustments to Phase 1 services to accommodate additional sites.

On May 5, 2016 the Authority Board of Directors approved **Amendment 19** to remove one (1) site from the system and to reconcile equipment quantities for certain LMR sites. **Amendment 19** was executed with an effective date of May 5, 2016.

On June 2, 2016 the Authority issued **NTP18** authorizing Work to develop Project Descriptions for two LMR sites.

On September 8, 2016 the Authority Board of Directors approved **Amendment 20** to reconcile nine (9) LMR Sites to reflect the updated LMR System Design, inclusion of 3D modeling drawings, and remove certain Site Lease Exhibits from the contract.

On October 6, 2016 the Authority Board of Directors approved **Amendment 21** to reconcile ten (10) LMR sites to reflect the updated LMR System Design, replace one (1) LMR site with a new site, remove five (5) Project Descriptions from the contract, and make administrative cost changes to one (1) LMR site.

On October 11, 2016 the Authority issued **NTP 19** authorizing specified Work related to Phases 2-4 for nine (9) LMR sites.

On November 3, 2016 the Authority Board of Directors approved **Amendment 22** to reconcile three (3) LMR sites to reflect the updated LMR System Design and to make administrative changes to Exhibit F (Administration of Agreement). On December 12, 2016 the Authority issued **NTP 20** authorizing specified Work related to Phases 2-4 for two (2) replacement LMR sites along with Special Operations Testing for DTVRS, ACVRS, LARTCS, and NMDN.

On December 12, 2016 the Authority Board of Directors approved **Amendment 23** to authorize specified Work related to Phases 2-4 for ten (10) LMR sites.

On December 2, 2016 the Authority issued **NTP 20** authorizing Phase 2-4 work at two (2) sites; and specified pre-installation acceptance testing for DTVRS, ACVRS, LARTCS, NMDN, and final core staging and SOT Prep.

On December 19, 2016 the Authority issued **NTP 21** authorizing specified Work related to Phases 2-4 for Six (6) LMR sites; all remaining work in Phase 2-4 at one (1) site; and all work related to ACVRS equipment in Phase 3 for six (6) sites.

On January 12, 2017 the Authority Board of Directors approved **Amendment 24** reconciling the following five (5) LMR System Sites (CLM, LACFDEL, LARICSHQ, WMP, WTR) to align with the updated System Design.

On March 2, 2017 the Authority Board of Directors approved **Amendment 25** reconciling the following six (6) LMR System Sites (AGH, VPK, BMT, CRN, MVS, and ONK) to align with the updated System Design. This Amendment also acknowledges three (3) sites (BHS, DPW38, and RPV1) into the scope of Phases 2, 3, and 4 to align with the updated LMR System Design.

On March 31, 2017 the Authority issued a Supplemental **NTP 21** authorizing specified Work related to Phases 2-4 for Seven (7) LMR sites (AGH, CRN, MVS, ONK, TPK, VPK, and LDWP243).

On April 6, 2017 the Authority Board of Directors approved **Amendment 26** reconciling the following seven (7) LMR System Sites (BUR1, JPK2, LPC, MDI, MML, MTL2, and PRG) to align with the updated System Design. This Amendment also acknowledges one (1) site (LAN) into the scope of Phases 2, 3, and 4 to align with the updated LMR System Design.

On June 1, 2017 the Authority Board of Directors approved **Amendment 27** reconciling the following two (2) LMR System Sites (FRP and PLM) to align with the updated System Design. This Amendment also includes two (2) sites (BKK and UCLA) into the scope of Phases 2, 3, and 4 to align with the updated LMR System Design.

On June 29, 2017 the Authority issued **NTP 22** authorizing specified Work related to work for Task A.1.9.1 (Mitigation Monitoring and Reporting Plan (MMRP)).

On August 3, 2017 the Authority Board of Directors approved **Amendment 28** reconciling one (1) LMR System Site (BMT) to align with the updated System Design.

On September 7, 2017 the Authority Board of Directors approved **Amendment 29** reconciling one (1) LMR System Site (POM) to align with the updated System Design and to make changes necessary to reflect LMR Change Order Modifications.

On September 14, 2017 the Authority issued **NTP 23** authorizing specified Work related to Phases 2-4 for Five (5) LMR sites.

On September 25, 2017 the Authority issued **NTP 24** authorizing specified Work related to Phases 2-4 for Five (5) LMR sites.

On November 9, 2017 the Authority Board of Directors approved **Amendment 30** reconciling seven (7) LMR System Sites (BUR1/DPW38/FRP/JPK1/MIR/MML/RHT) to reflect the updated LMR System Design for these sites. This Amendment also includes one (1) LMR System Site (UNIV) into the scope of Phases 2, 3, and 4 to align WITH THE UPDATED LMR SYSTEMN Design.

On December 20, 2017 the Authority issued **NTP 25** authorizing specified Work related to Phases 2-4 for Eighteen (18) LMR sites – with the exception of ACRVS and NMDN equipment order. This NTP also authorized Motorola to proceed with Work for Task 6 Multiprotocol Label Switching (MPLS) Mobile Backhaul.

On February 28, 2018 the Oversight Committee approved **Amendment 31** approving Change Order Modifications in the amount of \$19,573.00.

On March 6, 2018 the Authority Board of Directors approved **Amendment 32** reconciling three (3) LMR System Sites to align with the updated LMR System Design for a cost decrease in the amount of \$4,131,931; (b) a cost neutral administrative reconciliation in connection with the Narrowband Mobile Data Network (NMDN) Subsystem to align all corresponding per site NMDN costs to a single line item cost, impacting thirty-three (33) LMR System Sites; (c) decrease the Maximum Contract Sum by \$4,131,931 from \$300,051,310 to \$295,919,379 when taking the cost decrease into consideration; and (d) make other certain changes as set forth in this Amendment No. 32.

On May 30, 2018 the Authority Board of Directors approved **Amendment 33** to make changes necessary to reflect (a) certain LMR Change Order Modifications for a cost increase in the amount of \$17,490.

This report covers the period from 5/22/18 thru 6/13/18

During this reporting period associated Phase 1 tasks were performed to include A&E activities, site and network design, frequency planning, site scope reviews, Site Access Agreement drawings, backhaul/microwave path surveys, and Environmental Reviews. A&E activities included site walks, site sketch development, site surveys, and development of the Zoning Drawings, geotechnical plans, and Construction Drawings.

The primary Phase 1 activities for this period include:

LMR System Design

System design activities for this period included frequency identification and planning, backhaul network design, narrowband mobile data network design, fleet mapping, Spectrum Fingerprinting and Noise Floor Monitoring process review, and incorporation of system design parameters into the construction

drawing process. MSI is utilizing the Design of Record dated 9/6/16 to support the site True-Up process as well as information as it is refined and determined weekly. MSI and the Authority continue to refine the backhaul design and have identified areas of concern and their corresponding solutions.

Site Design Activities



Site design activities for this period included continued site evaluation walks, site sketch development and submittals, site survey walks, project description development and submittals for additional sites, Site Access Agreement exhibits, Zoning Drawing development and submittal, and Construction Drawing development and submittal for Authority review. Additional activities included power load studies, evaluation of as-built drawings and tower mapping, tower structural analysis for the applicable sites, submittal of applicable geotechnical drilling plans, and review of electrical one-line drawing designs.



LA-RICS Deliverables - Authority Site Access Agreements

Authority's efforts to develop and execute the applicable Right of Entry and Site Access Agreements for the required sites in the LMR design are ongoing. This activity is primarily being driven by the Authority's Site Access Team in conjunction with LA County CEO Real Estate Division. As of this reporting period 26 (out of 60) Site Access Agreements have been executed.

The Authority continues to work with FEMA to obtain independent site environmental approvals which are required prior to the start of construction at a site.

The following table provides a dashboard snapshot of the projects' health signs.

LMR Project Dashboard			
Category	Rating	Change	Comments
Schedule			Revisions to the baseline schedule for all phases (1-4) are reviewed weekly. A&E drawing progress is slow as measured against the planned Integrated Master Schedule (IMS) activity durations. MSI and the Authority have noted significant slips in individual activity durations as well as overall site schedules, which ultimately impacts the resource loading and the ability to meet 2020.schedule. Although Site Access Agreements (SAAs) are being processed, some sites are becoming problematic. The outstanding jurisdictional approvals from the US Forrest Service and from the California Coastal Commission have the potential to negatively impact the IMS if the planned project review durations are exceeded by the agencies having jurisdiction. Jacobs and MSI are both seeking ways to speed up the process, particularly for the Coastal Commission sites. MSI has brought on new resources specifically assigned this task.
Quality			The construction drawing, review, and approval process continues to be challenging despite MSI's most recent efforts (hiring two new AutoCAD operators, and an "in-house" structural engineer). Corrective actions are a continual discussion topic between The Authority and MSI. The

LMR Project Dashboard			
Category	Rating	Change	Comments
			Authority has been assured by MSI and its chief architectural firm, Arcadis, that production durations will decrease as Arcadis becomes more comfortable/ better acclimated to working with MSI and at the pace of the LA-RICS IMS. It is noteworthy to mention that in this reporting period MSI's building partner PNS has on-boarded additional field supervision that should result in higher quality work and more productivity in the field.
Risk			Risk items have been identified regarding: Spectrum, Site Access Agreements, and Site Accessibility Conditions. FEMA independent site environmental approvals required, USFS Approvals, California Coastal Commission Approvals.
Budget			Current budget reflects contract pricing and include the sites that have gone through the true-up review. Revised budgets for each site will be determined at the completion of each true-up (ten remaining).

2. Project Status

The following sections identify task activities during the reporting period and the planned activities for the next reporting period.

2.1 Tasks In Progress or Completed

The following depict the task activity that occurred during the current reporting period.

Activity Name	Activity Status
LA-RICS Deliverables	
Lease Negotiations & Site Access Use Agreements	In Process
FEMA Environmental Site Approvals & Construction Waivers	In Process
Notice To Proceed for applicable sites	In Process
LMR System Design	
Design baseline site parameters & Design development	In Process
Contract True-up of site designs and equipment for each site	In Process
Spectrum Fingerprinting and Noise Floor Monitoring Initial Test Update (In Process
Provided updated USFS tower elevations	Complete
Site Design, Zoning and Permitting	
Site Walks and Site Sketch Development & Approvals	In Process
Site Surveys	In Process
Develop Zoning Drawings & Approvals	In Process
Geotechnical Boring	In Process
Develop Construction Drawings & Approvals	In Process
Submit Permits Drawings and Approvals	In Process

Activity Name	Activity Status
Pre- Construction	
Pre- Construction Plans in review	In Process
Pre-Proposal meeting with USFS representatives	Complete
Construction	
Sites (APC, BMT, CCB, CCT, CLM, FCCF, HPK, LASDTEM, LDWP243, MLM, MMC, MVS, ONK, PHN, PLM, SDW, TPK, VPK)	In Process
Staging	
Microwave/Backhaul – Manassas, VA	Complete
FNE Installation	
A&L, Microwave Dishes, Equipment Racks,	In Process

2.2 Tasks Planned for Next Period

The following depict the task activity that is planned for the next reporting period.

Activity Name	Planned Status
LA-RICS Deliverables	
Lease Negotiations & Site Access Use Agreement	On Going
Access to Core Sites	On Going
FEMA Environmental Site Approvals & Construction Waivers	In Process
Review and Approve Zoning and Construction Drawings	In Process
Notice To Proceed for applicable sites	In Process
Environmental Review & Documentation (Authority)	
Additional Sites for Consideration Environmental Reviews	In Process
LMR System Design	
Design Baseline site parameters & redesign development	In Process
Contract True-up of site designs and equipment for each site	In Process
Site Design	
Site Walks and Site Sketch Development & Approvals	In Process
Site Surveys	In Process
Develop Zoning Drawings & Approvals	In Process
Submittal of Zoning Drawings	In Process
Develop Construction Drawings and Approvals	In Process
Submit Permits Drawings and Approvals	In Process
Pre-Construction	
Geotech drilling	In Process
Pre- Construction Packages & Site Monitoring (where applicable)	In Process
Site Construction	
Outreach to Neighborhoods for Applicable Sites	On Going
Pre- Construction Packages Review & Approval	On Going

Activity Name	Planned Status
Site Construction & Site Monitoring (where applicable)	On Going
Site Construction Inspection Approvals	On Going
Additional Sites (BHS, CRN, DPW38, LAN, LARICSHQ, MIR, POM, RHT, SGH, UCLA, UNIV)	On Going
FNE Installation	
A&L, Microwave Dishes, Equipment Racks,	In Process

2.3 Authority Look-Ahead Tasks (120-Day)

For the Authority planning purposes the following table provides a one hundred twenty (120) Day look-ahead of the Authority-specific activities to conduct coordination, inspections, approvals, consents, and or provide decisions necessary from the Authority to facilitate Contractor's progress.

Activity Name	Planned Status
LA-RICS Deliverables	
Lease Negotiations & Site Access Use Agreement	On Going
Access to Core Sites	On Going
FEMA Environmental Site Approvals & Construction Waivers	In Process
Review and Approve Zoning and Construction Drawings	In Process
Notice To Proceed for applicable sites	In Process
Environmental Review & Documentation (Authority)	
Additional Sites for Consideration Environmental Reviews	In Process
LMR System Design	
Design Baseline site parameters & redesign development	In Process
Contract True-up of site designs and equipment for each site	In Process
Site Design	
Site Walks and Site Sketch Development & Approvals	In Process
Zoning Drawings & Approvals	In Process
Construction Drawings and Approvals	In Process
Pre-Construction	
Geotech drilling	In Process
Pre- Construction Packages & Site Monitoring (where applicable)	In Process
Site Construction	
Outreach to Neighborhoods for Applicable Sites	On Going
Pre- Construction Packages Review & Approval	On Going
Site Construction & Site Monitoring (where applicable)	On Going
Site Construction Inspection Approvals	On Going
Additional Sites (BHS, CRN, DPW38, LAN, LARICSHQ, MIR, POM, RHT, SGH, UCLA, UNIV)	On Going
FNE Installation	
A&L, Microwave Dishes, Equipment Racks,	In Process

3. Project Risk Register

Title	Assigned	Impact	Risk Description	Status
Site Parameters	Authority	High	Site parameters (e.g. tower heights, RF equipment configurations) are different from the baseline agreement and may impact System performance.	Active
Environmental Process	Authority	Med	The individual determination of environmental impacts or mitigation may impact the schedule for site work (e.g., bird nesting season). Individual environmental releases from FEMA are required to start work at sites.	Active
Delayed Drawings and Permit Release	Motorola & Authority	High	Delay in permit submission and release has impacted the construction schedule and ability to meet grant spending guidelines. The Authority is seeing progress and schedule improvement as MSI refines its process with the new A&E firms (Arcadis and B&J) but permit submission is still not maintaining the necessary pace.	Active
Site Access Agreements	Authority	High	Lease holders approvals are needed in order to implement LA-RICS improvements.	Active
Project Schedule	Authority & Motorola	High	Overall project schedule and individual site permit submissions/work starts impacted by implementation of LMR System redesign enhancements, slow A&E construction development progress, and individual site true-ups.	Active

4. Areas of Concern

This section describes any events and or circumstances of which the Contractor is aware that has delayed or may delay project activities and what corrective or remedial actions was taken or will be taken to resolve the issue. Outstanding Issues Log (the "Oil Log") entries are also tabulated and monitored in this section. "Oil Log" items include, for example, sequencing, infrastructure, site access, coordination issues, congestion of workers and equipment, time requirements for design, procurement, and installation.

ID	Event / Circumstance	Remedial Action Taken or Required
	N/A	

5. Disputes and Claims

This section describes any disputes, potential claims, and claims made during the reporting period.

Dispute / Claim / Potential Claim	Status / Actions	Resolution Date
None at this time		

6. Financial Status

The following represents the invoice payments that were completed during the reporting period and the remaining amount to be invoiced and paid.

Invoice Payment Category	Invoice Payment Totals (\$)
Contract Sum Full Payable Amount (Amendment 30)	165,383,914
Cumulative Invoice Payments from Last Report	70,718,853
Total Invoice Payments This Period	3,960
Remaining Amount to be Paid	94,661,101

7. LA-RICS Master Schedule

The master schedule underwent major reconstruction in May and schedule reports were not generated the last two weeks in May to allow MSI more work time on the schedule itself. The current P6 schedule is being reviewed by the Jacobs PM Team and the MSI Team jointly. The result will be a recovered schedule to the 10/21/17 dates with the inclusion of 4b, or possibly a re-baselined IMS, which includes a 4b scope. Either outcome will be ready to present to The Authority in the final week of July 2018. The Authority's 20/20/20 plan will remain the focus for LMR Program completion and the IMS will reflect the timeline. The July reporting period will most likely capture the mutually agreed to changes between The Authority and MSI as pertain to the IMS, particularly Ph.4b.

(See attached LMR Executive Project Summary Snapshots)



LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100
Monterey Park, California 91754
Telephone: (323) 881-8291
<http://www.la-rics.org>

SCOTT EDSON
EXECUTIVE DIRECTOR

July 31, 2018

To: LA-RICS Authority Board of Directors

From: Scott Edson
Executive Director

OUTREACH UPDATE

The purpose of this discussion item is to update your Board on the status of outreach activities pertaining to the LA-RICS Public Safety Broadband Network (PSBN) and Land Mobile Radio (LMR) project. The below meetings occurred since our last report to you:

Municipality	Meeting Date
<i>Meeting with representatives from AT&T</i>	June 25, 2018
<i>Meeting with representative from Gardena</i>	June 26, 2018
<i>Meeting with representatives from Claremont</i>	July 3, 2018
<i>Attended Department of Homeland Security Conference</i>	July 9 – 14, 2018
<i>Meeting with representatives from AT&T</i>	July 16, 2018
<i>Meeting with ISD Director Scott Minnix</i>	July 18, 2018
<i>Meeting with representatives from Arcadia</i>	July 18, 2018
<i>Meeting with CEO, Sheriff and LA County Fire Chief</i>	July 20, 2018
<i>Meeting with representatives from AT&T</i>	July 23, 2018
<i>Meeting with representatives from Compton</i>	July 23, 2018
<i>Meeting with representatives from Port of Los Angeles</i>	July 26, 2018

Various meetings continued in the months of June and July with AT&T to discuss ongoing Technical and Program Management concerns, Transfer Transition logistics, Checkpoint Calls, Round 2 Specifications, and Assignment & Assumption Agreements.

Executive Director Edson and Program Manager Delfino met with Gardena Police Chief Ed Medrano to provide an update on LA-RICS and the AT&T Asset Transfer Agreement for the PSBN site in the City of Gardena.

AGENDA ITEM F

Executive Director Edson and Program Manager Delfino also met with Claremont Police Chief Shirley Vander Veen and City Manager Tara Schultz to provide an update on LA-RICS and the AT&T Asset Transfer Agreement for the PSBN site in the City of Claremont.

Members of the LA-RICS Management Team attended the Department of Homeland Security Conference in New York. LA-RICS made a presentation to attendees of the conference on Multiagency Cybersecurity Best Practices and Approaches.

Executive Director Edson, Administrative Chief Orellana-Curtiss and Program Director Odenthal met with Internal Services Department (ISD) Director Scott Minnix and key managers to provide an update on LA-RICS.

Executive Director Edson and Program Manager Delfino met with Arcadia Police Chief Bob Guthrie and City Manager Dominique Lazzaretto to provide an update on LA-RICS and the AT&T Asset Transfer Agreement for the PSBN site in the City of Arcadia.

Executive Director Edson, Administrative Chief Orellana-Curtiss and Program Director Odenthal met with CEO Hamai, Sheriff Jim McDonnell and Los Angeles County Fire Chief Daryl Osby to discuss LA-RICS Fiscal-Year 2018-19 Funding.

Executive Director Edson and Program Director Odenthal met Compton City Manager Rhambo and Fire Chief Humphries to provide an update on LA-RICS and the AT&T Asset Transfer Agreement for the PSBN sites in the City of Compton.

Executive Director Edson and Program Manager Delfino met with Port of Los Angeles Police Chief Gazi to provide an update on LA-RICS and the AT&T Asset Transfer Agreement for the PSBN site at the Port of Los Angeles.

Lastly, the LA-RICS Communication Team is currently working on the release of Volume 3, Issue 11 of the LA-RICS Newsletter for the end of July 2018.

WST:pl



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SCOTT EDSON
EXECUTIVE DIRECTOR

July 31, 2018

To: LA-RICS Authority Board of Directors

From: Scott Edson
Executive Director

PSBN ONBOARDING UPDATE

The purpose of this discussion item is to update your Board on the status of onboarding users, operating the system, and other onboarding related activities pertaining to the Public Safety Broadband Network (PSBN) project. The below activities have occurred:

STATUS OF PSBN AGENCY ONBOARDING		
Agency	Onboarding Status	Number of Units Installed/Demo Kit/SIM cards Received
LASD	Installations in progress.	1208
LACoFD	Installations in progress.	672
Inglewood PD	FirstNet connection is complete. Joint testing of the APN is being scheduled.	23
Claremont PD	FirstNet connection is complete. Joint testing of the APN is being scheduled.	2
Bell PD	Two routers in use. Working directly with FirstNet/AT&T	2
Covina PD	Two routers in use. Transition options from the LA-RICS APN are under review.	2
UCLA Health	Mobile Stroke Unit in operation using the LA-RICS connection. Transition options from the LA-RICS APN under review.	1
Health Services / EMS	Request for antennas for 3 routers approved pending procurement of installation services and antennas. Transition options from the LA-RICS APN under review.	3
El Segundo Fire & PD	Two routers in use via LA-RICS connection. Routers in use over the LA-RICS APN and transition options from the LA-RICS APN under review..	2
Signal Hill PD	They will work directly with AT&T.	0

The transition of the PSBN sites to AT&T continue. We are coordinating joint testing with the above mentioned agencies to minimize any service impacts due to the transition. Device vendor evaluations are underway to help determine the router transition.

AGENDA ITEM G



LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

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SCOTT EDSON
EXECUTIVE DIRECTOR

July 31, 2018

Board of Directors
Los Angeles Regional Interoperable Communications System ("LA-RICS") Authority
(the "Authority")

Dear Directors:

APPROVE THE FISCAL-YEAR 2018-19 PROPOSED LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY OPERATING BUDGET

SUBJECT

The Fiscal-Year 2018-19 Proposed Los Angeles Regional Interoperable Communications System Authority Operating Budget.

RECOMMENDED ACTION

It is recommended that the Los Angeles Regional Interoperable Communications System Authority (Authority) approve the enclosed Fiscal-Year 2018-19 Proposed Operating Budget of \$80,618,000 to be utilized for the continued operation of the Authority.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The enclosed Proposed Operating Budget will allow the Authority to expend funding on, among other things, the County of Los Angeles (County) project team, as well as executed consultant contracts, travel and training, services and supplies, equipment, Lease, Liability and Commercial Property Insurance.

FISCAL IMPACT/FINANCING

Federal grants will fund \$75,118,000 of grant-funded expenditures. In addition to Federal Grant revenue, \$3,000,000 will be contributed by members in Fiscal-Year 2018-19. Member contributions are made up of Member Funded Joint Power Authority (JPA) Operations in the amount of \$1,300,000, Long Term Evolution (LTE) Administrative Costs in the amount of \$850,000 and Land Mobile Radio (LMR) Administrative Costs in the amount of \$850,000 in accordance with the Adopted Funding Plan. In addition, this years' proposed budget includes \$2,500,000 in services

AGENDA ITEM H

supporting LTE router device swap activities, identified as AT&T Business Agreement Services in your budget summary.

FACTS AND PROVISIONS/LEGAL REQUIREMENT

The Finance Committee met on July 26, 2018, and voted unanimously to recommend adoption of the proposed budget. The County's Auditor-Controller reviewed the recommended action.

Respectfully submitted,



SCOTT EDSON
EXECUTIVE DIRECTOR

SOC

Enclosure

c: Counsel to the Authority



FISCAL-YEAR 2018-19 RECOMMENDED BUDGET EXECUTIVE SUMMARY

PROJECT OVERVIEW

The Los Angeles Regional Interoperable Communication System (LA-RICS) is a modern collaborative effort of law enforcement, fire service, and health service professionals with the goal to provide a single, unified voice and data communication platform for all regional public safety agencies. When completed, LA-RICS will cover over 4,000 miles of diverse terrain and serve as the hub for over 34,000 first responders working across 85 municipalities. LA-RICS is deploying a Land Mobile Radio (LMR) system utilizing both digital trunked and analog conventional subsystems as well as deploying state and federal interoperability channels. The System is scheduled for system acceptance in 2021. LA-RICS will allow interagency coordination and response to routine, emergency, and catastrophic events.

A Joint Powers Authority ("Authority") was established in January 2009, to engage in regional and cooperative planning and coordination of governmental services. The Authority Board includes ten (10) Directors who represent a cross-section of first responder stakeholders who all share in the decision-making process, and has responsibility for setting policy and providing oversight on behalf of the Authority's Members.

The following details the proposed Fiscal-Year 2018-19 LA-RICS Operating Budget.

LA-RICS RECOMMENDED OPERATING BUDGET FISCAL-YEAR 2018- 19 SOURCES

Grant Funded Expenditures

- **LMR:** Expenditures reimbursable under the Urban Area Securities Initiative (UASI).
- **LTE:** Expenditures reimbursable under Broadband Technologies Opportunity Program (BTOP).

Member Funded Joint Powers Authority Operations, LTE Administrative Cost, and LMR Administrative Cost

Member Funded Authority Operations, LTE Administrative Cost, and LMR Administrative Cost will be paid for out of the LA-RICS AT&T Business Agreement Funds in accordance with the LA-RICS Adopted Funding Plan.

AT&T Business Agreement Services

Services relating to router replacement services in accordance with the executed Business Agreement between LA-RICS and AT&T.

LA-RICS RECOMMENDED OPERATING BUDGET FISCAL-YEAR 2018- 19 USES

LA-RICS Project Team

This section contains costs associated with salaries and employee benefits of project staff from various County of Los Angeles (County) departments, assigned to the LA-RICS project through a Master Agreement and Memorandum of Understanding between the Authority and the County Chief Executive Officer (CEO). Project staff provide support relating to daily operations of the project, including Operations, Technical, and Administrative Support. Costs are projected and will not be incurred unless funds are secured for the same.

Travel and Training

This section contains costs associated with travel and training of project staff and executive management to support the project goals and mission. Projected travel includes public education, outreach meetings, airfare charges, transportation charges, per diem, and related conference fee/meeting registration charges.

Admin and Other Contractors

This section contains costs associated with grant and member funded professional services agreements and contracts between the Authority and consultants for various services, including: LA-RICS Executive Director, County of Los Angeles Department of Public Works for Building and Safety and other construction/permit-related support, CEO Real Estate Division for site access negotiations and execution, and the Department of Regional Planning for zoning and construction support, as well as others as needed.

Miscellaneous

This section contains cost associated with miscellaneous fees, including utilities, LMR Notices of Exemption (NOE) as well as escort and permit fees.

Capital Assets & Furniture

This section contains costs associated with fixed asset purchases made by the Authority to support daily operations.

Other Charges

This section contains costs associated with LA-RICS Authority Insurance, Commercial Property Insurance and FCC Licensing.

Lease, Tenant Improvements & Other Services – Suite 100 and 200

This section contains cost associated with Lease of LA-RICS office at 2525 Corporate Place, Suite 100 and Suite 200, Monterey Park, California 91754.

Contractors/Consultants Services

This section contains costs associated with projected contract expenditures for project management, broadband engineering, environmental studies, outreach, and deployment of the system (LMR and LTE).

LMR & LTE Administrative Costs

This section includes certain costs associated with the management and administration of the LTE and LMR system and their implementation in accordance with the Adopted Funding Plan.

CONCLUSION

Total Grant Funded Expenditures – \$75,118,000 projected in Fiscal-Year 2018-19.

Member Funded JPA Operations – \$1,300,000 projected in Fiscal-Year 2018-19.

Member Funded Authority Operations includes projected costs associated with activities supporting the Authority that cannot be funded by BTOP and UASI Grants as they are considered management and administration, support operations and maintenance operations and/or are unallowable under the grant guidance/regulations.

This includes:

- Certain travel and training supporting the project goals;
- Supplies required for daily operations;
- Certain Admin and Other Contractors (Executive Director);
- Miscellaneous fees including utilities fees for deployed sites, NOE and Escort and Permit Fees, etc.;
- Liability Insurance for LA-RICS JPA and Commercial Property Insurance; and Fixed asset, furniture purchase, and lease of LA-RICS offices.

LTE Administrative Cost – \$850,000 projected in Fiscal-Year 2018-19.

LTE Administrative Costs includes costs associated with certain Project Team members as well as other expenditures (S&S, Travel, Miscellaneous and Lease for Suite 100 and 200) required to deploy, implement and operate the PSBN Round 2 Project Implementation Plan including contract and grant management as well as other tasks not funded by grants.

LMR Administrative Cost – \$850,000 projected in Fiscal-Year 2018-19.

LMR Administrative Costs includes costs associated with certain Project Team members as well as other expenditures (S&S, Travel, Miscellaneous and Lease for Suite 100 and 200) required to deploy, implement and operate the LMR system including contract and grant management as well as other tasks not funded by grants.

AT&T Business Agreement Services – \$2,500,000 projected in Fiscal-Year 2018-2019.

AT&T Business Agreement Services costs include costs relating to router replacement services in accordance with the executed Business Agreement between LA-RICS and AT&T.

Los Angeles Regional Interoperable Communications System (LARICS)
Proposed Operating Budget
Fiscal Year 2018-19

	FY 2016-17	FY 2017-18	FY 2017-18	FY 2018-19
FINANCING USES	ACTUALS	ADOPTED BUDGET	ESTIMATED	PROPOSED
<u>Grant Funded Expenditures</u>				
Project Team	3,427,002	5,069,000	2,675,724	6,008,000
BTOP (1)	1,743,475	2,053,000	376,379	3,947,000
UASI Grant	1,683,527	3,016,000	2,299,345	2,061,000
Travel & Training	98,289	90,000	21,575	90,000
BTOP	95,077	50,000	11,288	20,000
UASI Grant	3,212	40,000	10,287	70,000
Admin and Other Contractors	52,707	250,000	124,021	300,000
BTOP (1)	33,060	150,000	15,000	220,000
UASI Grant	19,647	100,000	109,021	80,000
Miscellaneous * (3)	90,835	390,000	93,550	630,000
BTOP	0	25,000	0	0
UASI Grant	90,835	365,000	93,550	630,000
Other Charges* (4)	0	484,000	119,424	384,000
BTOP	0	0	0	0
UASI Grant	0	484,000	119,424	384,000
Contractors/Consultants Services	31,013,438	49,409,000	18,186,410	67,706,000
BTOP (1)	12,099,882	11,005,000	2,808,554	14,037,000
UASI	18,913,556	38,404,000	15,377,856	53,669,000
Total Grant Funded Expenditures	34,682,271	55,692,000	21,220,704	75,118,000
<u>Member Funded JPA Operations (2)</u>				
Project Team	239,920	300,000	297,395	276,000
Travel & Training	46,326	50,000	41,739	50,000
Services & Supplies	80,545	59,000	59,000	60,000
Admin and Other Contractors	194,173	336,000	218,968	119,000
Miscellaneous *(3)	78,948	110,000	80,484	135,000
Capital Assets & Furniture	0	40,000	0	20,000
Other Charges *(4)	29,178	60,000	46,296	60,000
Lease & Other Services - Suite 100 & 200	118,000	120,000	120,000	120,000
Contractors/Consultants Services	0	0	0	460,000
Total Member Funded JPA Operations	787,090	1,075,000	863,882	1,300,000
LMR Administrative Cost (2) (5)	0	806,000	715,540	850,000
LTE Administrative Cost (2) (5)	342,895	806,000	797,095	850,000
LTE Operation & Maintenance (2)	1,282,082	5,902,000	5,894,664	0
AT&T Business Agreement Services (BAS)	0	0	0	2,500,000
Total LTE & LMR Member Funded and AT&T BAS	1,624,977	7,514,000	7,407,299	4,200,000
TOTAL FINANCING USES	37,094,338	64,281,000	29,491,885	80,618,000
<u>FINANCING SOURCES</u>				
Federal Grant Revenue		55,692,000		75,118,000
Member Contribution		8,589,000		3,000,000
AT&T Business Agreement Services		0		2,500,000
Total Available Financing		64,281,000		80,618,000

Note 1: BTOP Award in FY 18-19 includes the balance of funds from PSBN Round 1 activities, as well as portion of PSBN Round 2 budget

Note 2: Member Funded JPA Operations, LTE Administrative Cost, and LMR Administrative Cost will be paid for out of the LA-RICS AT&T Business Agreement Funds

Note 3: Fees including utilities, Notices of Exception, Escort and permit fees, etc.

Note 4: Liability Insurance for LA-RICS JPA, Commercial Property Insurance and FCC Licensing.

Note 5: LTE Administrative Cost and LMR Administrative Cost include certain costs associated with the management & implementation of the LTE & LMR Systems in accordance with the Adopted Funding Plan.

AGENDA ITEM H - ENCLOSURE

**LA-RICS
FY 2018-2019**

PROJECT TEAM	BTOP	UASI/SHSGP Funding	Member Funded JPA Operations	LTE Admin Cost	LMR Admin Cost	Yearly Costs (Salary & Employee Benefits)
<u>DISTRICT ATTORNEY (DA)</u>						
Administrative Deputy II *	180,900	0	19,100	20,000	36,381	256,381
Fiscal Officer II *	153,178	0	10,000	20,000	40,000	223,178
DA Total	334,078	0	29,100	40,000	76,381	\$ 479,558
<u>TREASURER & TAX COLLECTOR (TTC)</u>						
Administrative Services Manager I *	84,830	40,000	10,000	0	22,000	156,830
TTC Total	84,830	40,000	10,000	0	22,000	\$ 156,830
<u>PUBLIC WORKS (PW)</u>						
Senior Management Secretary III *	80,000	10,000	20,000	0	25,958	135,958
PW Total	80,000	10,000	20,000	0	25,958	\$ 135,958
<u>SHERIFF (SH)</u>						
Operations Assistant III *	46,461	42,297	20,000	5,000	8,000	121,758
SH Total	46,461	42,297	20,000	5,000	8,000	\$ 121,758
<u>PROBATION (PB)</u>						
Administrative Services Manager I	75,960	50,000	10,000	0	22,000	157,960
Executive Assistant	63,143	120,000	10,000	0	15,071	208,214
PB Total	139,103	170,000	20,000	0	37,071	\$ 366,174
<u>ISD</u>						
Administrative Services Manager III *	132,015	40,000	10,000	0	30,000	212,015
ISD Total	132,015	40,000	10,000	0	30,000	\$ 212,015
<u>MENTAL HEALTH (MH)</u>						
Administrative Services Manager I	47,321	50,000	10,000	0	20,000	127,321
MH Total	47,321	50,000	10,000	0	20,000	\$ 127,321
<u>REGISTRAR RECORDER COUNTY CLERK (RRCC)</u>						
Accounting Officer II *	100,000	0	0	11,524	30,000	141,524
RRCC Total	100,000	0	0	11,524	30,000	\$ 141,524
<u>UNFILLED POSITIONS</u>						
Staff Assistant II	81,077	22,826	7,174	0	0	111,077
Senior Secretary III (1)	69,444	40,000	0	0	0	109,444
Sr. Telecom Systems Engineer (2)	0	0	0	0	0	372,024
Communication Tower & Line Supervisor (2)	0	0	0	0	0	298,336
Sr. Electronics Communications Technician (3)	0	0	0	0	0	437,028
Unfilled total	150,521	62,826	7,174	0	0	\$ 1,327,910
<u>AUDITOR CONTROLLER (A/C)</u>						
S&EB						
Principal Accountant	0	0	10,000	7,575	0	17,575
Supervising Accountant	0	0	10,000	18,791	0	28,791
Senior Accountant	0	0	22,584	39,316	20,000	81,900
S&S						
Travel Administrative Cost	0	0	0	1,000	2,000	3,000
Single Audit	0	0	0	15,000	50,000	65,000
Billing Services	115,000	0	10,000	0	0	125,000
A/C Total	115,000	0	52,584	81,682	72,000	\$ 321,265
<u>COUNTY COUNSEL</u>						
Principal/Senior County Counsel (4)	177,363	182,987	12,637	0	10,000	382,987
Environmental Legal Services	258,000	80,000	0	0	0	338,000
County Counsel Total	435,363	262,987	12,637	0	10,000	\$ 720,987

AGENDA ITEM H - ENCLOSURE

**LA-RICS
FY 2018-2019**

PROJECT TEAM	BTOP	UASI/SHSGP Funding	Member Funded JPA Operations	LTE Admin Cost	LMR Admin Cost	Yearly Costs (Salary & Employee Benefits)
<u>INTERNAL SERVICES DEPARTMENT (ISD)</u>						
Information Technology Specialist I	162,219	40,000	10,000	0	20,000	232,219
Sr. Telecom Systems Engineer (1)	161,012	15,000	0	0	10,000	186,012
Supervising Telecom System Engineer	74,710	100,578	10,000	10,000	10,000	205,288
Communication Tower & Line Supervisor (2)	215,336	60,000	0	10,000	13,000	298,336
Sr. Electronics Communications Technician (2)	81,352	190,000	0	10,000	10,000	291,352
ISD Total	694,629	405,578	20,000	30,000	63,000	\$ 1,213,207

<u>LOS ANGELES COUNTY FIRE (FR)</u>						
Battalion Chief (1)	100,000	103,000	10,000	10,000	20,000	243,000
Fire Captain (2)	280,000	134,000	10,000	0	10,000	434,000
Telecom System Consulting Engineer (1)	90,000	67,000	10,000	0	10,000	177,000
Fire Fighter Specialist (1)	111,501	62,500	5,000	0	5,000	184,000
FR Total	581,501	366,500	35,000	10,000	45,000	\$ 1,038,000

<u>LOS ANGELES COUNTY SHERIFF (LASD)</u>						
S&EB						
Lieutenant (1)	180,000	113,596	10,000	10,000	20,000	313,596
Sergeant (1)	101,587	118,243	10,000	0	34,301	264,131
Deputy (5)	620,000	272,392	10,000	10,000	20,000	932,392
Operation Assistant II	35,000	56,314	0	0	15,000	106,314
S&EB Total						\$ 1,616,432
S&S						
Human Resources & Procurement Services	10,000	10,000	0	0	0	20,000
Station B & Station On Wheel (SOW) MOU	60,000	40,000	0	0	0	100,000
LASD Total	1,006,587	610,545	30,000	20,000	89,301	\$ 1,736,432
Total	3,947,409	2,060,733	276,495	198,206	528,711	8,098,941

Total Budgeted Project Team for FY 18-19 **\$ 8,098,941**

* These Positions are Underfills

AGENDA ITEM H - ENCLOSURE

**LA-RICS
FY 2018-2019**

ADMIN AND OTHER CONTRACTORS	Maximum Contract Sum	Funding Source
Executive Director	219,000	50% BTOP & 50% Member Funded JPA
MISC County Contracts (DPW, CEO, CEO RED, RP, & ISD)	200,000	60% BTOP & 40% UASI/SHSGP
Total Admin and Other Contractors	\$ 419,000	

CONTRACTORS/CONSULTANTS	Maximum Contract Sum	Funding Source
Project Construction Management* (1) (2)	1,529,000	BTOP
	503,000	UASI 16
	4,739,000	UASI 17
	1,625,000	UASI 18
Broadband Engineering	545,000	BTOP
	245,000	LTE Admin
	245,000	Member Funded
	500,000	AT&T Business Agreement Services
Telecommunications & Devices Contractors	11,963,000	BTOP
	4,168,000	UASI 16
	28,423,000	UASI 17
	14,211,000	UASI 18
Total Contractors/Consultants Services	\$ 68,696,000	

* (1) Amounts based on Jacob's Contract, Estimates & Projected Schedule

* (2) Amounts included the Grant Analyst Position which was filled through Jacobs

MEMBER FUNDED JPA OPERATIONS		Funding Source
Project Team & Contractors/Consultants Services	276,000	Member Funded
Contractors/Consultants Services	460,000	Member Funded
Services, Supplies, Travel, lease, other charges & Misc	564,000	Member Funded
Total Member Funded JPA Operations	\$ 1,300,000	

LMR ADMINISTRATIVE COST (MEMBER FUNDED)		Funding Source
Project Team & Professional Consultants * (3)	614,000	Member Funded
Services, Supplies, Travel, lease & Misc	236,000	Member Funded
Total LMR Administrative Cost	\$ 850,000	

* (3) Amounts included the Grant Analyst Position which was filled through Jacobs

LTE ADMINISTRATIVE COST (MEMBER FUNDED)		Funding Source
Project Team & Professional Consultants	283,000	Member Funded
Services, Supplies, Travel, lease & Misc	322,000	Member Funded
Total LTE Administrative Cost	\$ 605,000	

AT&T Business Agreement Services		Funding Source
Project Team, Professional Consultants & Misc.	2,000,000	AT&T Business Agreement Services
Total AT&T Business Agreement Services	\$ 2,000,000	

AGENDA ITEM H - ENCLOSURE



LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100
Monterey Park, California 91754
Telephone: (323) 881-8291
<http://www.la-rics.org>

SCOTT EDSON
EXECUTIVE DIRECTOR

July 31, 2018

LA-RICS Board of Directors
Los Angeles Regional Interoperable Communications System Authority (the "Authority")

Dear Directors:

AMENDMENT NO. 14 FOR PROFESSIONAL BROADBAND ENGINEERING CONSULTING SERVICES

SUBJECT

Board approval is requested to authorize the Executive Director to execute Amendment No. 14 to the Professional Broadband Engineering Consulting Services Agreement (Agreement) with Televate, LLC (Televate) to allow Televate to assist with ongoing transition of the Public Safety Broadband Network (PSBN) to AT&T including assisting local agencies' successful Access Point Network (APN) connection to the National Public Safety Broadband Network (NPSBN), assisting with local control and governance of the NPSBN including service level agreements, managing the deployment and testing of vehicular router replacements and installs and other associated work resulting in an increase to the Maximum Contract Sum in the amount of \$1,722,525 through the period of December 2020.

RECOMMENDED ACTION

It is recommended that your Board:

1. Approve Amendment No. 14, substantially similar in form to the Enclosure, which contemplates allowing Televate to assist the Authority with ongoing transition of the PSBN to AT&T including assisting local agencies' successful APN connection to the NPSBN, assisting with local control and governance of the NPSBN including service level agreements, managing the deployment and testing of vehicular router replacements and installs and other associated work, for a cost increase in the amount of \$1,722,525.
2. Approve an increase to the Maximum Contract Sum in the amount of \$1,722,525 from \$12,516,500 to \$14,239,025 to cover the cost of work contemplated in Amendment No. 14.
3. Delegate authority to the Executive Director to execute Amendment No. 14, in substantially similar form to the enclosed Amendment.

AGENDA ITEM I

BACKGROUND

On December 14, 2017, your Board approved a Business Agreement with AT&T to accept \$12 million, up to 3,300 replacement routers, SIMS, and devices of the Authority's choosing, and \$2.5 million in services to pay for replacement services and installation costs.

On June 25, 2018, the Department of Commerce's National Telecommunications and Information Administration (NTIA) augmented the LA-RICS' Broadband Technology Opportunity Program (BTOP) grant award by \$32 million.

On June 29, 2018, the Authority and AT&T closed its Transfer of Asset and Business Agreements allowing for transition of the LA-RICS PSBN to integrate into the FirstNet/AT&T NPSBN.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to authorize the Executive Director to execute Amendment No. 14, which contemplates, among other things, allowing Televate to assist with ongoing transition of the Public Safety Broadband Network (PSBN) to AT&T including assisting local agencies' successful APN connection to the NPSBN, assisting with local control and governance of the NPSBN including service level agreements, managing the deployment and testing of vehicular router replacements and installs and other associated work and correspondingly increase the Maximum Contract Sum by \$1,722,525 for this work through the existing term of December 2020. Allowing Televate to continue to perform these much needed services will ensure local agencies' successfully connect to the NPSBN. Televate has intimate and fundamental knowledge of the LA-RICS PSBN project due to its past work on the project and is well situated to continue with these services efficiently and quickly.

As your Board is aware, the Asset Transfer and Business Agreement executed between the Authority and AT&T in December 2017, contemplated, among other things, transitioning all current PSBN users to the NPSBN and providing the Authority with replacement routers, SIMs, and devices of the Authority's choosing should current routers, SIMs, devices are not compatible/lack functionality with the FirstNet NPSBN.

As part of this transition and router replacement effort, it is necessary to have Televate continue to aid the Authority with managing the overall System transition, including but not limited to individual site transition, transport transition, core connectivity, and user transition. In addition, the Televate team will continue to assist the Authority with deployment of the router replacements and installs in connection with the Replacement Services contemplated in the Business Agreement between the Authority and AT&T including but not limited to assistance with router configurations and testing, assisting

with APN services which may be necessary to ensure the routers function properly, assisting with SIM deployment and configurations as may be needed, and performing data warehouse work as may be necessary to provide various router usage and network throughput reports for agencies. Additionally, the Televate team will continue to assist the Authority and its members with service level agreements and governance issues as users transition to the NPSBN and begin utilizing the FirstNet network.

FISCAL IMPACT/FINANCING

The activities contemplated in Amendment No. 14 will increase the Maximum Contract Sum by \$1,722,525 from \$12,516,500 to \$14,239,025 through Televate's existing term ending December 2020. The contract costs rendered by Televate under Amendment No. 14 will be funded by Joint Powers Authority (JPA) Member Funded Operations, Long Term Evolution (LTE) Administrative Costs, and AT&T Business Agreement Services included in the LA-RICS Adopted Operating Budget for Fiscal Year 2018-19 and/or future Fiscal Year Proposed Budgets.

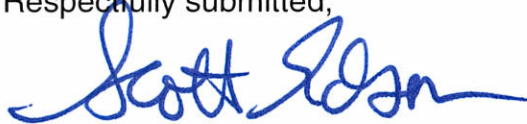
FACTS AND PROVISIONS/LEGAL REQUIREMENT

The Counsel to the Authority has reviewed the recommended actions.

CONCLUSION

Upon the Board's approval of the recommended actions, on behalf of the Authority, the Executive Director will execute Amendment No. 14, substantially similar in form to the Enclosure.

Respectfully submitted,



SCOTT EDSON
EXECUTIVE DIRECTOR

JA:pl

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Enclosure

c: Counsel to the Authority

AMENDMENT NUMBER FOURTEEN

TO AGREEMENT NO. 004

PROFESSIONAL BROADBAND ENGINEERING CONSULTING SERVICES

This Amendment Number Fourteen (together with all exhibits, attachments, and schedules hereto, "Amendment No. 14") is entered into by and between the Los Angeles Regional Interoperable Communications System Authority ("Authority") and Televate, LLC ("Consultant"), effective as of August _____, 2018 based on the following recitals:

RECITALS

WHEREAS, the Authority and Consultant have entered into that certain Agreement No. 004 for professional broadband engineering consulting services, dated as of April 18, 2011 (together with all exhibits, attachments, and schedules thereto, all as amended prior to the date hereof, the "Agreement").

WHEREAS, the Agreement has been previously amended by Amendment No. 1, effective as of August 4, 2011, to replace Exhibit A (Scope of Work) to provide for design review services throughout the entire scope of the project, including the preparation of a Request for Proposals through system implementation.

WHEREAS, the Agreement has been previously amended by Amendment No. 2, effective February 20, 2014, to (a) exercise the two renewal option years to the contract and extend the contract end date to April 17, 2016, (b) increase the Maximum Contract Sum by \$1,800,000, increasing the Maximum Contract Sum from \$1,500,000 to \$3,300,000, (c) broaden the scope of services to allow the consultant to provide additional technical support to the Authority to keep in line with meeting the aggressive demands of the procurement process consistent with the performance period of September 2015, (d) increase the Consultant's hourly rates, and (e) to make other certain revisions.

WHEREAS, the Agreement has been previously amended by Amendment No. 3, effective April 3, 2014 to (a) broaden the scope of services to expand on site acquisition support services to aid the Authority in securing the necessary agreements, including but not limited to, Long Term Evolution (LTE) Site Access Agreements, in order to meet the aggressive grant performance period deadline of September 2015; and (b) increase the Maximum Contract Sum by \$912,000, increasing the Maximum Contract Sum from \$3,300,000 to \$4,212,000.

WHEREAS, the Agreement has been previously amended by Amendment No. 4, effective February 11, 2015, to (a) increase the level of effort to continue to provide technical support to ensure that the Authority meets the aggressive demands consistent with the grant performance period deadline of September 2015, (b) assist the Authority with procurements for the purchase of LTE devices to be used on the Public Safety Broadband Network (PSBN); (c) to assist the Authority with member agencies transition/migration onto the PSBN; (d) to provide assistance and support to the Authority

with the PSBN during the warranty period of the PSBN; and (e) make certain other revisions.

WHEREAS, the Agreement has been previously amended by Amendment No. 5, effective May 21, 2015, to reduce the Maximum Contract Sum by \$329,997, from \$6,027,000 to \$5,697,003, to decrease the level of effort apportioned to the Public Safety Broadband Network (PSBN) project as proposed in the Authority's response to a Corrective Action Plan (CAP) issued by the National Oceanic and Atmospheric Administration (NOAA) Grants Management Division, on behalf of the National Telecommunications and Information Administration (NTIA), following direction from the County of Los Angeles (County) and City of Los Angeles (City) to reduce the number of PSBN Sites.

WHEREAS, the Agreement has been previously amended by Amendment No. 6, effective December 22, 2015, to (a) extend the contract term to September 30, 2016, to ensure that the Phase 1 Work for PSBN Sites related to the CAP Response is completed; (b) increase Televate's scope of work to provide additional technical support including, but not limited to, developing new policies and procedures, increase the level of effort in Member agency transition/migration onto the PSBN, and increase the level of effort for PSBN device onboarding; (c) increase the Maximum Contract Sum by \$1,400,000 to contemplate the increased scope of work and extended contract term; and (d) make certain other revisions.

WHEREAS, the Agreement has been previously amended by Amendment No. 7, effective August 15, 2016, to (a) extend the term of the contract to December 30, 2016, to ensure there is no break in service while the Authority awaits a formal grant augmentation for PSBN Round 2 from the National Oceanic and Atmospheric Administration (NOAA) and the National Telecommunications and Information Agency (NTIA); and (b) increase the Maximum Contract Sum by \$189,975 to assist the Authority with the development of the PSBN Round 2 plan and design until September 30, 2016.

WHEREAS, the Agreement has been previously amended by Amendment No. 8, effective November 14, 2016, to amend the Agreement to reflect the following (a) extend the term of the contract to January, 31, 2017, to continue assisting the Authority with PSBN Warranty Period closeout work, which includes but is not limited to, PSBN upgrade validation (Revision 9 and/or Revision 11), review of contract close-out documentation, optimization support, operations support, training management, onboarding agencies support (interconnection engineering, device connection support, troubleshooting), negotiation support regarding close-out items (if any), Rose Parade support, small cell technical support, drive testing and drive test evaluation, FirstNet Key Learning Conditions (KLC) support, for a cost increase in the amount of \$360,000; (b) increase the Maximum Contract Sum by \$360,000 from \$7,286,978 to \$7,646,978 for the Warranty Period close-out work through January 31, 2017; and (c) make other certain changes as set forth in Amendment No. 8.

WHEREAS, the Agreement has been previously amended by Amendment No. 9, effective January 25, 2017, to amend the Agreement to reflect the following (a) extend

the term of the contract to March, 31, 2017, to align with the extended PSBN Warranty Period, to continue assisting the Authority with PSBN Warranty Period closeout, which includes but is not limited to, PSBN upgrade validation (Revision 9 and/or Revision 11), review of contract close-out documentation, optimization support, operations support, training management, onboarding agencies support (interconnection engineering, device connection support, troubleshooting), negotiation support regarding close-out items (if any), small cell technical support, drive testing and drive test evaluation, FirstNet Key Learning Conditions (KLC) support; operational engineering/configuration support; implementation of security policy and process management; and provide LTE Training and Support services in the amount of \$415,000; (b) increase the Maximum Contract Sum by \$415,000 from \$7,646,978 to \$8,061,978 for this work through March 31, 2017; and (c) make other certain changes as set forth in Amendment No. 9.

WHEREAS, the Agreement has been previously amended by Amendment No. 10, effective March 20, 2017, to amend the Agreement to reflect the following: (a) extend the term of the contract to June 30, 2017, to continue assisting the Authority with PSBN Warranty Period close-out work and ongoing PSBN operations work, which includes but is not limited to, PSBN upgrade validation, review of contract close-out documentation, optimization support, operations support, training management, onboarding agencies support (interconnection engineering, device connection support, troubleshooting), negotiation support regarding close-out items (if any), small cell technical support, drive testing and drive test evaluation, FirstNet Key Learning Conditions (KLC) support; operational engineering/configuration support; implementation of security policy and process management; provide LTE Training and Support services; (b) revised Exhibit B (Schedule of Payments) to reflect an increase in certain Hourly Rates, effective March 13, 2017, to account for the inclusion of Consultant travel expenses; (c) increase the Maximum Contract Sum by \$680,000 from \$8,061,978 to \$8,741,978 for this work through June 30, 2017, which takes the increased hourly rates into consideration; and (d) make other certain changes as set forth in Amendment No. 10.

WHEREAS, the Agreement has been previously amended by Amendment No. 11, effective April 13, 2017, to amend the Agreement to reflect the following (a) make certain adjustments to the flow-down provisions to Consultant's Subcontractor (Ericsson) with respect to a limited scope of work related to training services for the PSBN; (b) revise Exhibit D (Administration of Agreement) to reflect updated personnel; (c) make other certain changes as set forth in Amendment No. 11.

WHEREAS, the Agreement has been previously amended by Amendment No. 12, effective May 18, 2017, to amend the Agreement to reflect the following (a) extend the term of the contract to complete certain areas of the Public Safety Broadband Network Round 2 Project Implementation Plan (PIP), specifically with acquisition of rapid response vehicles, connecting outside agencies Public Safety Enterprise Networks (PSENs) to the LA-RICS Core, and establishing a PSBN Testing and Validation Center to test and ensure that devices operate properly with the PSBN before use on the network as well as to allow Consultant to continue assisting the Authority with ongoing PSBN operations and

onboarding of users; and (b) increase the Maximum Contract Sum by \$2,764,332 from \$8,741,978 to \$11,506,310.

WHEREAS, the Agreement has been previously amended by Amendment No. 13, effective July 3, 2018, to amend the Agreement to reflect the following (a) increase the scope of work to assist the Authority in completing certain work contemplated in the PSBN Round 2 PIP, in particular, assistance with the PIP objectives for Coverage Augmentation and Rapid Response Vehicles, as well as to allow the Consultant to support the Authority with broadband related activities the Authority determines relevant to its mission as may be necessary; (b) extend the term of the Agreement until December 31, 2020 to align with the completion of certain Work contemplated in the PSBN Round 2 PIP and to allow Consultant to support the Authority with broadband related activities as may be necessary; (c) correspondingly increase the Maximum Contract Sum by \$1,010,190 from \$11,506,310 to \$12,516,500; and (d) make other certain changes as contemplated in Amendment No. 13.

WHEREAS, the Authority and Consultant desire to further amend the Agreement to (a) allow Televate to assist the Authority with ongoing transition of the PSBN to AT&T including assisting local agencies' successful Access Point Naming (APN) connection to the National Public Safety Broadband Network (NPSBN), assisting with local control and governance of the NPSBN including service level agreements, managing the deployment and testing of vehicular router replacements and installs and other associated work for a cost increase in the amount of \$1,722,525; (b) correspondingly increase the Maximum Contract Sum by \$1,722,525 from \$12,516,500 to \$14,239,025; and (d) make other certain changes as contemplated in Amendment No. 14.

WHEREAS, this Amendment No. 14 is authorized under Section 6 (Changes to Agreement) of the Agreement.

NOW THEREFORE, in consideration of the foregoing recitals, all of which are incorporated as part of this Amendment No. 14, and for other valuable consideration, the receipt and sufficiency of which are acknowledged, Authority and Consultant hereby agree as follows:

1. Capitalized Terms; Section References. Capitalized terms used herein without definition (including in the recitals hereto), have the meanings given to such terms in the Agreement. Unless otherwise noted, section references in this Amendment No. 14 refer to sections of the Agreement, as amended by this Amendment No. 14.
2. Amendments to Agreement.
 - 2.1 The parties agree and acknowledge that the Consultant will continue to assist the Authority with managing the overall System transition, including but not limited to individual site transition, transport transition, core connectivity, and user transition. Additionally, Consultant will continue to assist with the deployment of the router replacements and installs in

connection with the Replacement Services contemplated in the Business Agreement between the Authority and AT&T, including but not limited to, assistance with router configurations and testing, assisting with APN services which may be necessary to ensure the routers function properly, assisting with SIM deployment and configurations as may be needed, and performing data warehouse work as may be necessary to provide various router usage and network throughput reports for agencies. Consultant will also continue to assist the Authority and its members with service level agreements and governance issues as users transition to the NPSBN and begin utilizing the FirstNet network.

2.2 Section 8 (Maximum Contract Sum) of the Agreement is deleted in its entirety and replaced with the following:

8. The "Maximum Contract Sum" is the total monetary amount payable by the Authority to Consultant for furnishing all Work and Deliverables under this Agreement, inclusive of any applicable taxes. The Maximum Contract Sum under this Agreement shall be Fourteen Million, Two Hundred Thirty-Nine Thousand, Twenty-Five Dollars (\$14,239,025).

3. This Amendment No. 14 shall become effective as of the date identified in the recitals, which is the date upon which:

3.2 An authorized agent of Contractor has executed this Amendment No. 14;

3.3 Counsel to the Authority has approved this Amendment No. 14 as to form;

3.4 The Board of Directors of the Authority has authorized the Executive Director of the Authority to execute this Amendment No. 14; and

3.5 The Executive Director of the Authority has executed this Amendment No. 14.

4. Except as expressly provided in this Amendment No. 14, all other terms and conditions of the Agreement shall remain the same and in full force and effect.

5. Consultant and the person executing this Amendment No. 14 on behalf of Consultant represent and warrant that the person executing this Amendment No. 14 for Consultant is an authorized agent who has actual authority to bind Consultant to each and every term and condition of this Amendment No. 14, and that all requirements of Consultant to provide such actual authority have been fulfilled.

6. This Amendment No. 14 may be executed in one or more original or facsimile counterparts, all of which when taken together shall constitute one in the same instrument.

* * *

AMENDMENT NUMBER FOURTEEN
TO AGREEMENT NO. 004
FOR
PROFESSIONAL BROADBAND ENGINEERING CONSULTING SERVICES

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 14 to be executed on their behalf by their duly authorized representatives, effective as of the date first set forth above.

LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS
SYSTEM AUTHORITY

TELEVATE, LLC

By: _____

Scott Edson
Executive Director

By: _____

Joe Ross
Senior Partner

APPROVED AS TO FORM FOR THE
LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS
SYSTEM AUTHORITY:

MARY C. WICKHAM
County Counsel

By: _____

Truc L. Moore
Principal Deputy County Counsel



LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100
Monterey Park, California 91754
Telephone: (323) 881-8291
<http://www.la-rics.org>

SCOTT EDSON
EXECUTIVE DIRECTOR

July 31, 2018

LA-RICS Board of Directors
Los Angeles Regional Interoperable Communications System Authority (the "Authority")

Dear Directors:

APPROVE AMENDMENT NO. 34 TO AGREEMENT NO. LA-RICS 007 FOR LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM – LAND MOBILE RADIO SYSTEM

SUBJECT

Board approval is requested to make necessary findings under the California Environmental Quality Act (CEQA), authorize the Executive Director to execute Amendment No. 34 to Agreement No. LA-RICS 007 (Agreement) to contemplate the inclusion of one (1) Land Mobile Radio (LMR) System Site in the scope of Phases 2, 3, and 4; reflect the removal of certain equipment, in particular, an Uninterruptible Power Supply (UPS); incorporation of certain LMR Change Order Modifications; and contemplate abridge warranty extension for certain Early Deployment/ Specified Equipment; all resulting in an increase to the Maximum Contract Sum in the amount of \$1,544,334.

RECOMMENDED ACTIONS

It is recommended that your Board:

1. Take the following actions with respect to the LMR System Site Industry Water Tanks (INDWT) project:
 - a. Consider the Mitigated Negative Declaration for the LMR INDWT project, find that the Mitigation Monitoring Program (MMP) is adequately designed to ensure compliance with the mitigation measures during project implementation, find on the basis of the whole record before the Board that

there is no substantial evidence that the INDWT project will have a significant effect on the environment, and that the Mitigated Negative Declaration (MND) prepared for the INDWT project reflects the Authority's independent judgment and analysis, and adopt the Mitigated Negative Declaration included as Enclosure 1 and adopt the MMP included as Enclosure 2 as a condition of approval for the project.

- b. Find that inclusion of one (1) LMR System Site (INDWT) into Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), and Phase 4 (LMR System Implementation), and exercising of the Unilateral Options to align with the updated LMR System Design which would authorize the Authority to proceed with construction, implementation, operation, and maintenance of LMR infrastructure at Site INDWT, are within the scope of the MND recommended for adoption above.
2. Make the following findings with respect to other items included in Amendment No. 34 (Enclosure 3) to Agreement No. LA-RICS 007 for a LMR System with Motorola Solutions, Inc. (Motorola):
 - a. Find that removal of certain Authority equipment, in particular, an Uninterruptible Power Supply (UPS) from Los Angeles Police Department's Valley Dispatch Center does not have the potential to result in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and therefore is exempt from review under the California Environmental Quality Act (CEQA) as it is not a project pursuant to CEQA Guidelines Section 15061(b)(3) and 15378(a), and the Public Resources Code Section 21065.
 - b. Find that (a) approval of the LMR Change Order Modifications necessary to reflect reconciliation of one (1) LMR System Site (Agoura Hills [AGH]) to align with updated LMR System Design is within the scope of the Final Environmental Impact Report (EIR) for the LA-RICS LMR System, which was previously certified by the Board under CEQA on March 29, 2016; and (b) that there are no changes to the project at this site or to the circumstances under which the project is undertaken that require revisions to the previous EIR due to new significant effects or substantial increase in the severity of previously identified significant effects.
 - c. Find that approval of the LMR Change Order Modifications necessary to reflect reconciliation of one (1) LMR System Site (Hauser Peak [HPK]) to align with the updated LMR System Design is within the scope of design, construction, implementation, operation, and maintenance activities for the LMR System previously authorized at this one (1) site. The LMR activities at Site HPK were previously found by your Board to be statutorily exempt from

review pursuant to Public Resources Code Section 21080.25, the exemption adopted specifically for the LA-RICS project, and any leased circuit work that may occur outside of Site HPK if needed to provide network connectivity to the LMR System, was previously found to be categorically exempt under CEQA pursuant to State CEQA Guidelines Sections 15301, 15303, and 15304.

3. Approve Amendment No. 34 (Enclosure 3), in substantially similar form to the enclosure, to Agreement No. LA-RICS 007 for a LMR System with Motorola Solutions, Inc. (Motorola), which revises the Agreement to reflect the following:
 - a. Inclusion of one (1) LMR System Site (INDWT) into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercising the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,016,780
 - b. Removal of certain equipment, in particular a UPS, from Los Angeles Police Department's Valley Dispatch Center for a cost increase in the amount of \$6,010.
 - c. Make changes necessary to incorporate LMR Change Order Modifications related to LMR System Sites AGH and HPK for a cost increase in the amount of \$90,744.
 - d. Extend a bridge warranty for certain Early Deployment/Specified Equipment to bridge the warranty gap for this equipment commencing on August 1, 2018 up to and including December 31, 2019 for a cost increase in the amount of \$430,800.
4. Authorize an increase to the Maximum Contract Sum in the amount of \$1,544,334 from \$295,919,379 to \$297,481,203 when considering the cost increase.
5. Allow for the issuance of one or more Notices to Proceed for the Work contemplated in Amendment No. 34.
6. Delegate authority to the Executive Director to execute Amendment No. 34, in substantially similar form, to the enclosed Amendment (Enclosure).

BACKGROUND

Site Inclusion and Removal of UPS

The Authority continues to work closely with Motorola, on the reconciliation of sites to align with the LMR System redesign. As this is an iterative process, the ongoing design work has resulted in the need to reconcile certain Work, equipment, and corresponding costs for certain LMR System Sites to reflect the updated design. As a result, part of the recommended actions contemplate the inclusion of the INDWT site and the removal of a UPS from the Los Angeles Police Department's Valley Dispatch Center (LAPDVDC) site.

Change Order Modifications

With respect to the LMR Change Order Modifications contemplated in Amendment No.34, Authority staff, including its consultants, and the LMR Contractor, Motorola have reviewed and negotiated each claim, including the associated costs, for each change order. The changes presented in Amendment No. 34 benefit the LMR project and are required for the completion of the LMR System. LMR change orders are considered for a variety of reasons and reflect items that were not originally considered in the contract or are performed in order to ratify an agreement between the Authority and its Contractor, Motorola, regarding work to be performed.

Bridge Warranty

On June 4, 2015, your Board approved Amendment No. 12 to the Agreement to include a bridge warranty for Early Deployment/Specified Equipment (Core 1, Core 2, repeater sites, Site on Wheels, and Station B Equipment) purchased under previously approved Amendments to bridge the warranty gap.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to adopt the MND and MMP for the proposed LMR System Site INDWT project, authorize the Authority to proceed with construction, implementation, operation and maintenance of LMR infrastructure at site INDWT, and to find that certain changes at one (1) LMR System (AGH) site are within the scope of the LA-RICS LMR Final EIR prepared for the LA-RICS LMR System which was previously certified, and certain changes at one (1) LMR System site (HPK) are within the scope of the activities for the LMR System previously authorized at this site, which your Board previously found exempt from review under CEQA.

Approval of the recommended actions will also authorize the Executive Director to execute Amendment No. 34 to include (1) LMR System Site to align with the updated LMR System Design Agreement, to remove an Authority owned UPS located at LAPDVDC; incorporate certain Change Order Modifications; and extend the Bridge Warranty for certain equipment; all actions resulting in an increase to the Maximum Contract Sum in the amount of \$1,544,334.

Site Inclusion

As a result of the membership opt outs and redesign efforts to date, it is necessary to reconcile the Work and equipment at one (1) LMR System Sites (INDWT) to align with the updated LMR System Design. The INDWT LMR System Site serves as a replacement for the Olinda site, a site which is no longer part of the LMR System design. Such reconciliations contemplate the inclusion of the INDWT site into the scope of Phase 2 through Phase 4. Approval of the recommended actions will authorize the Authority to proceed with construction, implementation, operation, and maintenance of LMR infrastructure at Site INDWT.

Removal of UPS

It is necessary to remove Authority owned UPS equipment located at the LAPDVDC site. LAPDVDC was originally designated as the redundant LMR core facility. As a result of membership opt outs, it was determined the redundant core be relocated to LASD Palmdale Sheriff's station. Accordingly, the UPS equipment is no longer required to be located at the LAPDVDC site.

Change Order Modifications

Further, it is necessary to include the change order modifications contemplated in Amendment No. 34, for work not previously contemplated in the site design. The work includes certain electrical work to provide and install power and to provide additional survey work for electrical service. As construction continues to progress, approval of certain change order modifications may be necessary to address and continue construction activities that are above Motorola's originally contemplated scope.

Bridge Warranty

Lastly, it is necessary to extend the existing bridge warranty for certain Early Deployment/Specified Equipment to bridge the gap and ensure that the equipment is maintained until December 31, 2019. Some of the LMR System Sites may become permanent and operational prior to December 31, 2019 and the Early Deployment/Specified Equipment at these sites may be relocated and/or will be replaced by permanent site equipment. With respect to these permanent LMR System Sites, the LMR System Warranty shall take effect and replace the bridge warranty. If there are LMR System Sites that still utilize the Early Deployment equipment after December 31, 2019, the Authority staff will return to your Board to request an additional extension of the bridge warranty for the remaining equipment.

FISCAL IMPACT/FINANCING

The activities contemplated in Amendment No. 34 will increase the Maximum Contract Sum by \$1,544,334 from \$295,936,869 to \$297,481,203 when considering the cost increases and shall be reimbursed by the Urban Areas Security Initiative (UASI) grant and/or Member Funded Joint Powers Authority (JPA) Operations included in the LA-RICS Adopted Operating Budget for Fiscal Year 2018-19.

ENVIRONMENTAL DOCUMENTATION

With respect to LMR System Site INDWT, this site was proposed as a potential LMR System site after the Final EIR for the LMR Project had been certified by your Board on March 29, 2016. LMR System Site INDWT was previously included into Phase 1 (System Design) by your Board on December 12, 2016. Exercise of the Unilateral Option for all work in Phase 1 (System Design) at this site was found to be not a project subject to CEQA or exempt from CEQA. Activities associated with construction, implementation, operation, and maintenance of LMR infrastructure at Site INDWT are not categorically exempt from review under CEQA, nor is the project eligible for the statutory exemption for LA-RICS because Site INDWT does not meet all the criteria for the statutory exemption listed under California Public Resources Code Section 21080.25 (c) (i.e., it is not located at a site that contains existing antenna support structures and it is not a public facility that transmits or receives public safety radio signals). Therefore, the Authority prepared an Initial Study (IS) in accordance with the requirements of CEQA to provide information on which to base a decision to prepare an EIR or a negative declaration. The IS concluded that with implementation of mitigation measures, the project would not have significant adverse impacts on the environment. Based on this, the Authority prepared an MND.

As the lead agency under CEQA, the Authority completed an IS for the proposed LMR System Site INDWT project in compliance with CEQA. The IS identified potentially significant impacts in the following environmental areas: biological resources, cultural resources, hazards and hazardous materials, and mandatory findings of significance. Prior to the release of the proposed MND and IS for public review, revisions to the proposed project were made or agreed to which would avoid or mitigate the effects to a point where no significant effects would occur as follows:

- **Biological Resources** – avoiding and protecting nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code; avoiding disturbance to California Walnut Woodlands which is a sensitive community tracked by the California Department of Fish and Wildlife; minimizing habitat degradation to maintain the function of wildlife movement corridors in the Puente Hills Significant Ecological Area.

- **Cultural Resources** – monitoring for the presence of and developing procedures for handling paleontological resources.
- **Hazards and Hazardous Materials** – implementing a fire management plan to reduce fire hazards during site construction in a State Responsibility Very High Fire Hazard Severity Zone.
- **Mandatory Findings of Significance** – the measures listed above for biological resources and cultural resources apply.

The complete list of applicable mitigation measures is in the MMP (Enclosure 2).

The IS and project revisions showed that there is no substantial evidence, in light of the whole record before the Authority, that the project as revised may have a significant effect on the environment. Based on the IS and project revisions, an MND was prepared for the project.

Public notice was published in the *San Gabriel Valley Tribune* and *Orange County Register* newspapers pursuant to California Public Resources Code section 21092 and posted pursuant to section 21092.3. The Notice of Availability of the MND was also published on the LA-RICS website (<https://www.la-rics.org/documents/environmental-documents/environmental-documents-lmr/>). There was a 30-day public review period which ended on May 25, 2018. With the exception of a letter from Orange County acknowledging receipt and review of the IS/MND, no comments were received on the IS/MND during the review and comment period.

No California Native American tribe requested consultation pursuant to PRC section 21050.3.1 (Assembly Bill 52). However, consultation was conducted with 14 tribes identified through the Native American Heritage Commission. Tribal consultation with the tribes was completed in January 2018.

The IS/MND is enclosed as Enclosure 1 and can be found on the LA-RICS website (<https://www.la-rics.org/documents/environmental-documents/>).

A Mitigation Monitoring Program (MMP) consistent with the conclusions and recommendations of the MND has been prepared and is enclosed as Enclosure 2 and can be found on the LA-RICS website (<https://www.la-rics.org/documents/environmental-documents/>). The MMP identifies in detail the manner in which compliance with the measures adopted to mitigate or avoid significant adverse impacts of the project on the environment is ensured. These mitigation measures and requirements have been incorporated as conditions of approval for the INDWT project.

The documents and other materials that constitute the record of proceedings upon which the LA-RICS Authority Board's decision is based in this matter are located at the LA-RICS Headquarters, 2525 Corporate Place, Suite 100, Monterey Park, CA 91754. The custodian for these documents is the LA-RICS Authority.

The project is not exempt from payment of a fee to the California Department of Fish and Wildlife pursuant to section 711.4 of the Fish and Game Code to defray the costs of fish and wildlife protection and management incurred by the California Department of Fish and Wildlife.

Upon the Board's adoption of the MND, the Authority will file a Notice of Determination (NOD) with the Los Angeles County Clerk and with the Orange County Clerk in accordance with Section 21152 of the California Public Resources Code.

Approval of the removal of certain LA-RICS UPS equipment from Los Angeles Police Department's Valley Dispatch Center does not have the potential to result in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and therefore is exempt from review under CEQA as it is not a project pursuant to CEQA Guidelines Section 15061(b)(3) and 15378(a), and the Public Resources Code Section 21065.

Approval of the changes necessary to reflect reconciliation of one (1) LMR System Site (AGH) to align with updated LMR System Design is within the scope of the Final EIR for the LA-RICS LMR System (downloadable from <https://www.la-rics.org/documents/environmental-documents/environmental-documents-lmr/>), which was previously certified under CEQA on March 29, 2016. There are no changes to the project at this site or to the circumstances under which the project is undertaken that require revisions to the previous EIR due to new significant effects or substantial increase in the severity of previously identified significant effects.

The Authority previously determined on November 13, 2014 that design, construction, implementation, operation, and maintenance of LMR System infrastructure at one (1) LMR System Site (HPK) was exempt from review under CEQA pursuant to Public Resources Code Section 21080.25, the statutory CEQA exemption adopted specifically for the LA-RICS. In connection with those determinations for LMR System Site HPK, the Authority also determined on November 13, 2014 that leased circuit work that may occur outside of this LMR System Site as needed to provide connectivity to the LMR System is categorically exempt under CEQA pursuant to CEQA Guidelines section 15301 (existing facilities), 15303 (new construction or conversion of small structures), and 15304 (minor alterations to land). Approval of reconciliation to align with the updated LMR System Design for Site HPK is within the scope of the previously authorized activities, and the determination that these activities are exempt from CEQA remains unchanged.

Upon the Board's approval of the recommended actions, The Authority will file an NOD for one (1) LMR System Site (AGH) with the Los Angeles County Clerk in accordance with section 21152 of the California Public Resources Code.

With respect to the Bridge Warranty, the activities covered by this Amendment No. 34, which includes extending bridge warranty for certain Early Deployment/Specified Equipment, do not constitute a project under CEQA. These activities involve the purchase of an extended bridge warranty for certain equipment, and are organizational or administrative activities of government that will not result in direct or indirect physical changes in the environment pursuant to Sections 15378(b)(2) and 15378(b)(5) of the State CEQA Guidelines. It is also exempt from review under CEQA under Section 15061 (b)(3), in that there is no potential for causing a significant effect on the environment. No construction work or any other work involving the environment is being done under Amendment No. 34. Upon the Board's approval of the recommended actions, the Authority will file a Notice of Exemption with the County Clerk.

FACTS AND PROVISIONS/LEGAL REQUIREMENT

The Authority's counsel has reviewed the recommended actions.

Adoption of the MND is required by CEQA prior to the Board approval of the recommended actions for LMR System Site INDWT and authorization to proceed with construction, implementation, operation, and maintenance of LMR infrastructure at Site INDWT.

CONCLUSION

Upon the Board's approval of the recommended actions, the Executive Director will have delegated authority to proceed in a manner described in the recommended actions.

Respectfully submitted,



SCOTT EDSON
EXECUTIVE DIRECTOR

JA:rf

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Enclosure

c: Counsel to the Authority

ADOPTED

MITIGATED NEGATIVE DECLARATION FOR THE

LOS ANGELES REGIONAL INTEROPERABLE

COMMUNICATIONS SYSTEM (LA-RICS)

LAND MOBILE RADIO (LMR) SYSTEM

SITE INDUSTRY WATER TANKS (INDWT)



Prepared for:

LA-RICS Joint Powers Authority
2525 Corporate Place, Suite 100
Monterey Park, CA 91754

JULY 2018

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**ADOPTED MITIGATED NEGATIVE DECLARATION
FOR THE LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM (LA-RICS),
LAND MOBILE RADIO (LMR) SITE INDUSTRY WATER TANKS (INDWT)**

Project Proponent

Los Angeles Regional Interoperable Communications System (LA-RICS) Joint Powers Authority (Authority)

Project Location

The Project location is south of the City of Diamond Bar in an unincorporated area of Los Angeles County between Brea Canyon to the west and northwest and Tonner Canyon to the south and east. The Project site is on a hilltop, and includes a parcel owned by the City of Industry that contains existing water tanks near where the proposed telecommunications facility would be constructed. The Project site also extends generally southeast and southwest from these water tanks along unpaved roads to include a route for proposed power lines to the site. Two areas have been identified for extension of power to the site from existing utility power interconnection points, although only one of these options would be used. Both of these areas extend into the County of Orange. A figure showing the Project location is included as Figure 1-1 in the attached Initial Study.

Project Description

The proposed Project is the construction and operation of an LMR telecommunications facility at Site INDWT that supports emergency response and daily communications by first and secondary responders of the region's public safety agencies. The proposed Project would provide LMR coverage to a portion of Los Angeles County not served by sites in the current LA-RICS LMR system¹ and provide significant improvements to emergency response in the areas it would serve. Site INDWT would consist of three main components: a steel pole structure (also known as a monopole) for mounting antennas, an equipment shelter to house the communications and auxiliary equipment, and an emergency backup generator and fuel tank. The site would also require installation of either pole-mounted or underground electrical distribution lines to connect it to the power grid. A more detailed project description is included in the attached Initial Study.

Findings

A summary of the findings of the Initial Study by environmental resource topic is provided below. The Initial Study that supports these findings is attached.

The proposed Project would result in no impacts to the following environmental resources:

- Agriculture and Forest Resources
- Land Use and Planning
- Mineral Resources

¹ The LA-RICS LMR system, which includes approximately 60 sites, was the subject of an environmental impact report (EIR) certified in April 2016 by the Authority (SCH# 2014081085) and is currently under construction.

- Population and Housing
- Public Services
- Recreation

Less than significant impacts would occur to the following environmental resources:

- Aesthetics
- Air Quality
- Geology and Soils
- Greenhouse Gases
- Hydrology and Water Quality
- Noise
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities and Service Systems

Less than significant impacts with mitigation incorporated would occur to the following environmental resources:

- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Mandatory Findings of Significance

Applicable mitigation measures, agreed to by the Project proponent, are listed below.

Mitigation Measures

The Authority has determined that the mitigation measures listed below are applicable to proposed Site INDWT and will implement them if the site is approved. As background, the text of these measures was originally developed in connection with the EIR certified by the Authority for the LA-RICS LMR System in April 2016, and the measures are currently being implemented for those sites. Therefore, the text of these measures, in some cases, was originally drafted to be applicable to more than one site. For consistency in ensuring compliance with the mitigation measures, the naming and wording of the mitigation measures from the LMR EIR has generally been retained. Additionally, the mitigation measure numbers in the table below are not all continuous. However, the Authority has determined that the following mitigation measures are applicable and would be implemented for the proposed Site INDWT Project.

Mitigation Measure	Impact
<p>BIO MM 1 Mitigation Monitoring and Reporting Plan</p> <p>Prior to construction, the Authority shall develop and implement or require the system contractor to develop and implement a mitigation monitoring and reporting plan (MMRP) for the proposed Project. The MMRP would serve to organize environmental compliance requirements identified in best management practices, mitigation measures, permit requirements, real property agreement conditions, and other applicable sources. The MMRP shall contain an organization chart and communication plan for environmental compliance as it relates to the proposed Project.</p>	<p>Biological Resources, items a), b), and e)</p>
<p>BIO MM 2 Worker Environmental Awareness Program</p> <p>Prior to construction, the Authority shall develop and implement or require the system contractor to develop and implement a Worker Environmental Awareness Program (WEAP) for the proposed Project. This conservation measure would serve to institute and formalize an education program to increase awareness of environmental resources and measures and rules that are in place to help minimize impacts to those resources.</p> <ul style="list-style-type: none"> a) A WEAP shall be developed and shall be required for all construction employees prior to placement of Project equipment, construction, or any ground disturbing activities at the proposed Project site. Training of additional workers, contractors, and visitors shall be provided, as needed. b) The WEAP is to inform on-site workers of the possible presence of special status species, the measures to be taken to protect these species, and the importance of minimizing impacts to the natural environment through the protection of native vegetation, adhering to required buffers and protection zones, staying on existing roads, and implementing best management practices that include containment of any spills, disposal of trash, and management of runoff and sediment transport. c) To assure long-term implementation of mitigation measures, an information sheet shall be prepared, distributed to workers, and posted on site, listing potential sensitive species and what to do if any are encountered. 	<p>Biological Resources, items a), b), and e)</p>
<p>BIO MM 3 Biological Compliance Reporting</p> <p>A biological monitor shall visit all active construction sites at least once weekly to document compliance and provide reports to the Project administrator on a weekly basis.</p>	<p>Biological Resources, items a), b), and e)</p>
<p>BIO MM 4 Site Sanitation</p> <ul style="list-style-type: none"> a) The contractor shall keep a regulated work area free of litter and trash. Trash and discarded food items shall be contained within an appropriate receptacle and removed daily to avoid attracting wildlife to the construction site, contribute to habituation of wildlife to the presence of humans, or to attract avian or mammalian predators to the area. b) All construction debris (including nuts, bolts, small pieces of wire, etc.) shall be cleaned up (e.g., trash removed, scrap materials picked up) each day that work is conducted to minimize the likelihood of wildlife visiting the site and consuming microtrash, discarded food, or other substances. 	<p>Biological Resources, item e)</p>
<p>BIO MM 5 Hazardous Materials Management</p> <ul style="list-style-type: none"> a) A toxic substance management and spill response plan shall be prepared by the contractor. b) Hazardous materials shall be contained; spills shall be prevented; and any spills at 	<p>Biological Resources, item e)</p>

Mitigation Measure	Impact
<p>the Project site or along access roads shall be contained and cleaned up immediately.</p> <p>c) All construction vehicles are required to carry at least one spill response kit.</p> <p>d) Any spills shall be accounted for in reports prepared by the biological/environmental monitor.</p>	
<p>BIO MM 8 Biological Monitoring</p> <p>A qualified biological monitor shall be present at the site during construction activities that result in ground disturbance or removal of vegetation to ensure all conservation measures are met. Duties of the biological monitor include checking for the presence of wildlife on the construction site, inspecting trenches or holes for trapped wildlife, surveying for the presence of nesting birds and adherence to nesting bird protection buffers, monitoring construction site boundaries, and checking that vegetation flagged for protection is not disturbed.</p>	<p>Biological Resources, items a), b), and e)</p>
<p>BIO MM 9 Protect Native Vegetation and Common Wildlife</p> <p>a) Minimize disturbance to native perennial plants; new ground disturbance shall be the minimum necessary and established and delineated prior to any earth-moving activities.</p> <p>b) If native perennial vegetation cannot be avoided and would be impacted or destroyed, the disturbance area is to be surveyed for the presence of special status plants and to remove common species of wildlife prior to destruction of the vegetation.</p> <p>c) At no time shall protected species be handled or moved. If a protected species is found within the construction area, all work that may impact that animal shall cease and the appropriate agency(s) shall be contacted (e.g., USFWS, CDFW, land management agency). The animal shall be allowed to leave the site on its own accord.</p> <p>d) Prior to construction or any ground-disturbance activities, mark the construction disturbance limits and monitor for adherence to these boundaries.</p> <p>e). Stay on existing roads.</p> <p>f) Do not remove native trees; construction limits shall be established to avoid walnuts, oaks, and any other sensitive species habitat and the limits shall be flagged by a biological monitor.</p> <p>g). Protect tree root systems by precluding paving, trenching, or other ground-disturbing activities; and preclude heavy equipment from driving, parking, or staging within the tree's drip line.</p> <p>h) Any loss of native perennial vegetation, whether planned or unintentional, is to be accounted for in reports prepared by the biological monitor</p>	<p>Biological Resources, items a), b), and e)</p>
<p>BIO MM 10 No Pets</p> <p>Construction and maintenance workers shall be prohibited from bringing pets (especially dogs) to nonurban Project sites, as the domestic animal may harass or kill native wildlife present at the site.</p>	<p>Biological Resources, items a), b), and e)</p>
<p>BIO MM 11 Site Access</p> <p>a) On access roads, operate all vehicles within the posted speed limits.</p> <p>b). If access road speed limits are not posted, do not exceed 15 miles per hour (mph).</p>	<p>Biological Resources, items a), b), and e)</p>

Mitigation Measure	Impact
<ul style="list-style-type: none"> c). Adjust vehicle speed as appropriate to road conditions; avoid causing ruts and gullies, and minimize dust. d). Watch for wildlife on roads (including amphibians, snakes, rodents, and tortoises), especially during raining periods, and avoid running them over. e). Look under parked vehicles for the presence of wildlife (especially desert tortoise) before pulling away to avoid running over wildlife. f). Do not park on or drive over native perennial vegetation. g). Avoid cutting corners on access roads and impacting vegetation when large equipment and trailers are brought to the Project site. h). Do not drive off the designated roadway or make any modifications to the road or road shoulders. 	
<p>BIO MM 12 Coastal California Gnatcatcher Protection</p> <ul style="list-style-type: none"> a) As part of BIO MM 2 WEAP, construction crews shall be informed of the possible presence of coastal California gnatcatchers in the area and the importance of maintaining coastal sage scrub vegetation. b) As part of BIO MM 9 Protect Native Vegetation and Common Wildlife, disturbance to native perennial vegetation, especially coastal sage scrub vegetation (e.g., California sagebrush, sage, and laurel sumac, and California buckwheat), would be minimized. Surveys shall be conducted by a qualified biologist for the presence of coastal sage scrub perennial vegetation and plants not identified for removal within or near the construction zone shall be marked for protection. c) As part of BIO MM 3 Biological Compliance Reporting, the environmental monitor shall verify at least once a week during active construction and upon completion of construction activities that habitat protection measures have been followed. 	<p>Biological Resources, items a) and b)</p>
<p>BIO MM 17 Raptor Protection</p> <ul style="list-style-type: none"> a) If construction activities occur during the American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl breeding period, January 1 through July 31, preconstruction surveys would be conducted in all suitable habitats within 500 feet of the Project site as well as within a species-appropriate distance beyond the 500-foot buffer based on line of sight between potential nesting habitat and the construction site. b) If construction takes place during the breeding period, the biological monitor shall contact appropriate land management and resource agencies to ascertain if they have any current information on raptor nesting activities in the general vicinity of the proposed Project sites. c) If an active American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl nest is discovered within 500 feet of the construction site, work shall not be undertaken at that site until the nest is no longer active, with an additional five days to allow the fledging birds to disperse. An active nest is defined as one that is attended, built, maintained, or used by a pair of birds during a given breeding season, whether or not eggs are laid; a nest is considered inactive if not attended to for a period of 10 days or longer. d) If an active American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl nest is discovered between 500 feet and 0.5 mile of the construction site, the potential for disturbance of the nesting birds would be 	<p>Biological Resources, item a)</p>

Mitigation Measure	Impact
<p>evaluated based on line-of-sight, degree of potentially disturbing activities, and other site-specific factors. If the CDFW and land management agency concur, the protection buffer distance may be reduced.</p>	
<p>BIO MM 18 Nesting Bird Protection</p> <ul style="list-style-type: none"> a) It is preferred that removal of trees or large tree limbs and other vegetation removal activities such as grubbing or shrub clearing avoid the typical bird nesting season of January 1 through September 15. b) If construction activities occur during the bird nesting season, and to prevent disturbance to or destruction of nests of protected native bird species that could occur as a result of vegetation removal, disturbance, or other on-site construction activities, preconstruction surveys for nesting birds shall be conducted by a qualified biological monitor within 10 calendar days prior to on-site construction-related disturbance activities from March 1 through September 15 for non-raptors, and January 1 through July 31 for raptors. c) If nesting protected non-raptor species are detected, a 300-foot avoidance buffer shall be implemented; a 500-foot avoidance buffer would be applied to any active nest of a raptor or other species of special status bird. d) Appropriate site-specific buffers may be established with the approval of a project designated avian expert, based in part on the species of nesting bird present, location of nest, nesting phenology, magnitude of potential disturbance, and other site conditions (e.g., levels of ambient noise; line-of-sight). e) If construction activities would occur within the general buffer distances for active nests (300 feet for nonraptors, 500 feet for raptors, and up to 1.5 miles for condors and eagles), a Biological Monitor must be present during those activities. f) No active nests may be destroyed; inactive bird nests may be destroyed as part of vegetation removal but may not be reduced to possession. g) Between September 16 and December 30, grubbing, shrub clearing, and tree/limb removal activities are not subject to restrictions based on the protection of migratory birds. h) Comply with the USFWS Office of Migratory Birds voluntary guidelines (USFWS 2013a) for communications tower placement, construction, and operation. i) For any towers that must exceed 199 feet in height, lighting requirements would be designed in cooperation with FAA and USFWS Office of Migratory Birds to minimize attraction and resulting mortality of migratory birds. 	<p>Biological Resources, item a)</p>
<p>BIO MM 19 Trenches and Holes Management</p> <ul style="list-style-type: none"> a) The contractor shall cover or backfill all trenches the same calendar day they are opened, where practicable. b) If trenches or holes cannot be closed the same day they are made, covers shall be firmly secured at ground level in such a way that small wildlife cannot slip beneath. At sites that require the presence of a biological monitor, trench covers shall be approved by the monitor. c) Open trenches shall be inspected regularly throughout the day and prior to filling to remove any trapped common wildlife (e.g., small mammals, reptiles, amphibians) and to check for the presence of protected wildlife species (e.g., arroyo toad) at Project sites that require the presence of a biological monitor. d) If a protected wildlife species is present in the trench, the on-site biological monitor shall contact USFWS immediately, ensure the protected species is not in immediate danger, and wait for instruction by USFWS. 	<p>Biological Resources, items b) and e)</p>

Mitigation Measure	Impact
<ul style="list-style-type: none"> e) Covered trenches and holes at sites where biological monitors are present are to be inspected by the monitor at the end of the work day and prior to initiating construction activities the next day. f). In locating trenches or holes, minimize disturbance to natural vegetation, including plant root systems. g) Prior to trenching, mark the construction disturbance limits and monitor for adherence to these boundaries. 	
<p>BIO MM 24 Special Status Plants Surveys and Protection</p> <ul style="list-style-type: none"> a) As part of BIO MM 2 WEAP, construction crews shall be informed prior to the onset of construction activities of the possible presence of special status plants in the area, and the importance of maintaining native vegetation. b) At identified sites, surveys for special status plants shall be conducted by a qualified botanist prior to ground disturbing activities, in the proper season (i.e., during the plant species' blooming period) and in suitable habitat surrounding the proposed Project site or any area subject to ground disturbance, including access roads. c) If a special status plant is found to be present or if surveys are determined to be inconclusive, the areas requiring special protection would be marked prior to construction to provide a buffer to maintain the ecological context of the location at which the plant was found. d) BIO MM 8 - Biological Monitoring shall apply at proposed Project sites where special status plants or their habitat are present, and protection buffers would be monitored for compliance. 	<p>Biological Resources, item a)</p>
<p>CUL MM 3: Unexpected Discovery of Archaeological Materials</p> <p>In the event that previously unidentified prehistoric or historic-age archaeological resources are uncovered, the following actions shall be taken:</p> <ul style="list-style-type: none"> 1) All ground-disturbing work within 165 feet (50 meters) of the discovery shall be halted. The qualified archaeological monitor will mark the immediate area with highly visible flagging and immediately notify the Project Archaeologist. 2) The Project Archaeologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, the resource shall be documented on California State Department of Parks and Recreation cultural resource record forms, and no further effort shall be required. 3) If the resource cannot be avoided and may be subject to further impact, the Project Archaeologist shall evaluate the resource and determine whether it is (1) eligible for inclusion in the NRHP and is thus a historic property for the purposes of the NHPA and NEPA; (2) eligible for the CRHR and thus a historical resource for the purposes of CEQA; (3) a "unique" archaeological resource as defined by CEQA; (4) a Tribal resource as defined by AB 52. If the resource is determined not to be significant under any of these four categories, work may commence in the area following collection (as appropriate) and recording, including mapping and photography, of the archaeological materials or features. 4) If the resource meets the criteria for any or all of the categories described in CUL MM 3 (3), work shall remain halted, and the Project Archaeologist shall consult with LA-RICS Authority staff regarding methods to ensure that no substantial adverse changes occur. Preservation in place (i.e., avoidance) is the preferred 	<p>Tribal Cultural Resources, item b)</p>

Mitigation Measure	Impact
<p>method of ensuring no substantial adverse impacts occur on historic properties/historical resources and shall be required unless other equally effective methods are agreed upon among the Project Archaeologist, the Authority, and any other stakeholders. If the archaeological material appears to represent a site – defined as three or more artifacts and/or features in an intact deposit – an archaeological test program (Phase II) may be necessary. Associated mitigation measures include, but are not limited to, collection of the archaeological materials, recordation (e.g., DPR Primary Record and Site Forms), and analysis of any significant cultural materials in accordance with a Data Recovery Plan, and curation of artifacts at an approved curation facility. A curation agreement for this Project is already in place with the University of California, Los Angeles, Archaeological Collections Facility at the Fowler Museum. At the completion of the appropriate mitigation measures, a professional-level technical report shall be filed with the appropriate California Historical Resources Information System (CHRIS) Information Center (IC).</p> <p>5) Work at the project location may commence upon completion of the appropriate mitigation treatment(s).</p>	
<p>CUL MM 4: Unexpected Discovery of Human Remains</p> <p>In the event that human remains are unexpectedly encountered, the following procedures shall immediately be followed. This guidance is also provided on the NAHC's website at http://nahc.ca.gov/resources/discovery-of-native-american-human-remainswhat-to-do/.</p> <ol style="list-style-type: none"> 1) All construction activity shall stop immediately, and the Project Archaeologist shall be notified. The Project Archaeologist will contact the Los Angeles (or applicable) County Coroner. The list of California Coroners can be found on the Native American Heritage Commission's website at http://nahc.ca.gov/2015/06/implementation-of-ab52-sample-lettersrequest-for-formal-notification-and-request-for-consultation/. 2) The Coroner has two working days to examine human remains after being notified by the responsible person. If the remains are Native American, the Coroner has 24 hours to notify the Native American Heritage Commission. 3) The Native American Heritage Commission will immediately notify the person it believes to be the most likely descendent of the deceased Native American. 4) The most likely descendent has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods. 5) If the descendent does not make recommendations within 48 hours the owner shall reinter the remains in an area of the property secure from further disturbance, or; 6) If the owner does not accept the descendant's recommendations, the owner or the descendent may request mediation by the Native American Heritage Commission. 	<p>Cultural Resources, item d); Tribal Cultural Resources, item b)</p>
<p>CUL MM 6: Potential Paleontological Resources Plan</p> <p>A Paleontological Resources Monitoring Plan shall be developed and approved prior to construction to guide the activities of monitors during ground-disturbing activities. The plan would include, but not be limited to, a description of the Project location, the regulatory framework, site-specific impact mitigation requirements designed to</p>	<p>Cultural Resources, item c)</p>

Mitigation Measure	Impact
<p>reduce impacts to less than significant, specific locations and construction activities requiring monitoring and/or spot checking, and procedures to follow for construction monitoring and fossil discovery and recovery, and a repository agreement with the Natural History Museum of Los Angeles County or other accredited repository. Mitigation measures that may be implemented to ensure that impacts to paleontological resources would be reduced to less than significant may include but are not limited to the following:</p> <ol style="list-style-type: none"> Worker awareness training on paleontological resources presented to construction personnel prior to the start of construction. The training should include at minimum, the following: <ul style="list-style-type: none"> The types of fossils that could occur at the Project site The procedures that should be taken in the event of a fossil discovery Laws protecting paleontological resources Penalties for destroying or removing paleontological resources. Paleontological monitoring during ground disturbance at all sites with moderate/unknown or high paleontological potential Salvage of significant fossil resources Screen washing of matrix samples for microfossils Laboratory preparation of recovered fossils to the point of identification and curation Identification of recovered fossils to the lowest possible taxonomic order Curation of significant fossils at the Natural History Museum of Los Angeles County or other accredited repository Preparation of a final monitoring report that includes at a minimum the dates of field work, results of monitoring, fossil analyses, significance evaluation, conclusions, locality forms, and an itemized list of specimens. <p>The Plan shall be submitted to the Authority for review and approval and finalized at least 14 days prior to the start of construction.</p>	
<p>CUL MM 7: Paleontological Resources Monitoring</p> <p>Paleontological monitoring shall be conducted by a qualified paleontological monitor who has demonstrated experience in the collection and salvage of fossil materials. An undergraduate degree in geology or paleontology is preferable but is less important than documented experience performing paleontological monitoring and mitigation. The monitor will work under the supervision of a Principal Paleontologist.</p> <p>The qualified professional paleontological monitor shall be present during ground disturbance at all sites with moderate/unknown or high paleontological potential, and as specified in the Paleontological Resources Monitoring Plan prepared in accordance with CUL MM 6. The monitor shall be present during all subsurface excavation for tower or monopole foundations and during grading for access roads and structure foundations. Based on the specific site conditions observed during monitoring (type of sediment impacted, previous disturbances, nature of site conditions), the Principal Paleontologist may reduce or increase monitoring efforts in consultation with the Agency.</p>	<p>Cultural Resources, item c)</p>

Mitigation Measure	Impact
<p>In the event that a previously unidentified paleontological resource is uncovered, the following actions shall be taken:</p> <ol style="list-style-type: none"> 1) All ground-disturbing work within 50 feet of the discovery shall be halted. A qualified paleontologist shall divert or direct construction activities in the area of an exposed fossil in order to facilitate evaluation and, if necessary, salvage of the exposed fossil. Work shall not resume in the discovery area until authorized by the qualified paleontologist. 2) The paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. 3) If the resource cannot be avoided and may be subject to further impact, the paleontologist shall evaluate the resource and determine whether it is “unique” under CEQA, Appendix G, Part V. If the resource is determined not to be unique, work may commence in the area. 4) If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with LA-RICS Authority staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource. Preservation in place (i.e., avoidance) is the preferred method of ensuring that no substantial adverse impacts occur to the resource and shall be required unless other equally effective methods are available. Other methods include ensuring that the fossils are scientifically recovered, prepared, identified, catalogued, and analyzed according to current professional standards. 5) Due to the small nature of some fossils, a fine mesh screen may be used at the discretion of the paleontologist to screen matrix test samples on site during monitoring. Additionally, bulk matrix samples may be collected and transported to a laboratory facility for processing. 6) Provisions for preparation and identification of any fossils collected shall be made before donation to a suitable repository. 7) All recovered fossils shall be curated at the Natural History Museum of Los Angeles County, or a local accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines standards. Work may commence upon completion of the appropriate treatment and the approval from the Authority. 	
<p>HAZ MM 3: Fire Management Plan</p> <p>Prior to construction activity, the Authority must work with the agency responsible for fire protection in the jurisdiction where the site is located to develop and implement a fire management plan for use during construction activity. The plan will identify Project locations, project descriptions, anticipated construction activities, limitation of activities during periods of elevated fire risk (e.g., “red flag” days), level of suppression equipment required on site, training requirements, and points of contact.</p>	<p>Hazards and Hazardous Materials, item h)</p>

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Term
AB	Assembly Bill
Authority	Joint Powers Authority
APE	area of potential effects
APSA	Aboveground Petroleum Storage Act
BACT	Best Available Control Technology
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CO ₂	carbon dioxide
CBC	California Building Code
CDC-CGS	California Department of Conservation, California Geological Survey
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CMU	concrete masonry unit
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
C/NR	Conservation and Natural Resources
County	Los Angeles County
CRHR	California Register of Historical Resources
EIR	Environmental Impact Report
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FT	foot/feet
FTA	Federal Transit Administration
GHG	greenhouse gas
HASAP	Hazard Assessment Safety Action Plan
HVAC	heating, ventilation, and air conditioning
INDWT	Industry Water Tanks
kW	Kilowatt
LACDPW	Los Angeles County Department of Public Works
LACSD	Los Angeles County Sanitation District
LADRP	Los Angeles County Department of Regional Planning
LA-RICS	Los Angeles Regional Interoperable Communications System

Acronym/Abbreviation	Term
LED	light-emitting diode
LMR	Land Mobile Radio
LOS	level of service
LST	local significance threshold
µg/m ³	microgram per cubic meter
MM	mitigation measure
MMRP	Mitigation Monitoring and Reporting Plan
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO _x	nitrogen oxides
NO ₂	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O ₃	Ozone
Pb	Lead
PBF	physical or biological feature
PCE	primary constituent element
PM ₁₀	particulate matter less than 10 microns in size
PM _{2.5}	particulate matter less than 2.5 microns in size
ppm	parts per million
PPV	peak particle velocity
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SEA	Significant Ecological Area
SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
SRA	Source/Receptor Area
SUV	sport utility vehicle
TCNS	Tower Construction Notification System
U.S.	United States
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WEAP	Worker Environmental Awareness Program

1 ENVIRONMENTAL CHECKLIST FORM

1. Project title:

Los Angeles Regional Interoperable Communications System (LA-RICS), Land Mobile Radio (LMR) Site Industry Water Tanks (INDWT)

2. Lead agency name and address:

Los Angeles Regional Interoperable Communications System Joint Powers Authority
2525 Corporate Place, Suite 200
Monterey Park, CA 91754

3. Contact person and phone number:

Nancy Yang (323) 881-8049

4. Project location:

South of the City of Diamond Bar in an unincorporated area of Los Angeles County (County). The Project site lies between Brea Canyon to the west and northwest and Tonner Canyon to the south and east. The Project site is on a hilltop, and includes a parcel adjacent to existing water tanks that are owned by the City of Industry where the proposed telecommunications facility would be constructed. The Project site also extends generally southeast and southwest from these water tanks along unpaved roads to include two route options for proposed power lines to the site from existing utility power interconnection points, although only one of these options would be used. Both of these areas extend into the County of Orange (**Figure 1-1 — INDWT Project Site Location**).

5. Project sponsor's name and address:

LA-RICS Joint Powers Authority (Authority)
2525 Corporate Place, Suite 100
Monterey Park, CA 91754

6. General plan designation:

Los Angeles County: Rural Land 10 and Rural Land 20; Orange County: General Agriculture

7. Zoning:

Los Angeles County: Heavy Agriculture (A-2-1, A-2-2); Orange County: A1(O)

8. Description of project:

Background

Los Angeles County experiences many man-made and natural incidents that require a rapid, coordinated response among the region's first and secondary responders. Public safety services in Los Angeles County are provided by more than 80 public safety agencies represented by approximately 34,000 first

Figure 1-1 — INDWT Project Site Location



responders and 17,000 secondary responders serving more than 10 million residents, tourists, and commuters in the region. Many of these agencies use communications systems that have exceeded their useful life (i.e., equipment and programming are no longer supported by vendors). Due to the numerous systems in use and the number of agencies, interagency communication is challenging.

To help address these needs in the Los Angeles region, the Authority was formed under a Joint Powers Agreement in 2009 with the mission to develop and operate a regional public safety communications system that provides interoperable communication on a single platform using integrate voice and data technologies for the region's first and secondary responders. Much of the LA-RICS LMR system, currently under construction, was the subject of an environmental impact report (EIR) certified in April 2016 by the Authority (SCH# 2014081085). In addition, many of the sites in the system qualified for a statutory exemption granted by the State of California at Public Resources Code (PRC) 21080.25 specifically for the LA-RICS system. Notices of Exemption have been filed for 31 independent sites since 2014. Site INDWT does not qualify for the LA-RICS statutory exemption, because it does not meet all of the criteria for Statutory Exemption identified at PRC 21080.25. Specifically, it does not currently contain communications equipment.

The LA-RICS LMR system is a wireless communications system for mobile and portable devices such as walkie-talkies and two-way radios. The LA-RICS LMR system consists of antennas and support equipment at independent sites located throughout Los Angeles County. The LMR sites in the system contain the infrastructure and equipment necessary to provide day-to-day voice and narrowband data radio communications coverage for emergency responders throughout the County. These sites are widely dispersed across the County in both urban and rural settings and include mountain peaks and coastal and high desert locations, as well as downtown Los Angeles.

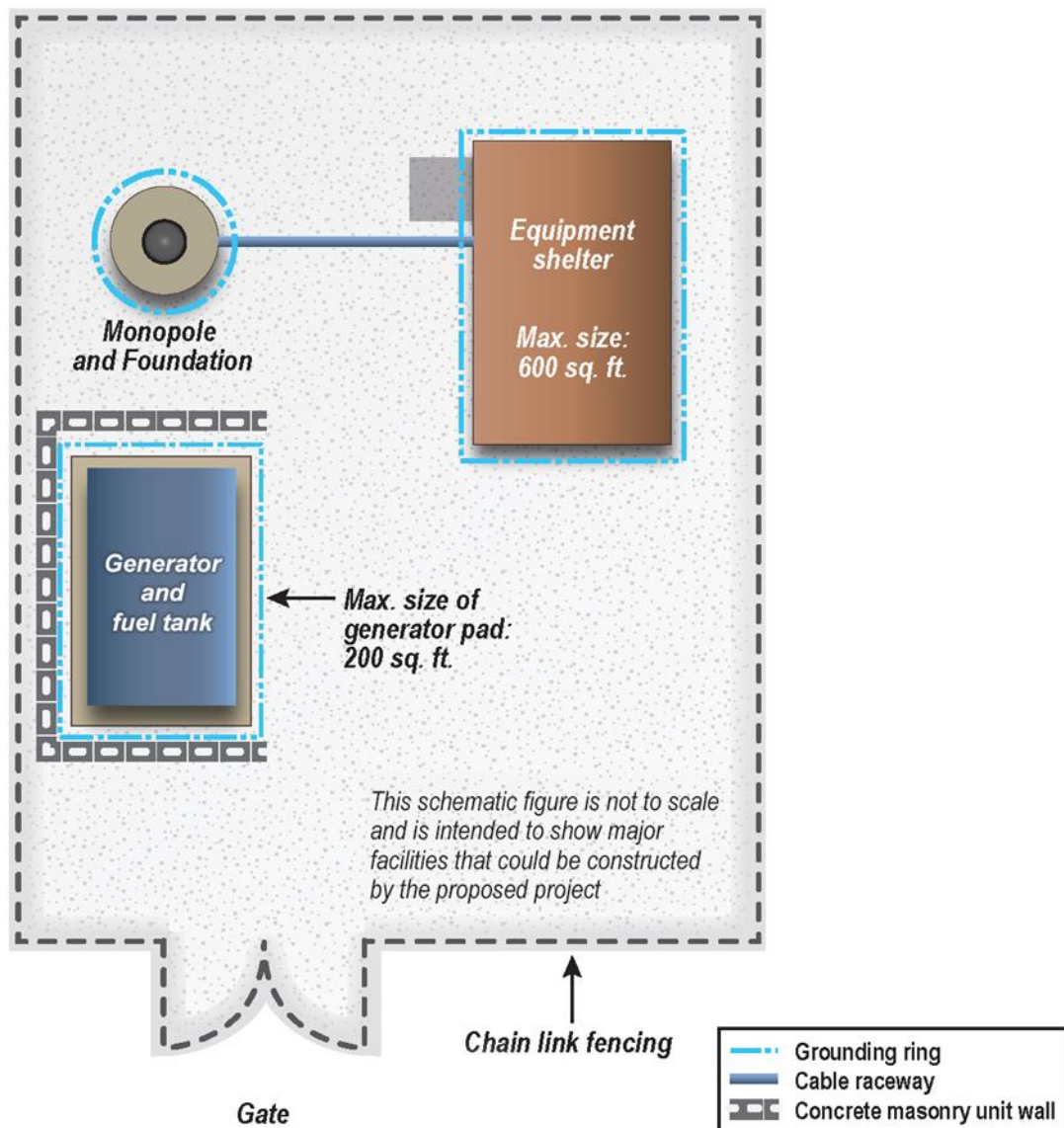
Proposed Project

The proposed Project is the installation and operation of LMR Site INDWT. The proposed Project would provide LMR coverage to a portion of Los Angeles County not served by sites in the current LA-RICS LMR system and would provide significant improvements to emergency response and day-to-day operations for public safety agencies in the areas it would serve. Once developed and operational, Site INDWT could operate independently from the overall LMR system. Construction and operation of Site INDWT would not commit or compel the Authority to construct any additional LMR facilities or infrastructure. The major components of the proposed Project are discussed below.

Proposed Project Infrastructure

The proposed Project site is currently undeveloped and located along an unpaved (i.e., dirt and narrow) road. A fenced area containing two existing water tanks is near to but not contiguous with the proposed site. Because the site is undeveloped, all proposed facility components would require new construction, and no demolition of existing infrastructure is expected to occur. Site INDWT would consist of three main components: a steel pole structure (also known as monopole) for mounting antennas, an equipment shelter to house the communications and auxiliary equipment, and an emergency backup generator and fuel tank. A conceptual site layout showing these components is provided in **Figure 1-2 – Conceptual Site INDWT Facility Layout**. The site would also require installation of electrical distribution lines to connect it to the power grid. The infrastructure proposed for development at Site INDWT is discussed below.

Figure 1-2 – Conceptual Site INDWT Facility Layout



Monopole. An up to 70-foot-tall monopole would be installed at Site INDWT. The monopole would be a free-standing structure with a single footing and would be installed by drilling a caisson. The width of the monopole and depth of the caisson would vary based on site conditions which have not yet been investigated; but, in general, a 70-foot monopole typically would have a diameter at ground level of approximately 6.5 feet and require a caisson at least 36 feet deep or a 10-foot-deep concrete mat foundation. An up to 15-foot-tall lightning rod would extend above the top of the new monopole.

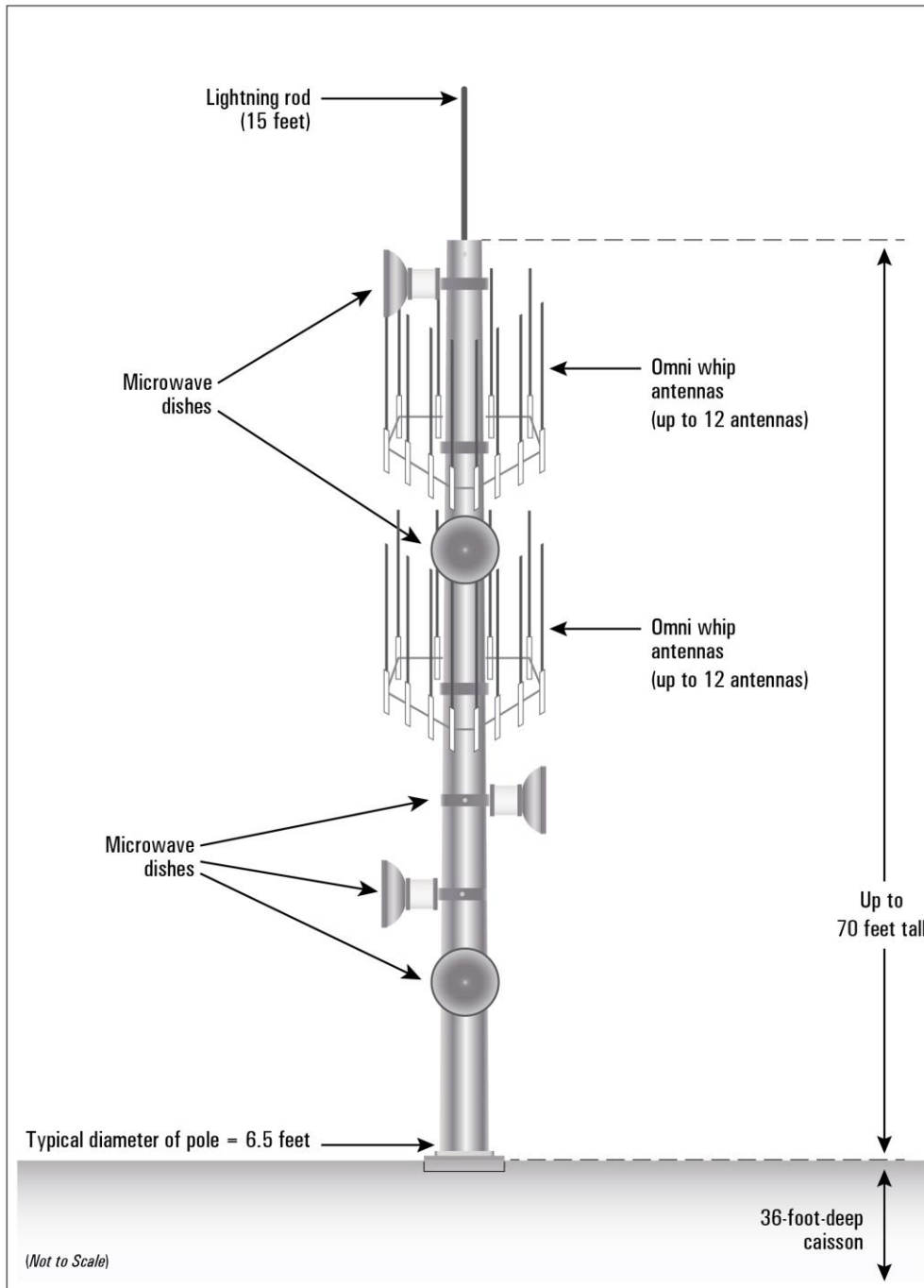
Whip and microwave antennas would be installed on the monopole. Whip antennas are narrow, cylindrical structures, typically 10 to 15 feet long, designed to provide 360-degree radio signal patterns and support two-way radio communications. Microwave antennas are parabolic dishes that direct line-of-sight signals between sites to provide connectivity among sites in the LMR system. Microwave antennas typically range from 2 to 12 feet in diameter. The monopole would support up to 20 whip and 5 microwave antennas. A typical LMR system monopole is shown in **Figure 1-3 – Typical Monopole with Antennas.**

Equipment Shelter. The site would require a shelter to house the radio communication equipment. The shelter would be up to 600 square feet and would either be concrete masonry unit (CMU) construction built on site or a prefabricated shelter delivered to the site. The shelter would be installed on a concrete pad up to 600 square feet in area and up to 18 inches deep. The shelter would require heating, ventilation, and air conditioning (HVAC) to control interior temperature and humidity. The equipment shelter would require exterior security lighting equivalent to a 100-watt light bulb. The shelter would have a valve-regulated (sealed) gel cell, or absorbed glass mat type lead-acid battery, or fuel cell battery emergency power system. The shelter roof would be designed so that burning embers will not collect under eaves. The shelter would be constructed in accordance with applicable building codes.

Emergency Generator and Fuel Tank. Site INDWT would require backup power, which would be provided by an emergency diesel generator up to 125 kilowatts (kW). The emergency generator would be mounted outdoors on a concrete pad, potentially with curbs. A CMU wall would be installed around the generator, or the generator may be installed within its own shelter or building enclosure. The new generator foundation size would not exceed 200 square feet. The emergency generator would be equipped with spark arrestors and cooling and heating mechanisms. Automatic transfer switches would be installed to allow automatic transfer of power sources in the event of an electrical utility outage and would be capable of being monitored remotely. The generator would have a remote start function. The generator would be permitted in accordance with *SCAQMD Regulation XIV, Rule 1470 (2012) – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines.*

The generator would be fueled by an up to 4,000-gallon, double-walled diesel fuel tank. The tank would be constructed in accordance with current codes and standards, and installation would include secondary containment as applicable based on tank size. The fuel tank would require an up to 400 square foot foundation and may be located within the same enclosure as the generator or may be located separately. The fuel tank would be sized to allow for up to 168 hours of operation at full-rated load. Routine testing of emergency generators would occur during scheduled maintenance of the site.

Figure 1-3 – Typical Monopole with Antennas



Utilities. Electricity is not available at Site INDWT; therefore, an electrical line would need to be installed between the proposed telecommunications facility and the electrical utility grid.

Two potential power alignment options have been identified as shown in **Figure 1-1**, only one of which would be used. The local utility provider, Southern California Edison, would evaluate the potential power alignment and identify their preferred power alignment to the Authority at a later date. Because this decision has not been made at this time, this analysis considers both options so that whatever alignment is selected will have been addressed under CEQA. One option extends southeasterly approximately 4,500 linear feet from the Project site where it would connect to an existing power line located along Tonner Canyon Road. The other option extends southwesterly up to approximately 5,500 linear feet from the Project site where it would connect to an existing power line. The new electrical line would be installed under the existing road bed or overhead on new wooden poles installed adjacent to the existing road. For an overhead line, new poles would be installed within 5 feet of the edge of the road, with each pole approximately 200 feet apart. Poles could be placed closer together where the road sharply turns, and each of these poles would likely be supported by a guy wire for greater stability. Guy lines would be secured to the ground up to 20 feet from the pole. If placed underground, the new electrical line would be installed in a conduit placed in a trench approximately 36 inches below the grade of the roadbed. If required, telecommunications optical fiber could be installed with or near the proposed new overhead or underground electrical infrastructure. The site would not require water or natural gas utilities, and no wastewater would be generated.

Other Components. In addition to the components described above, other required infrastructure could include:

- **Grounding.** The new foundations for monopole, equipment shelter, and emergency generator would be surrounded by a subsurface ground ring installed in a trench approximately 30 inches below grade to protect persons and equipment from power surges and lightning strikes.
- **Cable Raceway.** Communications cables to connect the antennas on the monopole to the radio equipment in the shelter would be routed via an aboveground cable tray supported by steel posts at regular intervals or via underground conduits in a trench approximately 36-48 inches below grade.
- **Fencing.** The monopole, equipment shelter, generator and fuel tank would be enclosed by an up to 12-foot-high chain link fence for security. The fence would include swing gates to accommodate access for maintenance vehicles and would be locked for security when no one is on site. The total fenced area of Site INDWT would be less than 5,000 square feet.
- **Access, Parking, and Staging Areas.** The site would be accessed using existing paved and unpaved roads. No new road or off-site improvements would be required to access Site INDWT. Some improvements to existing access roads at the telecommunications site may be required to improve access or allow for creation of vehicle parking and equipment staging areas. Only existing previously disturbed areas or areas where former habitat has been degraded by grazing would be used for access roads, turnarounds, and parking areas; and aggregate may be applied in these areas to stabilize the ground or control dust.
- **Lighting.** The new equipment shelter would require exterior security lighting equivalent to no more than a 100-watt light bulb. Lighting for air navigation safety may be required by the

Federal Aviation Administration (FAA) depending on site conditions and location. If required, the new monopole would be lighted and/or marked consistent with FAA Advisory Circular, AC 70/7460-1L Obstruction Marking and Lighting, for visibility to aircraft, as applicable. If tower obstruction lighting is installed on the monopole, it may include red or white light-emitting diode (LED) lamps or strobe lights that are steady and/or flashing.

Construction

If approved, construction of Site INDWT would be expected to begin in 2018 and be completed by the end of 2019. Prior to construction the site would undergo a Phase I environmental site assessment. The Phase I environmental site assessment would be conducted in coordination with the property owner after initial site design review has been completed. If it is determined that construction activities could encounter impacted soils or impacted groundwater, the contractor would prepare a site-specific Health and Safety Plan that meets the requirements of 29 CFR 1910 for worker safety. If the extent or the nature of the impacted soil or groundwater cannot be determined from available documents, a Phase II investigation would be completed to determine if the soils and/or groundwater that may be encountered during construction are impacted. The Phase II investigation would also determine the nature of contaminations that may be encountered and would also address disposal alternatives and procedures for any impacted soil that may be encountered or groundwater which may need to be removed. Any identified hazards affecting construction or operation of the site would be abated prior to initiation of construction. If abatement were infeasible, Site INDWT would be eliminated from consideration.

Table 1-1 summarizes the construction activities associated with Site INDWT. Construction of Site INDWT may result in substantially less disturbance or excavation than the maximum quantities listed in the table, but the analysis assumes maximum disturbance to be conservative.

Table 1-1: Anticipated Construction Activities

Disturbance Type	Disturbance Amount
Temporary Disturbance (includes staging)	Temporary disturbance area (includes staging): Up to 5,000 square feet
Permanent Disturbance	Permanent disturbance area: Up to 4,000 square feet
Excavation (including geotechnical investigation)	Excavation: Up to 150 cubic yards removed
Trenching and augering	Proposed trenching for underground conduits to accommodate power, grounding rings, and/or fiber up to 800 linear feet, approximately 36-48 inches below grade, up to 24 inches wide. If electrical power lines are installed underground, an additional up to 6,000 linear feet of trenching could be required. If overhead lines are constructed, as many as fifty 3-foot-wide and 20-foot-deep holes may be drilled for pole set.
Foundation Construction	Proposed foundations include: Up to 8-foot-diameter by 36-foot-deep drilled caisson with concrete cap for monopole support; or up to 300-square-foot by 10-foot-deep concrete mat foundation Up to 600-square-foot by 18-inch concrete slab, or raised foundation for equipment shelter Up to 200-square-foot by 18-inch concrete slab for generator Up to 400-square-foot by 18-inch concrete slab for fuel tank.

Estimates of construction equipment and duration of use at Site INDWT are described in **Table 1-2**.

Table 1-2: Project Site Construction Equipment Usage

Equipment Type	Specification (Brake Horsepower)	No.	Hours Per Day	Trips To/ From Site	Days on Site ¹	Usage
Personnel and Tool Delivery						
F250 Antenna and Line Truck	306	4	0.067	120	30	Haul equipment
F550 Civil Truck	306	1	0.067	30	30	Haul personnel
Site Preparation						
Mini Excavator	22.9	1	4	1	15	Cut and fill work
Excavation						
Auger Drill Rig ²	205 [206] ²	1	3	1	2	Install fences, excavate foundation holes and bores, install power poles
Excavator ¹	153	1	5	1	10	Trenching
Cat Skid Steer	73	1	4	1	10	Move excavated soil on site
2,000 Gallon Water Truck	210	1	1	3	10	Dust control
Pad Construction						
Concrete Truck	450	1	1	19	19	Pour concrete
Monopole/Shelter and Equipment Installation						
3-Ton Flatbed Truck	400	1	3	1	2	Haul materials and equipment
250-Ton Crane	530	1	8	2	4	Monopole/shelter/fuel tank installation
8,000 Pound Reach Fork	60	1	4	2	5	Access structures, string conductor, modify structure arms, tree trimming/ removal, etc.
Portable Generator ²	84 [7] ²	1	6	1	10	Operate power tools
¹ Maximum six-week total construction duration. ² Horsepower and usage data referenced from <i>Broadband Technology Opportunities Program Final Environmental Assessment, Los Angeles Regional Interoperable Communications System LTE System</i> (LA-RICS LTE, 2008).						

Typical construction equipment required would include four-wheel drive vehicles, antenna and line trucks, water trucks, excavators, skidsters, cranes, forklifts, dump trucks, and concrete trucks.

The Project site would be graded so that water drains away from the installed structures. A minimum of a 2-percent grade would be provided. After completion of construction and grading, the fenced facility would be covered in aggregate (gravel) from a permitted local source. Areas disturbed during construction that are not to be permanently covered by aggregate would be seeded to prevent erosion.

Excavated material of suitable quality could be used as backfill on site. Unsuitable or excess excavated material would be removed for disposal off site at an appropriate facility.

Site INDWT would be accessed via existing paved and unpaved roads. No road improvements or new road construction would occur.

Included in the proposed Project design are best management practices (BMPs) that have been developed to avoid or minimize impacts to environmental resources that may be present on the proposed Project site. BMPs represent best professional practices and/or use of accepted technology to ensure desired regulatory compliance is achieved and are often included in building permits or other regulatory conditions. Examples of BMPs applicable to the proposed Project are provided below.

- Apply water to the construction site as needed to comply with Rule 403 of the applicable air quality management district.
- Enclose or water down exposed dirt storage piles.
- Minimize the disturbed area and preserve vegetation to the maximum extent possible.
- Phase construction activities, to the extent possible, to reduce disturbed areas and time of exposure.
- Plan the development to fit the topography, soils, drainage pattern, and natural vegetation of the site.
- Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive or unnecessary disturbances and exposure. Minimize the size of staging areas to the extent practical.
- Avoid excavation and grading during wet weather.
- Use berms and drainage ditches to divert runoff around exposed areas. Place diversion ditches across the top of cut slopes.
- Control stormwater flowing to and through the project site.
- Protect slopes by using measures such as erosion control blankets, bonded fiber matrices, turf reinforcement mats, silt fences (for moderate slopes), etc.
- Temporarily protect storm drain inlets until the site is stabilized. Protect drainage courses, creeks, or catch basins with fiber rolls, silt fences, sand/gravel bags, and/or temporary drainage swales if on-site sediment control measures are not adequately preventing stormwater runoff.
- Use appropriate erosion control measures to reduce siltation and runoff of contaminants into wetlands and adjacent ponds, streams, or riparian woodland/scrub.

- Conduct routine inspections of erosion control measures especially before and immediately after rainstorms, and repair if necessary.
- Establish stabilized construction entrances/exits (e.g., large crushed rocks, stone pads, steel wash racks, hose-down systems, and pads).
- Clean up leaks, drips, and other spills immediately to avoid soil or groundwater contamination. Cleanup of a spill on soil would include removing the contaminated soil using the emergency spill cleanup gear. Contaminated soil and disposable gear used to clean up a hazardous materials spill would be properly disposed of following state and federal hazardous material disposal regulations.

Operations and Maintenance

No on-site staff would be required to operate the LMR equipment at Site INDWT. Operational activities would include occasional routine inspections, maintenance, and repairs. Maintenance activities would involve both routine preventive maintenance and emergency procedure testing, including emergency generator testing, to maintain service continuity. Emergency generators would be tested on a monthly basis. The test run time each month would be approximately one hour. Fuel tanks would require occasional refilling. LMR structures and equipment would be inspected annually, at a minimum, for corrosion, equipment misalignment, loose fittings, and other common mechanical problems. Maintenance activities may require use of bucket trucks (man-lifts), standard vans, or utility pickup trucks, depending on the scope of maintenance. The LMR components may need to be repaired or replaced to maintain uniform, adequate, safe, and reliable service. Equipment replacement or repair that cannot be diagnosed and performed remotely may require a technician on site, typically in a standard van or utility pickup truck. Where replacement or repair involves installed antennas, a four-person crew with one truck, a boom (aerial lift) truck, and an assist van or sport utility vehicle (SUV) might be required.

The site would continually draw power for LMR operations and security and safety lighting (including any aviation safety or obstruction lighting that might be required by FAA).

9. Surrounding land uses and setting:

Site INDWT is located in an undeveloped area that is used for cattle grazing. The proposed facility location is adjacent to two water tanks owned by the City of Industry that are located to the northeast. The area is surrounded by the Orange Freeway (State Route 57) located approximately one-half mile to the west and northwest of the proposed facility site, residential development located approximately one-half mile to the north, the Boy Scouts of America Firestone Scout Reservation located approximately three-quarters of a mile to the east and southeast, and facilities related to oil extraction located along Tonner Canyon Road approximately a mile to the south. A radio antenna farm with towers more than 400 feet tall is located approximately three-quarters of a mile to the southwest. An electrical transmission line with large lattice support structures runs east-west approximately one-quarter mile south of the site.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

- Federal Emergency Management Agency – National Environmental Policy Act (NEPA) and Environmental and Historic Preservation compliance approval
- Federal Aviation Administration - Hazard Determination; Form 7460-1 Notice of Proposed Construction or Alteration (if required)
- Federal Communications Commission - Antenna Structure Registration (if required)
- U. S. Fish and Wildlife Service – Endangered Species Act Section 7 informal consultation
- California State Historic Preservation Officer – National Historic Preservation Act (NHPA) Section 106 consultation
- South Coast Air Quality Management District - Air permit for facility back-up generator
- Los Angeles Regional Water Quality Control Board – National Pollutant Discharge Elimination System (NPDES) permit for groundwater dewatering during construction (if required)
- County of Los Angeles – Conditional Use Permit, Building Permit
- City of Industry – Site Access Agreement

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

No California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed Project requested consultation pursuant to California PRC section 21080.3.1 (Assembly Bill [AB] 52) for the Site INDWT Project area. However, after consultation with the Native American Heritage Commission (NAHC) (Totton, Gayle 2017), tribal consultation was conducted using traditional paths, which included requesting a search of the NAHC's Sacred Lands File and a list of California Native American tribes with interest in the INDWT geographic area (NAHC 2017). The NAHC was contacted using their required online form format on October 22, 2017, and their letter response was received by email on October 25, 2017. The NAHC stated that the records search of the Sacred Lands File was negative (i.e., no sacred lands were identified at the Project site); however, the letter further indicated that the area of potential effects (APE) is sensitive for cultural resources (NAHC 2017). Each tribe on the NAHC list was subsequently contacted through their preferred method of communication (e.g., direct mailings, including follow-up telephone calls and emails). In addition, because the Federal Emergency Management Agency (FEMA) as the federal funding source for the Project has deferred Section 106 compliance to the Federal Communications Commission (FCC), the proposed INDWT tower location was entered into the FCC's Tower Construction Notification System (TCNS), which notifies any federally recognized tribes having an interest in the INDWT geographic area. The federally recognized tribes were consulted using the preferred methods stated in the various TCNS responses, including submittal of INDWT-specific information (maps, photographs, survey results) provided by email, direct mailings, or through upload to their website, and through follow-up telephone conversations, as needed. Using this NAHC-approved combined method for tribal outreach, a total of 14 federally recognized and other California tribes were consulted for the Site INDWT Project area. Tribal consultation with the 14 tribes was completed in January 2018. The 14 tribes consulted are:

- Gabrieleño Band of Mission Indians-Kizh Nation
- Gabrieleño/Tongva San Gabriel Band of Mission Indians
- Gabrielino/Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Juaneño Band of Mission Indians
- Fernandeano Tataviam Band of Mission Indians
- Eastern Shoshone Tribe
- Skull Valley Band of Goshute Indians
- San Manuel Band of Mission Indians
- Cahuilla Band of Indians
- Los Coyotes Reservation
- Santa Ynez Band of Mission Indians
- Soboba Band of Luiseno Indians

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2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities / Service Systems |
| <input type="checkbox"/> Mandatory Findings of Significance | | |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Signature

Date

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3 ENVIRONMENTAL ISSUES

3.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

The area considered for impacts to aesthetics is one-half mile from the proposed monopole site. Photographs of the Project site are included in Appendix A.

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. No scenic vista has been identified in the area. The Project site is surrounded by unimproved, privately owned vacant parcels and is not accessible to the general public. No known trails in the area provide views of the site. The site is also more than 0.5 mile from an eligible scenic highway (see analysis under 3.1 b below). The site is not a significant ridgeline identified in the Los Angeles County General Plan (LADRP 2014b).

Construction. Construction activities would not generally be visible to viewers in adjacent areas and would not have a substantial adverse impact on a scenic vista as none have been identified in the area.

Operational. The Project would result in an up to 70-foot monopole on a hilltop that would be visible from some distance, particularly the south-facing slopes of the hillside northwest of State Route (SR) 57, and the north-facing slope of the hillside southeast of Tonner Canyon Road, where the Firestone Scout Reservation is located. The site's viewshed also includes a residential area approximately 0.5 mile northeast, as well as some areas of the hillside to the southeast of the site. The new monopole would be visible from portions of the nearby Firestone Scout Reservation; however, the monopole location is more than 0.5 mile away from the nearest campsites and other developed areas on the reservation. Rolling hills adjacent to the west and northwest of the site, as well as dense vegetation, preclude views of the site from SR 57, Brea Canyon Road, and the residential area.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact.

Construction. The Project area does not contain any designated state scenic highways. No rock outcropping or historic buildings are in the Project area, and no trees would be removed during construction. Construction of the proposed Project would not result in damage to any scenic resources.

Operational. The Project area does not contain any designated state scenic highways. The nearest designated state scenic highway is the portion of SR 91, the Riverside Freeway, located between SR 55 and SR 241. This designated segment is located more than 7 miles to the south of the Project site. SR 57, the Orange Freeway, in the Brea Canyon area (between Lambert Road on the south and SR 60 on the north), is an eligible state scenic highway but is not officially designated. The proposed monopole would be visible from some locations along the eligible portion of the freeway; however, the site is approximately 0.5 mile from SR 57 at its closest point. Operation of the proposed Project would not result in damage to any scenic resources.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The proposed site is located in an unincorporated area identified as South Diamond Bar in the *Los Angeles County 2035 General Plan* (County of Los Angeles 2015). South Diamond Bar is designated as an agricultural zone according to the Los Angeles County Department of Regional Planning. The land, which is owned by the City of Industry, has no commercial or residential properties (Los Angeles Times 2017). The existing visual character reflects the current agricultural land use in the area. Land cover includes primarily shrub/scrub intermixed with evergreen forest (EPA 2017). A few deciduous trees, reaching approximately 20 to 30 feet tall, are located adjacent to the site, as well as two white water tanks enclosed within a chain link fence; the tanks are approximately 10 to 20 feet tall (see **Figure 1-2**). A radio antenna farm is located approximately 0.75 mile to the southwest. At least five radio antennas are visible from SR 57 and Brea Canyon Road, which parallels SR 57. These antennas reach heights of 476 feet. An electrical transmission line travels east-west approximately 0.25 mile south of the Project site, connecting to a lattice support tower located at roughly the same elevation as the proposed telecommunications site. As mentioned above, SR 57 is located approximately 0.5 mile from the site. Although the site and the area surrounding is generally undeveloped, the presence of the water tanks, transmission line towers, radio antennas, and highway introduce industrial and transportation elements into the scene. The radio antennas and transmission line towers are conspicuous vertical elements along the ridgeline. No outstanding natural or cultural elements are present. The visual quality of the overall scene is typical of the general region.

Construction. Construction activities would result in the temporary presence of construction equipment on the site. The equipment would be located adjacent to the existing water tanks. The presence of this equipment would not substantially degrade the existing visual character or quality of the site and its surroundings.

Operational The presence of a potentially 70-foot tall monopole on a hilltop would not substantially degrade the existing visual character or quality of the site and its surroundings. The monopole would be consistent with other vertical elements that currently exist along the ridgeline and would be substantially shorter than the grouping of existing radio antennas (a maximum of 70 feet high compared to 476 feet high) and the electrical utility transmission line

lattice support towers that are more than 100 feet high. The proposed telecommunications site would also be visually compatible with the two adjacent water tanks, particularly the equipment shelter and generator. Although the site would introduce a new man-made element into a primarily undisturbed area, the site's visual character and quality would not substantially change due to the presence of similar existing structures.

- d) **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

Less Than Significant Impact.

Construction. Construction activities are expected to occur during daylight hours. Construction activities would not include use of equipment or materials that would be sources of substantial light or glare that could adversely affect views in the area.

Operational. The proposed monopole may require lighting in accordance with FAA requirements. Although the site is in an undeveloped area, it is adjacent to densely developed areas to the north and south where lighting typical of urban areas is present. The radio antennas located to the southwest of the site have red air navigation obstruction hazard lighting. If FAA lighting is required, it would be intended to be visible to pilots for purposes of aircraft operations safety and would not result in illumination of areas not currently illuminated. Based on the nature of tower safety lighting (LED white or red solid or blinking lights), proposed Project facilities would not introduce a substantial new source of light or glare. The monopole and other facilities would not have reflective surfaces that would result in daytime glare. The Project would not result in new sources of substantial light or glare that could affect day or nighttime views.

3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to nonforest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to nonforest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?**

No Impact. The site is not located on an area mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program (FMMP) (FMMP 2014).

- b) **Conflict with existing zoning for agricultural use or a Williamson Act contract?**

No Impact. The proposed Project site is not under a Williamson Act contract (State of California Department of Conservation 2016). The proposed Project site is located in an area zoned Heavy Agricultural (A-2) by Los Angeles County and A1(O) by Orange County. The Los Angeles County Code Title 22 (Section 22.16.030) indicates that radio towers are allowed in Zone A-2 with a conditional use permit. Therefore, the Project would not conflict with the agricultural use zoning. Installation of power lines would occur within or along existing roads and would not conflict with the agricultural zoning designation of either the Los Angeles County or Orange County portion of the power run alignment.

- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section**

4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. Site INDWT is not used for or zoned for forest land, timberland, or timberland production.

d) Result in the loss of forest land or conversion of forest land to nonforest use?

No Impact. Site INDWT is not forest land. No trees would be removed to construct or operate the Project.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to nonforest use?

No Impact. The proposed telecommunication site would occupy less than an acre of land that is currently being grazed. Although the site is currently being used for grazing, it is not identified as Grazing Land in the FMMP. The Project would not convert Farmland or forest land to other uses.

3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

The proposed Project site is located in the South Coast Air Basin (SCAB), within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD has developed emissions thresholds for projects with air quality impacts. The thresholds presented in **Table 3.3-1** were determined to be appropriate for assessing the significance of both construction and operational air

quality impacts for the proposed Project. The listed thresholds were used to evaluate the Project's impacts on air quality, specifically as they relate to significance criteria 3.3 a) through 3.3 d).

Table 3.3-1: SCAQMD Significance Thresholds

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NO _x	100 lbs./day	55 lbs./day
VOC	75 lbs./day	55 lbs./day
PM ₁₀	150 lbs./day	150 lbs./day
PM _{2.5}	55 lbs./day	55 lbs./day
SO _x	150 lbs./day	150 lbs./day
CO	550 lbs./day	550 lbs./day
Pb	3 lbs./day	3 lbs./day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	<ul style="list-style-type: none">Maximum Incremental Cancer Risk greater than or equal to 10 in 1 millionCancer Burden greater than 0.5 excess cancer cases (in areas greater than or equal to 1 in 1 million)Chronic & Acute Hazard Index greater than or equal to 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO ₂ eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants ^d		
NO ₂ 1-hour average Annual arithmetic mean	SCAQMD is in attainment: project is significant if it causes or contributes to an exceedance of the following attainment standards: <ul style="list-style-type: none">0.18 ppm (state)0.03 ppm (state) and 0.0534 ppm (federal)	
PM ₁₀ 24-hour average Annual average	10.4 µg/m ³ (construction) ^e and 2.5 µg/m ³ (operation) 1.0 µg/m ³	
PM _{2.5} 24-hour average	10.4 µg/m ³ (construction) ^e and 2.5 µg/m ³ (operation)	
SO ₂ 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m ³ (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment: project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Pb 30 day average Rolling 3-month average Quarterly average	1.5 µg/m ³ (state), non-vehicular sources 0.15 µg/m ³ (federal) 1.5 µg/m ³ (federal)	

Table 3.3-1: SCAQMD Significance Thresholds

Pollutant	Mass Daily Thresholds ^a	
	Construction ^b	Operation ^c
^a Source: SCAQMD CEQA Handbook (SCAQMD 1993, Revised March 2015). ^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins). ^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds. ^d Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated. ^e Ambient air quality threshold based on SCAQMD Rule 403. KEY: lbs./day=pounds per day; ppm=parts per million; µg/m ³ =microgram per cubic meter NO _x = nitrogen oxides; NO ₂ = nitrogen dioxide; VOC = volatile organic compounds; PM ₁₀ = particulate matter less than 10 micrometers in size; PM _{2.5} = particulate matter less than 2.5 micrometers in size; SO _x = sulfur oxides; CO = carbon monoxide; Pb = lead; TAC = toxic air contaminant; GHG = greenhouse gases http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (Revised March 2015)		

Estimated air emissions from construction and operation of the proposed INDWT site were calculated for the analysis using similar methodologies detailed in the *Final Environmental Impact Report for the Los Angeles Regional Interoperable Communications System (LA-RICS) Land Mobile Radio (LMR) System* (LMR EIR) (LA-RICS 2016).

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. Air emissions from the proposed Project would result from facility construction activities and from trips to the proposed Project site for maintenance and testing of emergency generators during facility operation. The relevant air quality plan considered in this analysis is the SCAQMD 2016 *Final Air Quality Management Plan* (SCAQMD Plan) (SCAQMD 2016), which is the most up-to-date plan, and the Final 2015 Supplement to the 24-Hour PM_{2.5} SIP (SCAQMD 2015). The purpose of this plan is to demonstrate attainment of the PM_{2.5} 24-hour standard of 35 micrograms per cubic meter (µg/m³) by 2015 within the SCAB, identify measures and actions to fulfill the 8-hour ozone (O₃) State Improvement Plan (SIP) commitments to the federal Environmental Protection Agency (USEPA) to achieve emissions reductions from Best Available Control Technology (BACT), and to demonstrate attainment of the 1-hour O₃ California Ambient Air Quality Standards (CAAQS) by 2022.

Air emissions from construction and operation of the proposed Project were calculated for the following pollutants for comparison to their SCAQMD thresholds as shown in the first part of **Table 3.3-1** under Mass Daily Thresholds: NO_x, ROG (equivalent to regulated VOCs in an outdoor setting), PM₁₀, PM_{2.5}, and CO. Lead (Pb) is not a typical pollutant associated with emissions from construction equipment or generator diesel engine operation and therefore was not included in the emissions calculations. Similarly, SO_x emissions would be negligible and were not quantified.

Construction. Emissions calculated for construction of Site INDWT and a comparison to SCAQMD thresholds are shown in **Table 3.3-2**. Emissions from construction of the site would not exceed SCAQMD thresholds. <http://www.arb.ca.gov/desig/adm/adm.htm>

Table 3.3-2: Construction Emissions for Site INDWT

	SCAQMD Maximum Emissions (lbs/day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Unmitigated Emissions	0.4777	4.7112	4.9551	0.8067	0.2137
Mitigated Emissions	0.1967	2.1683	4.6501	0.6441	0.1332
SCAQMD Threshold	75	100	550	150	55
lbs/day = pounds per day; ROG = reactive organic gases (equivalent to regulated VOCs in an outdoor setting); NO _x = nitrogen oxides; CO = carbon monoxide; PM ₁₀ = particulate matter less than 10 microns in size; PM _{2.5} = particulate matter less than 2.5 microns in size					

Because emissions would not exceed any SCAQMD thresholds either during construction, the Project would not conflict with or obstruct implementation of the SCAQMD Plan.

Operational. Operational emissions from the proposed INDWT site were also estimated and are provided in **Table 3.3-3**. Operational emissions would not exceed SCAQMD significance thresholds.

Table 3.3-3: Operational Emissions for Site INDWT

Emission Category	Maximum Daily Emissions (lbs)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Daily Maintenance	0.0017	0.0035	0.0132	0.0019	0.0007
Generator Testing	0.0027	0.0247	0.0241	0.0011	0.011
Total Daily Emissions	0.0044	0.0282	0.0373	0.003	0.0117
Threshold (lbs/day)	55	55	550	150	55
Exceedance	No	No	No	No	No
lbs/day = pounds per day; ROG = reactive organic gases (equivalent to regulated VOCs in an outdoor setting); NO _x = nitrogen oxides; CO = carbon monoxide; PM ₁₀ = particulate matter less than 10 microns in size; PM _{2.5} = particulate matter less than 2.5 microns in size					

Because emissions would not exceed any SCAQMD thresholds during operations, the Project would not conflict with or obstruct implementation of the SCAQMD Plan.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The SCAB is designated a nonattainment area for the federal standards for ozone (O₃), particulate matter less than 2.5 microns in size (PM_{2.5}), and lead (Los Angeles County portion of SCAB only) and, for the State standards for O₃, particulate matter less than 10 microns in size (PM₁₀), and PM_{2.5} (CARB 2017). The significance thresholds detailed in **Table 3.3-1** were used to determine whether the proposed Project would violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Construction. As discussed in section 3.3 a), emissions from the proposed Project would not exceed SCAQMD thresholds either during construction. Because emissions would not exceed any SCAQMD thresholds, construction of the Project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

Operational. As discussed in section 3.3 a), emissions from the proposed Project would not exceed SCAQMD thresholds during operations. Because emissions would not exceed any SCAQMD thresholds, operation the Project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

- c) **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

Less Than Significant Impact. This analysis focuses on the criteria pollutants for which the SCAB is classified as nonattainment: O₃ (federal), PM_{2.5}, and PM₁₀ (State). The significance thresholds detailed in **Table 3.3-1** are the air quality standards considered in this analysis.

Construction. As discussed in section 3.3 a) emissions from the proposed Project would not exceed SCAQMD thresholds either during construction or during operations. Compliance with the significance thresholds for PM_{2.5}, PM₁₀, or O₃ precursor NO_x is sufficient to demonstrate that construction of the proposed Project site in the SCAB would not result in cumulatively considerable net increases in these pollutants.

Operational. As discussed in section 3.3 a) emissions from the proposed Project would not exceed SCAQMD thresholds during operations. Compliance with the significance thresholds for PM_{2.5}, PM₁₀, or O₃ precursor NO_x is sufficient to demonstrate that operation of the proposed Project site in the SCAB would not result in cumulatively considerable net increases in these pollutants.

- d) **Expose sensitive receptors to substantial pollutant concentrations?**

Less Than Significant Impact.

Construction. Air emissions from construction of Site INDWT would be short-term (approximately six weeks). The site is in an undeveloped area that is not accessible to the public, and no sensitive receptors are present. The nearest sensitive receptors are residences located approximately one-half mile north of the site. The SCAQMD has established local significance thresholds (LSTs) of allowable pollutant concentrations at sensitive receptors. For the proposed INDWT site, air emissions from construction were calculated and compared to the applicable LSTs within in the SCAB Source/Receptor Area (SRA) 10 listed in SCAQMD *Final Localized Significance Threshold Methodology* (SCAQMD 2008a). No LSTs for SRA 10 would be exceeded at the closest receivers located approximately one-half mile from the proposed INDWT site; therefore, construction of the proposed Project would not expose sensitive receptors to substantial pollutant concentrations

Operational. Operational air emissions would consist of those from monthly testing of the generator. Pollutant concentrations would be localized in the vicinity of the Project site. The site

is in an undeveloped area that is not accessible to the public, and no sensitive receptors are present. The nearest sensitive receptors are residences located approximately one-half mile north of the site. As described above for construction air emissions, air emissions from Project operations were calculated and compared to the applicable LSTs within in the SCAB SRA 10 listed in SCAQMD *Final Localized Significance Threshold Methodology* (SCAQMD 2008a). No LSTs for SRA 10 would be exceeded at the closest receivers located approximately one-half mile from the proposed INDWT site; therefore, operation of the proposed Project would not expose sensitive receptors to substantial pollutant concentrations

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact.

Construction. Project construction activities would not be expected to produce objectionable odors. The construction of proposed Site INDWT would not include extensive soil excavation or other construction activities (painting and solvent use) that commonly trigger public complaints and would not likely create an odor nuisance pursuant to SCAQMD Rule 402; therefore, impacts would be less than significant. In addition, Site INDWT is located in an undeveloped area that is not accessible to the public. The nearby water tanks site is not a staffed facility. Considerable numbers of people would not be present in the area of the Project site during construction.

Operational. Project operations and maintenance activities would not be expected to produce objectionable odors. Site INDWT is located in an undeveloped area that is not accessible to the public. The nearby water tanks site is not a staffed facility. Considerable numbers of people are not currently present in the area of the Project site; and, because the facility would be unmanned, this would continue to be true after construction is completed and the facility is operational.

3.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

The Project site is within the coast live oak-California black walnut woodland vegetation community and includes an understory of primarily non-native wild oats grassland. Within the study area (i.e., the 500-foot buffer surrounding the Project site) on steep, south-facing slopes are small, scattered patches of native coastal sage scrub with laurel sumac and California sagebrush; the understory is composed of non-native annuals. In the bottom of Tonner Canyon and within the steep ephemeral drainages within the study area are narrow corridors of riparian vegetation that includes scattered stands of arroyo willow within fragmented Southern Coast Live Oak Riparian Forest. Throughout the site the area has been highly disturbed by livestock grazing, past fires, and disking to reduce the fire hazard. The proposed location for the monopole has been highly disturbed by livestock, as indicated by the presence of two watering troughs; and the cattle utilize the shade of the nearby trees during hot weather.

Reconnaissance-level site surveys were conducted within the proposed Project site and study area on December 14, 2016; September 5, 2017; and September 14, 2017. Field notes are provided in Appendix B. The results of these surveys were used in the following analysis.

A list of the common and scientific names of species mentioned in the following analysis is provided in **Table 3.4-1**.

Table 3.4-1. Species Referenced in this Initial Study

Common Name	Scientific Name
Plants	
arroyo willow	<i>Salix lasiolepis</i>
California black walnut	<i>Juglans californica</i>
California sagebrush	<i>Artemisia californica</i>
coast live oak	<i>Quercus agrifolia</i>
cottonwood	<i>Populus fremontii</i>
intermediate mariposa-lily	<i>Calochortus weedii</i> var. <i>intermedius</i>

Table 3.4-1. Species Referenced in this Initial Study

Common Name	Scientific Name
laurel sumac	<i>Malosma laurina</i>
sage	<i>Salvia sp.</i>
seep willow	<i>Baccharis salicifolia</i>
sycamore	<i>Platanus racemosa</i>
wild oats	<i>Avena barbata</i>
Wildlife	
cattle/livestock	<i>Bos taurus</i>
coastal California gnatcatcher	<i>Polioptila californica californica</i>
coyote	<i>Canus latrans</i>
deer	<i>Odocoileus spp.</i>
grasshopper sparrow	<i>Ammodramus savannarum</i>
least Bell's vireo	<i>Vireo bellii pusillus</i>
mountain lion	<i>Puma concolor</i>
western pond turtle	<i>Emys marmorata</i>
yellow-breasted chat	<i>Icteria virens</i>
yellow warbler	<i>Setophaga petechia</i>

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Less Than Significant with Mitigation Incorporated. Table 3.4-2 provides the list of special status species documented in the California Natural Diversity Database (CNDDDB) within about 1.0 mile (accounting for wide-ranging species, dispersal patterns, and poorly documented species) of Project Site INDWT. The CNDDDB species records up to 3.0 miles from the site were also reviewed in the context of on-site habitat evaluations because the distribution of each species may not be fully represented by recorded occurrence data.

Table 3.4-2. Special Status Plants and Animals Recorded within about 1 Mile from Site INDWT.

Species – Common Name	Scientific Name	Status Designation
coastal California gnatcatcher	<i>Polioptila californica californica</i>	ESA-T, ESA-CH, CDFW-SSC
least Bell's vireo	<i>Vireo bellii pusillus</i>	ESA-E, CA-E
yellow warbler	<i>Setophaga petechia</i>	CDFW-SSC
yellow-breasted chat	<i>Icteria virens</i>	CDFW-SSC
grasshopper sparrow	<i>Ammodramus savannarum</i>	CDFW-SSC
western pond turtle	<i>Emys marmorata</i>	CDFW-SSC
intermediate mariposa-lily	<i>Calochortus weedii</i> var. <i>intermedius</i>	CNPS-1B.2

Table 3.4-2. Special Status Plants and Animals Recorded within about 1 Mile from Site INDWT.

ESA = Endangered Species Act
 CDFW = California Department of Fish and Wildlife
 CNPS = California Native Plant Society
 E = Endangered T = Threatened CH = Critical habitat SSC = Species of Special Concern
 1B.2 = plant species that is rare throughout its range and moderately threatened in California

Construction

Coastal California Gnatcatcher: Coastal California gnatcatchers are not expected to be nesting within the study area of Site INDWT (i.e., the 500-foot buffer around the delineated site boundary) due to the lack of suitable coastal sage scrub habitat. The location for the installation of the proposed communications facility has been heavily impacted by livestock grazing (water troughs are located nearby), and no shrub elements of the coastal scrub vegetation community are present. This location, at approximately 1,115 feet in elevation, is above the predominant (99 percent occurrence) maximum elevation range (984 feet) of nesting gnatcatchers; higher elevations may be used during dispersal. Most of the access road/powerline run is over 1,000 feet in elevation. Even at lower elevations where the access road leaves Tonner Canyon there is almost a total lack of coastal sage scrub vegetation. Although small, scattered patches of only a few species of coastal sage scrub vegetation (e.g., laurel sumac and California sagebrush) are found intermixed with the live oak-black walnut woodland on south-facing slopes, these patches are on steep slopes and very small (often only individual plants) with low shrub species diversity and open canopy. This does not constitute sage scrub habitat as used by gnatcatchers for nesting. Due to the absence of suitable nesting habitat, activities associated with construction or operations at Site INDWT would not result in disturbance to nesting gnatcatchers.

Gnatcatchers may use oak-walnut woodland and the scattered shrubs for foraging or during dispersal, especially when in proximity to sage scrub habitats. Gnatcatchers are known to nest within 1 mile of Site INDWT, at lower elevations. If foraging or dispersing gnatcatchers would be present, the noise of construction activities and facility operations (including running a generator for about one hour each month) could disrupt the bird's activities, but generally birds are less sensitive to disturbance farther from their nest and during the non-breeding period. These disturbances may cause foraging or dispersing birds to avoid the source area of the noise but within normal behavior patterns; the bird would simply fly away.

Due to the degraded habitat conditions, construction of a new 70-foot-tall monopole at Site INDWT is not expected to result in additional ground-clearing or removal of native perennial vegetation; and no coastal sage scrub shrubs would be lost. However, activities associated with installation of the buried or overhead powerlines has the potential to result in loss of some perennial shrubs that may be adjacent to the road. Potential impacts to gnatcatchers from these activities would be less than significant. However, the application of various mitigation measures during construction would further reduce Project impacts. These measures would require the Biological Monitor to delineate habitat that is to be protected and ensure that the loss of native plants would be the minimum necessary. Any potential loss of perennial vegetation would also be minimized with the application of **BIO MM 9 Protect Native Vegetation and Common Wildlife** and **BIO MM 12 Coastal California Gnatcatcher Protection**.

(Note: Potential impacts to designated critical habitat are addressed under Significance Criteria 3.4 b.)

Least Bell's Vireo, Yellow Warbler, and Yellow-breasted Chat: Although no suitable riparian nesting habitat for least Bell's vireo, yellow warbler, or yellow-breasted chat is within Site INDWT or the study area, these birds may be nesting somewhere in the general vicinity and could possibly forage within the study area in Tonner Canyon. Only scattered stands of arroyo willow are present, as the creek is too intermittent. That portion of the study area that overlaps with Tonner Canyon is at the beginning of the access road. This area could be used for interconnection of the project to the electrical grid. Project construction may result in noise and human activity that could cause possible disturbance to these foraging birds. This location in Tonner Canyon is used as a parking area for the Firestone Scout Reservation, restroom facilities are present, and there are often many people throughout. The additional human presence due to Project activities, or the presence of equipment while the site is being developed, is minimal in comparison. Noise from construction activities would be of short duration (a day or two) and would not result in removal of riparian habitat or occur within the wash channel. Foraging birds are unlikely to be present at the same time the loudest construction noise would be produced. If a bird would be present during noise generated by installation of the powerline for Site INDWT, it would likely react to noise and other disturbances in accordance with its normal behavior patterns and simply fly away without risk to its nest. Impacts to these species would be less than significant and no mitigation measures would be required.

Grasshopper Sparrow: Nesting grasshopper sparrows have been reported from a little over 1 mile west of Project Site INDWT in an area with a mix of non-native grassland and disturbed coastal sage scrub. Suitable nesting habitat is not present within the Project site or expected to be present within the Project study area. Grazing by livestock has removed most of the grasses, and slopes are extremely steep. Project-related effects to the sparrow would be less than significant; however, implementation of **BIO MM 18 Nesting Bird Protection**, as required for potential impacts to migratory birds (see below), requires preconstruction surveys for any nesting migratory birds to be conducted if Project-related disturbance would occur between March 1 and September 15. Although considered highly unlikely, if an active grasshopper sparrow nest is found, it would be protected by a 300-foot buffer.

Migratory Birds: Disturbance to or destruction of nests of native bird species that are protected by the Migratory Bird Treaty Act and the California Fish and Game Code Sections 3503.5 and 3513 could occur as a result of vegetation removal or other on-site construction activities. Any disturbance to or destruction of active nests associated with the proposed Project would be a significant impact.

With implementation of **BIO MM 17 Raptor Protection** and **BIO MM 18 Nesting Bird Protection**, preconstruction surveys for nesting birds will occur prior to on-site construction-related disturbance activities from March 1 through September 15; in addition, surveys for nesting raptors will be conducted between January 1 and July 31. Appropriate buffers of 300 feet will be established to protect nesting birds and active bird nests. If nesting owls, eagles, or other raptors are located, a 500-foot avoidance buffer will be implemented in compliance with **BIO MM 17 Raptor Protection** and **BIO MM 18 Nesting Bird Protection**. With implementation of these mitigation measures, impacts to migratory birds would be less than significant.

Western Pond Turtle: No wetland or aquatic habitats are present in the Project area; habitat is not suitable for the western pond turtle. No impacts would occur to this species.

Intermediate Mariposa-lily: The intermediate mariposa-lily occurs on grassy slopes and ridges; however, the ridges at Site INDWT and along the access road (location of proposed power run options) have been disked, are too over-grazed, and are too weedy to provide habitat for this species. During fall surveys of the Project site no evidence of the conspicuous seed pods were observed, although they could have been eaten by cattle. Suitable habitat may be present within the study area, although much of it is too steep to survey. Potential impacts to intermediate mariposa-lily from Project construction activities would be less than significant. However, in order to further reduce the potential for impacts to this species, **BIO MM 24 Special Status Plants Surveys and Protection** would be applied. **BIO MM 24** requires preconstruction surveys for plants be conducted during the spring.

The following mitigation measures would be implemented during Project construction to reduce potentially significant impacts to migratory birds and to further reduce less than significant impacts to other sensitive species:

BIO MM 1 Mitigation Monitoring and Reporting Plan

Prior to construction, the Authority shall develop and implement or require the system contractor to develop and implement a mitigation monitoring and reporting plan (MMRP) for the proposed Project. The MMRP would serve to organize environmental compliance requirements identified in best management practices, mitigation measures, permit requirements, real property agreement conditions, and other applicable sources. The MMRP shall contain an organization chart and communication plan for environmental compliance as it relates to the proposed Project

BIO MM 2 Worker Environmental Awareness Program

Prior to construction, the Authority shall develop and implement or require the system contractor to develop and implement a Worker Environmental Awareness Program (WEAP) for the proposed Project. This conservation measure would serve to institute and formalize an education program to increase awareness of environmental resources and measures and rules that are in place to help minimize impacts to those resources.

- a) A WEAP shall be developed and shall be required for all construction employees prior to placement of Project equipment, construction, or any ground disturbing activities at the proposed Project site. Training of additional workers, contractors, and visitors shall be provided, as needed.
- b) The WEAP is to inform on-site workers of the possible presence of special status species, the measures to be taken to protect these species, and the importance of minimizing impacts to the natural environment through the protection of native vegetation, adhering to required buffers and protection zones, staying on existing roads, and implementing best management practices that includes containment of any spills, disposal of trash, and management of runoff and sediment transport.

- c) To assure long-term implementation of mitigation measures, an information sheet shall be prepared, distributed to workers, and posted on site, listing potential sensitive species and what to do if any are encountered.

BIO MM 3 Biological Compliance Reporting

A biological monitor shall visit all active construction sites at least once weekly to document compliance and provide reports to the Project administrator on a weekly basis.

BIO MM 8 Biological Monitoring

A qualified biological monitor shall be present at the site during construction activities that result in ground disturbance or removal of vegetation to ensure all conservation measures are met. Duties of the biological monitor include checking for the presence of wildlife on the construction site, inspecting trenches or holes for trapped wildlife, surveying for the presence of nesting birds and adherence to nesting bird protection buffers, monitoring construction site boundaries, and checking that vegetation flagged for protection is not disturbed.

BIO MM 9 Protect Native Vegetation and Common Wildlife

- a) Minimize disturbance to native perennial plants; new ground disturbance shall be the minimum necessary and established and delineated prior to any earth-moving activities.
- b) If native perennial vegetation cannot be avoided and would be impacted or destroyed, the disturbance area is to be surveyed for the presence of special status plants and to remove common species of wildlife prior to destruction of the vegetation.
- c) At no time shall protected species be handled or moved. If a protected species is found within the construction area, all work that may impact that animal shall cease and the appropriate agency(s) shall be contacted (e.g., USFWS, CDFW, land management agency). The animal shall be allowed to leave the site on its own accord.
- d) Prior to construction or any ground-disturbance activities, mark the construction disturbance limits and monitor for adherence to these boundaries.
- e) Stay on existing roads.
- f) Do not remove native trees; construction limits shall be established to avoid walnuts, oaks, and any other sensitive species habitat and the limits shall be flagged by a biological monitor.
- g) Protect tree root systems by precluding paving, trenching, or other ground-disturbing activities; and preclude heavy equipment from driving, parking, or staging within the tree's drip line.
- h) Any loss of native perennial vegetation, whether planned or unintentional, is to be accounted for in reports prepared by the biological monitor.

BIO MM 10 No Pets

Construction and maintenance workers shall be prohibited from bringing pets (especially dogs) to nonurban Project sites, as the domestic animal may harass or kill native wildlife present at the site.

BIO MM 11 Site Access

- a) On access roads, operate all vehicles within the posted speed limits.
- b) If access road speed limits are not posted, do not exceed 15 miles per hour (mph).
- c) Adjust vehicle speed as appropriate to road conditions; avoid causing ruts and gullies; and minimize dust.
- d) Watch for wildlife on roads (including amphibians, snakes, rodents, and tortoises), especially during raining periods, and avoid running them over.
- e) To avoid running over wildlife, look under parked vehicles for the presence of wildlife (especially desert tortoise) before pulling away.
- f) Do not park on or drive over native perennial vegetation.
- g) Avoid cutting corners on access roads and impacting vegetation when large equipment and trailers are brought to the Project site.
- h) Do not drive off the designated roadway or make any modifications to the road or road shoulders.

BIO MM 12 Coastal California Gnatcatcher Protection

- a) As part of BIO MM 2 WEAP, construction crews shall be informed of the possible presence of coastal California gnatcatchers in the area and the importance of maintaining coastal sage scrub vegetation.
- b) As part of BIO MM 9 Protect Native Vegetation and Common Wildlife, disturbance to native perennial vegetation, especially coastal sage scrub vegetation (e.g., California sagebrush, sage, and laurel sumac, and California buckwheat), would be minimized. Surveys shall be conducted by a qualified biologist for the presence of coastal sage scrub perennial vegetation and plants not identified for removal within or near the construction zone shall be marked for protection.
- c) As part of BIO MM 3 Biological Compliance Reporting, the environmental monitor shall verify at least once a week during active construction and upon completion of construction activities that habitat protection measures have been followed.

BIO MM 17 Raptor Protection

- a) If construction activities occur during the American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl breeding period, January 1 through July 31, preconstruction surveys would be conducted in all suitable habitats within 500 feet of the Project site as well as within a species-appropriate distance beyond the 500-foot buffer based on line of sight between potential nesting habitat and the construction site.
- b) If construction takes place during the breeding period, the biological monitor shall contact appropriate land management and resource agencies to ascertain if they have any current information on raptor nesting activities in the general vicinity of the proposed Project sites.
- c) If an active American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl nest is discovered within 500 feet of the construction site, work shall not be undertaken at that site until the nest is no longer active, with an additional five days to

allow the fledging birds to disperse. An active nest is defined as one that is attended, built, maintained, or used by a pair of birds during a given breeding season, whether or not eggs are laid; a nest is considered inactive if not attended to for a period of 10 days or longer.

- d) If an active American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl nest is discovered between 500 feet and 0.5 mile of the construction site, the potential for disturbance of the nesting birds would be evaluated based on line-of-sight, degree of potentially disturbing activities, and other site-specific factors. If the CDFW and land management agency concur, the protection buffer distance may be reduced.

BIO MM 18 Nesting Bird Protection

- a) It is preferred that removal of trees or large tree limbs and other vegetation removal activities such as grubbing or shrub clearing avoid the typical bird nesting season of January 1 through September 15.
- b) If construction activities occur during the bird nesting season, and to prevent disturbance to or destruction of nests of protected native bird species that could occur as a result of vegetation removal, disturbance, or other on-site construction activities, preconstruction surveys for nesting birds shall be conducted by a qualified biological monitor within 10 calendar days prior to on-site construction-related disturbance activities from March 1 through September 15 for non-raptors, and January 1 through July 31 for raptors.
- c) If nesting protected non-raptor species are detected, a 300-foot avoidance buffer shall be implemented; a 500-foot avoidance buffer would be applied to any active nest of a raptor or other species of special status bird.
- d) Appropriate site-specific buffers may be established with the approval of a project designated avian expert, based in part on the species of nesting bird present, location of nest, nesting phenology, magnitude of potential disturbance, and other site conditions (e.g., levels of ambient noise; line-of-sight).
- e) If construction activities would occur within the general buffer distances for active nests (300 feet for nonraptors, 500 feet for raptors, and up to 1.5 miles for condors and eagles), a Biological Monitor must be present during those activities.
- f) No active nests may be destroyed; inactive bird nests may be destroyed as part of vegetation removal but may not be reduced to possession.
- g) Between September 16 and December 30, grubbing, shrub clearing, and tree/limb removal activities are not subject to restrictions based on the protection of migratory birds.
- h) Comply with the USFWS Office of Migratory Birds voluntary guidelines (USFWS 2013a) for communications tower placement, construction, and operation.
- i) For any towers that must exceed 199 feet in height, lighting requirements would be designed in cooperation with FAA and USFWS Office of Migratory Birds to minimize attraction and resulting mortality of migratory birds.

BIO MM 24 Special Status Plants Surveys and Protection

- a) As part of BIO MM 2 WEAP, construction crews shall be informed prior to the onset of construction activities of the possible presence of special status plants in the area and the importance of maintaining native vegetation.
- b) At identified sites, surveys for special status plants shall be conducted by a qualified botanist prior to ground disturbing activities, in the proper season (i.e., during the plant species' blooming period) and in suitable habitat surrounding the proposed Project site or any area subject to ground disturbance, including access roads.
- c) If a special status plant is found to be present or if surveys are determined to be inconclusive, the areas requiring special protection would be marked prior to construction to provide a buffer to maintain the ecological context of the location at which the plant was found.
- d) BIO MM 8 Biological Monitoring shall apply at proposed Project sites where special status plants or their habitat are present, and protection buffers would be monitored for compliance.

Operational. Project operation would not entail any activities that could result in a substantial adverse effect on special status species. Operational activities would include occasional routine inspections, maintenance, and repairs, and would not entail ground disturbing activities or large numbers of personnel traveling to and from the site on a regular basis. If an overhead powerline is used to bring electric service to the site, about 30 wooden power poles would be installed. Each of these poles would likely be supported by a guy wire for greater stability. Guy lines would be secured to the ground up to 20 feet from the pole. Though these guy lines and power lines are not particularly high, they pose a minor collision hazard for birds in flight. The poles would be placed along a high ridgeline, the type of topography often followed by migrating birds; however, birds in migration fly at much greater heights. The proposed 70-foot-tall monopole would not use guy wires; the monopole would pose a minimal collision risk to migrating birds. If the monopole is required to be equipped with FAA obstruction hazard lighting for aviation safety, LED tower lights of flashing white and/or red lights will be used whenever permissible. These lights are less attractive to night-migrating birds than steady-burning red lights. Impacts would be less than significant and no mitigation measures would be required for Project operations.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Less Than Significant with Mitigation Incorporated. Sensitive natural communities are defined as those vegetation communities that are being tracked by California Department of Fish and Wildlife (CDFW) CNDDDB, and critical habitat is designated by the U.S. Fish and Wildlife Service (USFWS) under the authorities of the Endangered Species Act (ESA).

Sensitive natural communities recorded within about 1 mile from Project Site INDWT include:

- California Walnut Woodland

- Southern Coast Live Oak Riparian Forest
- Designated critical habitat for the coastal California gnatcatcher

Construction

California Walnut Woodland:

The Southern California Black Walnut Woodland community occurs as solid stands or as a mixed woodland community, most commonly intermixed with coast live oak. It usually grows 10 to 30 feet in height, forming open or closed canopy stands on north-facing slopes and in mesic canyons, providing important wildlife habitat. This community is threatened by loss of habitat due to urbanization and is affected by overgrazing and increasing drought conditions. The California Walnut Woodland within the Project study area is contiguous with some of the best remaining stands in Los Angeles County. Trees are scattered on slopes with tree density generally increasing southwest of the proposed facilities site and in canyon bottoms. The understory includes primarily non-native grasses, although a variety of coastal sage scrub and chaparral shrubs are often scattered about. Within the Project Site INDWT, the understory of non-native grasses has undergone extreme trampling by livestock, even to the point of denuding the soil.

No trees or other native perennial vegetation would be removed for development of the proposed facility at Site INDWT. Ground disturbance to construct the power run, with either buried or overhead electric line, would be restricted to locations where perennial vegetation would not be lost (i.e., within or adjacent to the roadbed). However, individual plants may be present along the access road and may need to be trimmed or removed to accommodate Project needs. These potential impacts to native vegetation communities, and especially large trees, would be considered potentially significant. With the implementation **BIO MM 9 Protect Native Vegetation and Common Wildlife**, most, if not all, perennial vegetation would be preserved on site. Construction workers would be informed of the importance of avoiding impacts to all trees. (**BIO MM 2 Worker Environmental Awareness Program**). **BIO MM 9** restricts vehicles to existing roads, and parking and use of heavy equipment near (under the drip line) walnut trees would be precluded to prevent soil compaction and protect the tree's root system; trenches would be sited to minimize disturbance to tree roots. **BIO MM 9** requires that large trees be avoided. Any loss of vegetation from sensitive woodland communities would be the minimum necessary as demarked by the Biological Monitor and would not compromise the integrity of the sensitive community. With implementation of mitigation measures, impacts would be less than significant.

Southern Coast Live Oak Riparian Forest:

The Southern Coast Live Oak Riparian Forest is found in canyons with permanent or ephemeral streams, where dense stands of trees often form interlocking canopies. Other riparian trees may be present including arroyo willow, seep willow, sycamore, and cottonwood. No riparian habitat is located at Site INDWT. The only riparian habitat within the study area is in association with the ephemeral drainage in Tonner Canyon near the junction of the access road and the paved road in the bottom of the canyon, a potential location where electric tie-in may occur. The vegetation along the narrow wash channel includes coast live oak, California black walnut, California sycamore, and scattered riparian scrub with arroyo willow. However, many of the trees in this portion of Tonner Canyon are large ornamentals.

No Project construction activities would be conducted within the wash channel or riparian zone. There would be no removal of or impact to riparian habitat, and best management practices would be implemented to control erosion and sedimentation of excavated soil from stormwater runoff. No impact would occur and no mitigation measures are required.

Designated critical habitat for the coastal California gnatcatcher:

The evaluation of potential impacts to designated or proposed critical habitat requires the assessment of whether specific physical or biological features (PBFs)² are present, and then the assessment of whether Project-related activities would impact those PBFs and the function of critical habitat. Gnatcatcher critical habitat PBFs/PCEs include various coastal sage scrub vegetation communities and their successional stages; also included are non-sage scrub habitats such as chaparral, grassland, and/or riparian areas in proximity to the sage scrub habitats that provide space for dispersal, foraging, and nesting. Critical habitat does not include man-made structures (such as buildings, aqueducts, airports, roads, and other paved areas and the land on which they are located).

The ridgeline followed by the access road southwest from the proposed location for the communications facility forms a part of the border of designated gnatcatcher critical habitat. Critical habitat extends to the bottom of Tonner Canyon and includes the junction of the access road with the paved road in Tonner Canyon. The facilities location is not within critical habitat, being about 0.3 mile away. As the access road/powerline run proceeds southwest from the facilities location into critical habitat, vegetation becomes denser but is made up mostly of oak and walnut trees. Coastal sage scrub vegetation elements are better represented in this portion of the Project area, although no habitat patch that could be classified as coastal sage scrub community could be located. These scattered shrubs are too sparse to support nesting gnatcatchers, although they may provide potential foraging and dispersal habitat.

The proposed power run may or may not pass through designated critical habitat, depending on the selection of the route. If trenching is required for burying the line, or if wooden poles are erected, ground disturbance associated with these activities would be within or adjacent to the roadbed where potential loss of perennial vegetation would be minimized. No patches of coastal sage scrub vegetation and gnatcatcher critical habitat PBFs are within the Project site (i.e., construction footprint). Therefore, construction of the LMR facility and associated power run would not be expected to result in the loss of native shrubs or loss of PBFs within that portion of the Project site within critical habitat. However, the Project would facilitate placement of additional man-made structures within critical habitat. Any loss of shrubs at Site INDWT due to an unavoidable situation (e.g., required placement of a power pole at a bend in the road) would be minimal (e.g., perhaps one or two individual plants). Potential impacts to gnatcatcher critical habitat would be less than significant. However, mitigation measures are proposed in order to further reduce potential impacts. The application of **BIO MM 8 Biological Monitoring** would require the Biological Monitor to delineate habitat that is to be protected and ensure that the loss of native plants would be the minimum necessary. Any potential loss of perennial vegetation would also be minimized with the application of **BIO MM 9 Protect Native**

² Updated 2016 critical habitat regulations [81 Federal Register 7214] replace the term “primary constituent element” (PCE) with “physical or biological features” (PBF).

Vegetation and Common Wildlife and BIO MM 12 Coastal California Gnatcatcher Protection. This loss of perennial plants would not compromise the integrity or continued level of function of critical habitat because coastal sage scrub vegetation community (gnatcatcher nesting habitat) is not present, and the plants would be within the disturbed roadway corridor.

The following mitigation measures would be implemented during Project construction to reduce potentially significant impacts to California walnut woodland and to further reduce less than significant impacts to coastal California gnatcatcher habitat:

BIO MM 1 Mitigation Monitoring and Reporting Plan

BIO MM 2 Worker Environmental Awareness Program

BIO MM 3 Biological Compliance Reporting

BIO MM 8 Biological Monitoring

BIO MM 9 Protect Native Vegetation and Common Wildlife

BIO MM 10 No Pets

BIO MM 11 Site Access

BIO MM 12 Coastal California Gnatcatcher Protection

BIO MM 19 Trenches and Holes Management

- a) The contractor shall cover or backfill all trenches the same calendar day they are opened, where practicable.
- b) If trenches or holes cannot be closed the same day they are made, covers shall be firmly secured at ground level in such a way that small wildlife cannot slip beneath. At sites that require the presence of a biological monitor, trench covers shall be approved by the monitor.
- c) Open trenches shall be inspected regularly throughout the day and prior to filling to remove any trapped common wildlife (e.g., small mammals, reptiles, amphibians) and to check for the presence of protected wildlife species (e.g., arroyo toad) at Project sites that require the presence of a biological monitor.
- d) If a protected wildlife species is present in the trench, the on-site biological monitor shall contact USFWS immediately, ensure the protected species is not in immediate danger, and wait for instruction by USFWS.
- e) Covered trenches and holes at sites where biological monitors are present are to be inspected by the monitor at the end of the work day and prior to initiating construction activities the next day.
- f) In locating trenches or holes, minimize disturbance to natural vegetation, including plant root systems.
- g) Prior to trenching, mark the construction disturbance limits and monitor for adherence to these boundaries.

Operational. Project operation would not entail any activities that could result in a substantial adverse effect on sensitive natural communities. Operational activities would include occasional routine inspections, maintenance, and repairs, and would not entail ground disturbing activities or large numbers of personnel traveling to and from the site on a regular basis. Impacts would be less than significant and no mitigation measures would be required for Project operations.

- c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No Impact. The definition of wetlands provided in Section 404 of the Clean Water Act and as applied by the U.S. Army Corps of Engineers and the USEPA implementing the Clean Water Act is: "Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." No federally protected wetlands have been identified within or adjacent to the proposed Project site and study area.

The USFWS National Wetland Inventory mapped Freshwater Forested/Shrub Wetlands within the Project study area. However, this wetland type is restricted to ephemeral drainages that would likely be classified under the Clean Water Act as Waters of the United States but not as protected wetlands. Best management practices would be implemented to control erosion and sedimentation of excavated soil from stormwater runoff into Waters of the United States.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Less Than Significant Impact.

Construction. The Los Angeles County General Plan uses the term habitat linkage and defines it as an area that possesses sufficient cover, food, forage, water, and other essential elements to serve as a species' movement pathway between two or more larger areas of habitat. Depending on the species, linkages vary in size. Wildlife corridors can be applied at a landscape level or at a very fine species-specific scale depending on the size and ecological requirements of the species being considered. For this reason, wildlife corridor boundaries have not been officially designated. Linkages are estimated wildlife routes most commonly taken between open space areas that serve as core habitat.

Project Site INDWT is located with the Los Angeles County-designated Puente Hills Significant Ecological Area (SEA). SEAs provide core habitat to support wildlife movement among large open spaces and through bottleneck areas surrounded by urban development and within fragmented landscapes of scattered open space within rural settings. The continued presence of large mammals is dependent on retaining linkage corridors among open space blocks. Evidence of significant wildlife movement throughout the Puente Hills SEA has been documented in a two-year carnivore study commissioned by the Santa Monica Mountains Conservancy. By virtue of these linkages and a complex of interconnected habitat units throughout the hills, the Puente-Chino Hills Wildlife Linkage provides fragile connections for wildlife across a landscape of

scattered open space and functions as both an important wildlife linkage and resident habitat area for regional wildlife populations. Site INDWT is located on a high ridge line about 0.25 mile east of SR 57. SR 57 follows Brea Canyon and is an impediment to wildlife movement across the SEA and considered a choke-point where opportunities for wildlife movement across the landscape are limited.

Construction at Project Site INDWT may cause temporary and minor impacts to wildlife movements (including deer, mountain lion, coyote, small mammals, reptiles, and birds) in the vicinity of the site due to increased human presence and noise associated with construction activities. Open trenches could impede small mammals and reptiles moving within or through the site. Increased use of roads, even on a temporary basis for construction-related activities, could impede or cause injury/mortality to various species of wildlife.

The proposed Project site is located along an existing dirt road near two water tanks in an area heavily used by livestock. The proposed facilities at Site INDWT represent a small point within a larger landscape having extensive opportunity for wildlife to move around the facility. Construction of a monopole at the site would result in minimal (if any) loss of native perennial vegetation without causing any change in forest stand structure or condition. Land would not be converted from a natural use to a developed use, and existing roads would not be upgraded in road-class. Due to the nature of the Project, impacts to wildlife movement would be minimal to none. The proposed Project would not introduce new disturbances to wildlife corridors or otherwise interfere with wildlife movement. Development of Site INDWT would not alter the character of the open space or otherwise exacerbate the existing challenges for wildlife movements within the Puente-Chino Hills Wildlife Linkage. Construction of Project facilities may have temporary and minor effects to wildlife movement on a very fine scale but would have no effect at a landscape level.

No occurrences of wildlife nursery sites or colonial bird nesting sites are recorded in the CNDDB within 3.0 miles of Site INDWT.

The proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, and would not impede the use of native wildlife nursery sites. Although construction of Site INDWT has a potential for less than significant impacts to wildlife movement across the landscape, these impacts would be further reduced through implementation of the following mitigation measures:

BIO MM 1 Mitigation Monitoring and Reporting Plan

BIO MM 2 Worker Environmental Awareness Program

BIO MM 3 Biological Compliance Reporting

BIO MM 4 Site Sanitation

- a) The contractor shall keep a regulated work area free of litter and trash. Trash and discarded food items shall be contained within an appropriate receptacle and removed daily to avoid attracting wildlife to the construction site, contribute to habituation of wildlife to the presence of humans, or to attract avian or mammalian predators to the area.

- b) All construction debris (including nuts, bolts, small pieces of wire, etc.) shall be cleaned up (e.g., trash removed, scrap materials picked up) each day that work is conducted to minimize the likelihood of wildlife visiting the site and consuming microtrash, discarded food, or other substances.

BIO MM 5 Hazardous Materials Management

- a) A toxic substance management and spill response plan shall be prepared by the contractor.
- b) Hazardous materials shall be contained; spills shall be prevented; and any spills at the Project site or along access roads shall be contained and cleaned up immediately.
- c) All construction vehicles are required to carry at least one spill response kit.
- d) Any spills shall be accounted for in reports prepared by the biological/environmental monitor.

BIO MM 8 Biological Monitoring

BIO MM 9 Protect Native Vegetation and Common Wildlife

BIO MM 10 No Pets

BIO MM 11 Site Access

BIO MM 19 Trenches and Holes Management

Operational. The proposed facilities at Site INDWT represent a small point within a larger landscape having extensive opportunity for wildlife to move around the facility. Due to the nature of the Project, impacts to wildlife movement would be minimal to none. The proposed Project would not introduce new disturbances to wildlife corridors or otherwise interfere with wildlife movement. Operation of Site INDWT would not alter the character of the open space or otherwise exacerbate the existing challenges for wildlife movements within the Puente-Chino Hills Wildlife Linkage. Impacts would be less than significant and no mitigation measures would be required for Project operations.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Less Than Significant with Mitigation Incorporated.

Construction. Local policies and ordinances protecting biological resources that are relevant to the proposed Project include the Los Angeles County General Plan and the County's Puente Hills SEA. Impacts to these are discussed in the following paragraphs.

County of Los Angeles General Plan: The Los Angeles County General Plan (County of Los Angeles, 2015), adopted in October 2015, includes a Conservation and Natural Resources (C/NR) Element that guides the long-term conservation of natural resources and preservation of available open space areas in unincorporated Los Angeles County. Goal C/NR3 of this element calls for permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and SEAs. The policies or portions of policies potentially affecting biological resources at Project sites include:

- Policy C/NR 3.1. Conserve and enhance the ecological function of diverse natural habitats and biological resources
- Policy C/NR 3.8. Discourage development in areas with identified significant biological resources such as SEAs
- Policy C/NR 3.9 (abridged). Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:
 - Preservation of biologically valuable habitats, species, wildlife corridors, and linkages
 - Protection of sensitive resources on the site within open space
 - Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources on site)
 - Consideration of the continuity of on-site open space with adjacent open space in project design

Los Angeles County Significant Ecological Areas Ordinance (County of Los Angeles, Department of Regional Planning. 2014): An SEA designation is given to land that contains irreplaceable biological resources. Individual SEAs include undisturbed or lightly disturbed habitat supporting valuable and threatened species, linkages, and corridors to promote species movement and are sized to support sustainable populations of its component species. The objective of the SEA Program is to preserve the genetic and physical diversity of the county by designing biological resource areas capable of sustaining themselves into the future. The SEA ordinance is the primary mechanism that the County uses to regulate development within the SEAs. Properties mapped within, or partially within, an adopted SEA are subject to the rules in the SEA ordinance, in addition to other applicable regulations of the zoning code. Conditional use permits are required for most development within SEAs to protect resources contained in SEAs from incompatible development as specified in the County General Plan.

Puente Hills SEA: SEAs play a critical role in not only identifying Los Angeles County's biotic diversity but in providing an opportunity to connect these areas with other areas of biological importance. The Puente Hills SEA contains walnut woodland habitat, important wildlife corridors between the Puente Hills and the Chino Hills, and many important riparian drainages. This SEA is a regionally significant open space that represents the Los Angeles County portion of a continuous series of natural open space within the Puente Hills in Los Angeles County, portions of the Chino Hills in Los Angeles, Orange, San Bernardino and Riverside counties, and additional connections south into the Santa Ana Mountains and San Diego County. Recommended management practices include limiting development, retaining rare vegetation communities with adequate buffers, and retaining connectivity within the SEA.

The construction of Site INDWT may conflict with the following policies of the Los Angeles County General Plan: C/NR3.1, C/NR 3.8, and C/NR 3.9 which promote protection of biological resources and site-sensitive design. Construction activities could potentially degrade habitat values and disrupt wildlife movements. Impacts would be potentially significant. The application

of mitigation measures would minimize on-site habitat degradation so that there would be no change in the function of wildlife movement corridors. With mitigation measures, the construction of Site INDWT would not conflict with specific SEA management strategies. Impacts would be less than significant.

The following mitigation measures would be implemented during Project construction to reduce potentially significant impacts to local policies or ordinances protecting biological resources:

BIO MM 1 Mitigation Monitoring and Reporting Plan

BIO MM 2 Worker Environmental Awareness Program

BIO MM 3 Biological Compliance Reporting

BIO MM 4 Site Sanitation

BIO MM 5 Hazardous Materials Management

BIO MM 8 Biological Monitoring

BIO MM 9 Protect Native Vegetation and Common Wildlife

BIO MM 10 No Pets

BIO MM 11 Site Access

BIO MM 19 Trenches and Holes Management

Operational. The presence of a 70-foot-tall monopole and associated facilities are an addition to the existing water tanks and would not change the nature of the existing on-site impacts. There would be no change in the function of wildlife movement corridors. The operation of Site INDWT would not conflict with specific SEA management strategies. Impacts would be less than significant and no mitigation measures would be required for Project operations.

- f) **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

No Impact. No Habitat Conservation Plan or Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan is applicable to Project Site INDWT.

3.5 CULTURAL RESOURCES

Would the project:	Less Than Significant			
	Potentially Significant Impact	with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Less Than Significant			
	Potentially Significant Impact	with Mitigation Incorporated	Less Than Significant Impact	No Impact
archaeological resource pursuant to § 15064.5?				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

Based on records searches at the South Central Coastal Information Center (SCCIC) (SCCIC 2017) and intensive field surveys of the entire direct area of potential effects (APE) (Peyton 2018), no historical resources are within the ground-disturbing areas of the Site INDWT Project area. The only cultural resources identified within the vicinity of the Project area are three isolated archaeological resources, all of which are situated within the 1-mile indirect APE and approximately 0.42 to 0.54 mile from the Site INDWT Project area, and none of which meet criteria for listing in the National Register of Historic Places or the California Register of Historical Resources.

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

No Impact. No historical resources are within the ground-disturbing areas of the Site INDWT Project area.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

No Impact. No archaeological resources are within the ground-disturbing areas of the Site INDWT Project area.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated. The Site INDWT Project area is situated within an area of Los Angeles and Orange counties that is sensitive for paleontological resources. Previous investigations and paleontological mapping show that the Chino Hills are underlain by the La Vida Shale, Soquel Sandstone, and Yorba Shale Members of the Monterey Formation, the Sycamore Canyon Formation, and the Repetto and Pico Members of the Fernando Formation. These Formations have yielded the fossilized remains of middle Miocene to early Pleistocene land plants and marine microfossils (foraminifers), algae (sea weed), invertebrates (snails, tusk shells, clams, cephalopods, barnacles, crabs, shrimps, sand dollars, heart urchins), and/or vertebrates (sharks, rays, fishes, turtles, birds, desmostylids, whales) at numerous localities in the Chino Hills.

In addition, at depths as shallow as 5 feet or less, younger alluvium has produced the fossilized bones and teeth of extinct species of Pleistocene land mammals, including ground sloths, mammoths, camels, and bison, in the Chino Hills at Tonner Canyon and in the Chino Valley.

Construction. Based on the shallow underlying rock units, scientifically important fossil remains similar to those noted above have a high potential to be encountered within the Site INDWT Project area during tower and power pole construction and / or trenching, disturbance of which would be a potentially significant impact; therefore, the following mitigation measures are required during all ground-disturbing activities, which would reduce the impact to a less than significant level:

CUL MM 6 Potential Paleontological Resources Plan

A Paleontological Resources Monitoring Plan shall be developed and approved prior to construction to guide the activities of monitors during ground-disturbing activities. The plan would include, but not be limited to, a description of the Project location, the regulatory framework, site-specific impact mitigation requirements designed to reduce impacts to less than significant, specific locations and construction activities requiring monitoring and/or spot checking, and procedures to follow for construction monitoring and fossil discovery and recovery, and a repository agreement with the Natural History Museum of Los Angeles County or other accredited repository. Mitigation measures that may be implemented to ensure that impacts to paleontological resources would be reduced to less than significant may include but are not limited to the following:

- a) Worker awareness training on paleontological resources presented to construction personnel prior to the start of construction. The training should include at minimum, the following:
 - The types of fossils that could occur at the Project site
 - The procedures that should be taken in the event of a fossil discovery
 - Laws protecting paleontological resources
 - Penalties for destroying or removing paleontological resources.
- b) Paleontological monitoring during ground disturbance at all sites with moderate/unknown or high paleontological potential
- c) Salvage of significant fossil resources
- d) Screen washing of matrix samples for microfossils
- e) Laboratory preparation of recovered fossils to the point of identification and curation
- f) Identification of recovered fossils to the lowest possible taxonomic order
- g) Curation of significant fossils at the Natural History Museum of Los Angeles County or other accredited repository

- h) Preparation of a final monitoring report that includes at a minimum the dates of field work, results of monitoring, fossil analyses, significance evaluation, conclusions, locality forms, and an itemized list of specimens.

The Plan shall be submitted to the Authority for review and approval and finalized at least 14 days prior to the start of construction.

CUL MM 7 Paleontological Resources Monitoring

Paleontological monitoring shall be conducted by a qualified paleontological monitor who has demonstrated experience in the collection and salvage of fossil materials. An undergraduate degree in geology or paleontology is preferable but is less important than documented experience performing paleontological monitoring and mitigation. The monitor will work under the supervision of a Principal Paleontologist.

The qualified professional paleontological monitor shall be present during ground disturbance at all sites with moderate/unknown or high paleontological potential and as specified in the Paleontological Resources Monitoring Plan prepared in accordance with CUL MM 6. The monitor shall be present during all subsurface excavation for tower or monopole foundations and during grading for access roads and structure foundations. Based on the specific site conditions observed during monitoring (type of sediment impacted, previous disturbances, nature of site conditions), the Principal Paleontologist may reduce or increase monitoring efforts in consultation with the Agency.

In the event that a previously unidentified paleontological resource is uncovered, the following actions shall be taken:

- 1) All ground-disturbing work within 50 feet of the discovery shall be halted. A qualified paleontologist shall divert or direct construction activities in the area of an exposed fossil in order to facilitate evaluation and, if necessary, salvage of the exposed fossil. Work shall not resume in the discovery area until authorized by the qualified paleontologist.
- 2) The paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required.
- 3) If the resource cannot be avoided and may be subject to further impact, the paleontologist shall evaluate the resource and determine whether it is "unique" under CEQA, Appendix G, Part V. If the resource is determined not to be unique, work may commence in the area.
- 4) If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with LA-RICS Authority staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource. Preservation in place (i.e., avoidance) is the preferred method of ensuring that no substantial adverse impacts occur to the resource and shall be required unless other equally effective methods are available. Other methods include ensuring that the fossils are scientifically recovered, prepared, identified, catalogued, and analyzed according to current professional standards.

- 5) Due to the small nature of some fossils, a fine mesh screen may be used at the discretion of the paleontologist to screen matrix test samples on site during monitoring. Additionally, bulk matrix samples may be collected and transported to a laboratory facility for processing.
- 6) Provisions for preparation and identification of any fossils collected shall be made before donation to a suitable repository.
- 7) All recovered fossils shall be curated at the Natural History Museum of Los Angeles County, or a local accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines standards. Work may commence upon completion of the appropriate treatment and the approval from the Authority.

Operational. After completion of construction, no further ground disturbing activities that could present a potential impact to paleontological resources would occur. No impacts would occur as part of site operations, and no mitigation measures would be required.

d) Disturb any human remains, including those interred outside dedicated cemeteries?

No Impact. No human remains are known to occur within the ground-disturbing areas of the Site INDWT Project area. While no impacts are expected to occur, the following mitigation measure would be implemented during construction in the unexpected event that human remains are discovered:

CUL MM 4: Unexpected Discovery of Human Remains

In the event that human remains are unexpectedly encountered, the following procedures shall immediately be followed. This guidance is also provided on the NAHC's website at <http://nahc.ca.gov/resources/discovery-of-native-american-human-remainswhat-to-do/>.

- 1) All construction activity shall stop immediately, and the Project Archaeologist shall be notified. The Project Archaeologist will contact the Los Angeles (or applicable) County Coroner. The list of California Coroners can be found on the Native American Heritage Commission's website at <http://nahc.ca.gov/2015/06/implementation-of-ab52-sample-lettersrequest-for-formal-notification-and-request-for-consultation/>.
- 2) The Coroner has two working days to examine human remains after being notified by the responsible person. If the remains are Native American, the Coroner has 24 hours to notify the Native American Heritage Commission.
- 3) The Native American Heritage Commission will immediately notify the person it believes to be the most likely descendent of the deceased Native American.
- 4) The most likely descendent has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.
- 5) If the descendent does not make recommendations within 48 hours the owner shall reinter the remains in an area of the property secure from further disturbance, or;

- 6) If the owner does not accept the descendant's recommendations, the owner or the descendent may request mediation by the Native American Heritage Commission.

3.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**
- a) i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

No Impact. The site is not located within an Alquist-Priolo Earthquake Fault Zone nor is it located on any other known active earthquake fault (California Department of Conservation 2018a). Therefore, the site is not subject to rupture of a known fault.

a) ii) **Strong seismic ground shaking?**

Less Than Significant Impact. The Project site and the entire Southern California region are subject to some degree of seismic activity. The Seismic Hazards Mapping Act and the California Building Code (CBC) require preparation of a geotechnical report for each new construction site to evaluate and assess the geologic hazards that may be present. The city and/or county in which a project is located is responsible for reviewing and approving any such report prior to construction. Design and construction of the site and its elements would be required to conform to the current (CBC) seismic design provisions and would be designed to minimize seismic hazards. Site-specific seismic hazards would be evaluated as part of the geotechnical investigation which would be completed during design phase of the Project. The geotechnical report would address all geologic hazards including expected ground motions at the site from known active faults. The report would identify geotechnical and structural design requirements as prescribed by the most current version of the CBC, including applicable County amendments, to ensure that structures can withstand ground accelerations expected from known active faults to minimize seismic hazards. These requirements would be incorporated into site design. The County would review and approve the geotechnical report and site design before issuing a building permit. Nothing about the proposed Project would exacerbate the risk of seismic activity.

Construction. Facility designs made in response to the findings of the geotechnical investigation regarding geologic hazards would minimize potential hazards from seismic shaking during construction activities.

Operational. Facility designs made in response to the findings of the geotechnical investigation regarding geologic hazards would minimize potential hazards from seismic shaking to the completed structures.

a) iii) **Seismic-related ground failure, including liquefaction?**

No Impact. The Project site is not located in an area identified as subject to liquefaction (California Department of Conservation 2018b).

a) iv) **Landslides?**

Less Than Significant Impact. Landslides generally occur in steep, hilly terrain and in locations where the underlying geology is such that it may fail and slide downslope, either from natural process (heavy rain, seismic shaking, erosion) or man-made conditions from site construction. The Proposed Project site is in an area mapped as having the potential for a landslide occurrence based on known geologic conditions (California Department of Conservation 2018b).

Construction. Construction activities have the potential to trigger a landslide. As discussed in Section 3.6 a) ii), design level geotechnical evaluation be completed and report submitted to the County as required by the Seismic Hazards Reduction Act and the CBC. The geotechnical report would assess site-specific potential for landslides and make recommendations on the design of the facility to minimize landslide hazards. The geotechnical investigation will identify whether a landslide potential exists and can help to characterize the size of the potential landslide. The report will identify site-specific recommendations to be made as part of design to reduce or eliminate any landslide hazards. The County would review and approve the geotechnical report and site design before issuing a building permit.

Operational. As described above, the geotechnical report that would be required by the County would assess site-specific potential for landslides and make recommendations on the design of the facility to minimize landslide hazards. The report will identify site-specific recommendations to be made as part of design to reduce or eliminate any landslide hazards. The County would review and approve the geotechnical report and site design before issuing a building permit.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact.

Construction. Ground-disturbing activities would expose soils and elevate the potential for erosion. The potential for wind erosion would be abated by application of water or other BMPs applicable to the site. The primary potential for erosion from construction at the proposed Project site would be associated with runoff because the site is located on a slope. The building permitting process would include the review of proposed drainage for the site. Building plans must include positive drainage away from the facility and analyses of projected surface runoff into local natural drainages. The Los Angeles County Department of Public Works (LACDPW), Water Resources Division, *Hydrology Manual* (LACDPW 2006) provides guidance on requirements for drainage at a Project site to ensure grading plans maintain proper drainage from a site. For a site on a hilltop, grading plans must include analysis of runoff potential, estimated projected flows of newly constructed hard surfaces, and determination of the potential for erosion at constructed outflow areas. Grading plans, as required, may include features to control runoff and eliminate the potential for erosion at the outflow location. The site would be constructed using BMPs to prevent erosion and runoff.

Operational. Operation of the proposed Project would not include any ground-disturbing activities and therefore would have no potential for substantial erosion or loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. The proposed Project site has been identified as being within a potential landslide area as discussed under 3.6 a) iv). Therefore, the ground under the site has the potential to become unstable from Project site activities. As described in Section 3.6.a) iv), the site-specific geotechnical investigation that would be required by the County prior to their issuing a site construction permit would identify any hazards associated with unstable soils or geologic units and, if needed, address any facility design features needed to address the potential hazard.

Construction. Facility designs made in response to the findings of the geotechnical investigation regarding unstable soils or geologic units would address potential hazards from landslides during construction activities.

Operational. Facility designs made in response to the findings of the geotechnical investigation regarding unstable soils or geologic units would address potential hazards from landslides to the completed structures.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated changes in the moisture content. While expansive soils are not expected to be encountered on the Project site, the site-specific geotechnical investigation that would be required by the County prior to their issuing a site construction permit would identify any expansive soils that are present and, if needed, address any facility designs needed to address the potential hazard.

Construction. If expansive soils are identified as being a potential concern at this location, facility designs made in response to the findings of the geotechnical investigation would address potential hazards from expansive soils during construction activities.

Operational. If expansive soils are identified as being a potential concern at this location, facility designs made in response to the findings of the geotechnical investigation would address potential hazards from expansive soils to the completed structures.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project would not include the installation or use of septic tanks or other wastewater disposal systems; therefore, soil suitability to support such systems is not relevant to this Project.

3.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION:

Greenhouse gas (GHG) emissions from construction of the proposed Site INDWT were calculated using the California Air Pollution Control Officers Association CalEEMod v.2016.3.2 (CAPCOA 2017) and emissions from operation of the proposed site were calculated using California Air Resources Board EMFAC2014 and the SCAB fleet emissions factors for a 2018 construction year. The SCAQMD threshold for GHG emissions that is used in this analysis includes construction emissions amortized over 30 years and added to operational GHG emissions (SCAQMD 2008b). Therefore, the analysis below is not separated by construction and operational phases of the Project.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Site INDWT is located in the SCAB, and the SCAQMD thresholds of significance for GHG emissions are applicable to this project. The SCAQMD has established a

significance threshold of 10,000 metric tons per year for carbon dioxide (CO₂) equivalents (MTCO₂e) including nitrogen dioxide and methane from industrial facilities (SCAQMD 2008a).

Direct and indirect GHG emissions from construction and operation of LMR sites were estimated for the proposed INDWT site. Total annual GHG emissions were estimated using CalEEMod v.2016.3.2 for construction emissions, EMFAC2014 for maintenance vehicle emissions, and SCAQMD CEQA Handbook for emission from generator testing and HVAC unit operation (see Appendix C). Annual emissions were estimated to be 42.5 metric tons, which is substantially below the SCAQMD GHG threshold of 10,000 metric tons (LA-RICS 2016).

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. Assembly Bill (AB) 32 (Chapter 488, States of 2006), the Global Warming Solutions Act of 2006 requires reporting of GHG emissions by major sources. The California Air Resources Board (CARB) has established the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions. Industrial facilities that emit a SCAQMD recommended 10,000 MTCO₂e or more of GHG emissions per year, typically from stationary sources such as the proposed diesel generator at Site INDWT, are required to submit annual reports to CARB. SCAQMD has proposed a lower threshold (3,000 MTCO₂e) for residential and commercial projects with emissions from mobile sources traveling to and from a project site.

The Project site is located within an unincorporated area of Los Angeles County, with a segment of proposed electrical line alignment potentially located within Orange County limits; however, the GHG generating activities would occur primarily within the unincorporated area of Los Angeles County. The Unincorporated Los Angeles County Community Climate Action Plan 2020 (LADRP 2015) projects a 10-percent reduction in GHG emission from 2013 levels in unincorporated areas of the county will be necessary to be consistent with AB 32 and has set a goal of 11-percent emissions reductions for the period from 2013 to 2020. Orange County has not developed a similar plan.

For the proposed Site INDWT, 90.3 percent of the GHG emissions would be associated with the electrical needs for equipment operation; and the remaining 9.7 percent would be from construction and maintenance of the facility. Compliance with the SCAQMD significance threshold for GHGs would not trigger mandatory reporting of Project emissions to CARB and demonstrates the proposed Project's contribution to statewide and Unincorporated Los Angeles County emissions, which are trending downward for transportation and electric power sources. Therefore, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

3.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Less Than Significant Impact. Diesel fuel is the primary hazardous material at the site.

Construction. During construction diesel fuel would be required on site to operate heavy equipment. Generally only the fuel in the equipment fuel tanks would be required. However, if equipment requires refueling while on site, it would be done in accordance with the Hazard Assessment Safety Action Plan (HASAP) for the LA-RICS LMR and Long Term Evolution programs.

The HASAP include procedures for the handling, storage, use, and disposal of hazardous materials at LA-RICS sites.

Operational. The facility would include a diesel generator and an up to 4,000-gallon diesel fuel tank. Transportation and storage of diesel fuel on site for the generator would occur during site operations. The use, transport, and disposal of hazardous materials and wastes are required to occur in accordance with federal, State, and local regulations. In accordance with such regulations, the transport of hazardous materials and wastes can occur only with transporters who have received training and appropriate licensing.

Accidental spills or releases associated with the on-site fuel storage tank would be controlled through compliance with the Spill Prevention, Control, and Countermeasure (SPCC) plan that would be prepared in accordance with 40 Code of Federal Regulations (CFR) Part 112 and as required by California's Aboveground Petroleum Storage Act (APSA). Worker education would be conducted and emergency response plans would be in place as required by the SPCC.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Less Than Significant Impact.

Construction. The amount of hazardous material that could be accidentally released to the environment from the operation of construction equipment would be minimal. Use of hazardous materials required to operate construction equipment would be subject to the requirements of the LA-RICS HASAP as described in the analysis in under 3.8 a) above.

Operational. The Project may include an up to 4,000-gallon double-walled diesel fuel tank. The fuel tank would meet National Fire Protection Act standards for flammable liquids and seismic hazards, and would be installed in accordance with California Fire Code and the APSA. Secondary containment (construction of concrete pad with a berm to contain potential diesel fuel spill) will be in place. If the diesel fuel tank is greater than 660-gallon capacity, or fuel has a storage greater than 1,320 gallons, an SPCC Plan would be prepared in accordance with 40 Code of Federal Regulations (CFR) Part 112 and as required by the APSA. Site operations would include refilling the on-site diesel generator periodically. Refueling would be done in accordance with the SPCC. Construction and operation of the Project would not create or result in any reasonably foreseeable upset or accident conditions.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

No Impact. Site INDWT is not located within one-quarter mile of an existing or proposed school.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

No Impact. The proposed Project site is not located on a list of hazardous materials sites.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

No Impact. The proposed Project site is not located within an airport land use plan area or within two miles of a public or public use airport. No impacts would occur.

- f) **For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

No Impact. The proposed Project site is not located within the vicinity of a private air strip.

- g) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

No Impact. The Project facilities would not interfere with an adopted emergency response plan or emergency evacuation plan. The location of the proposed Project site has been fully coordinated with county emergency responders to ensure the location would not interfere with emergency response vehicles or facilities. The intent of the proposed Project is to enhance communication among emergency responders and facilitate better coordination among various agencies responding to emergencies. The proposed Project would enhance implementation of emergency plans and would result in beneficial operational impacts.

Proposed Project construction activities would be fully coordinated with the property owners. Installation of hardware and integration of software for LMR equipment is planned so as to minimize disruption, if any, of local emergency responders' communications. No impairment of or interference with an emergency response plan or emergency evacuation plan would occur.

- h) **Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

Less than Significant Impact with Mitigation. California PRC Sections 4201-4204 and Government Code Sections 51175-51189 require identification of fire hazard severity zones within the State of California. Fire prevention areas considered to be under State jurisdiction are referred to as "State responsibility areas." In State responsibility areas, the California Department of Forestry and Fire Protection is required to delineate three hazard ranges: moderate, high, and very high. Site INDWT is located within a State Responsibility Area Very High Fire Hazard Severity Zone.

Construction. Construction activities in this area represent an elevated risk of igniting a wildland fire, resulting in a potentially significant impact. Therefore, the following mitigation measure would be required during construction, which reduces the impact to less than significant.

HAZ MM 3: Fire Management Plan

Prior to construction activity, the Authority must work with the agency responsible for fire protection in the jurisdiction where the site is located to develop and implement a fire management plan for use during construction activity. The plan will identify Project locations,

project descriptions, anticipated construction activities, limitation of activities during periods of elevated fire risk (e.g., “red flag” days), level of suppression equipment required on site, training requirements, and points of contact.

With implementation of **HAZ MM 3: Fire Management Plan**, impacts would be less than significant.

Operational. Proposed Project facilities would be unmanned, equipment would be maintained within a shelter, and the diesel generator would be operated only during a power outage and periodically for routine maintenance. The risk of starting a fire from operational activities would be minimal. Operation of the proposed Project would have a less than significant impact.

3.9 HYDROLOGY AND WATER QUALITY

Would the project:	Less Than Significant			
	Potentially Significant Impact	with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Less Than Significant			
	Potentially Significant Impact	with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

a) Violate any water quality standards or waste discharge requirements?

No Impact. During site construction, any potential for surface water runoff to affect water quality would be controlled by required BMPs. BMPs are intended to reduce run-on and runoff of stormwater and control sediment runoff through placement of hay bales, sand bags, and fiber rolls that protect stormwater or drainage inlets. During excavation of the deep foundation for the monopole, groundwater may be encountered. As required by the CBC, a geotechnical investigation would be conducted during site design and would identify the likelihood of encountering groundwater. If necessary, a dewatering plan would be prepared. If it is determined that groundwater is likely to be encountered during excavation and that dewatering would be necessary, a permit from the Los Angeles Regional Water Quality Control Board (RWQCB) would be obtained prior to construction. Removal or discharge of water would be done in accordance with the terms and conditions contained in the permit. Because construction of the proposed Project would be conducted in accordance with applicable NPDES permit requirements, no violation of water quality standards would occur.

Operation of any proposed Project facility would not require use of or discharge of water from the proposed facility. BMPs require that soils be stabilized once construction is completed, and operational activities would not generate runoff that could affect water quality or generate water discharge. Operation of the proposed Project would occur in compliance with applicable regulations and would not use or discharge measurable amounts of runoff; therefore, no violation of water quality standards or waste discharge requirements would occur.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact.

Construction. Site construction activities may require use of water for compaction of soils and wetting of exposed soils to control dust. No water would be needed for the operation of the

proposed Project. Water use is not expected to exceed 500 gallons during the entire six-week construction period. In comparison, domestic per capita water use in Los Angeles County was 81 gallons per day in 2015 (USGS 2015). No new groundwater sources are required to support the proposed Project, and the water supplied to the Project would be acquired from municipal or other public water sources

Operational. Groundwater recharge could potentially be affected by creation of new impervious surfaces. The amount of new impervious surfaces at the Project site would not exceed 4,000 square feet. The proposed Project site is located on a hilltop. Hilltops are not groundwater recharge areas. Therefore, construction of the proposed Project would not result in interference with groundwater recharge.

- c) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?**

No Impact. The proposed telecommunication facility site is on a hilltop and is not adjacent to a stream or river. The nearest surface water features are in Brea Canyon to the west and northeast and Tonner Canyon to the south and southeast. Both are at least one-half mile from the site at their closest points. Construction of proposed Project would not substantially alter existing drainage patterns. Site construction plans would be reviewed by applicable County planning departments prior to issuance of a building permit. During the design and building permit approval process, a hydrological analysis would be completed and/or a standard approved equipment and generator pad would be developed. BMPs such as hay bales, straw rolls, or similar methods would be implemented to direct runoff toward drains and limit sediment leaving the area during construction to limit erosion of exposed soils (e.g., during excavation). Hydrological analysis of surfaces that could generate runoff would be completed during the design and building permit approval process to ensure that local drainages can support any additional runoff that may occur as part of the proposed Project. Therefore, the proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on or off site.

- d) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?**

No Impact. The proposed telecommunication facility site is on a hilltop and is not adjacent to a stream or river. As discussed under item 3.9 c), construction of proposed Project would not substantially alter existing drainage patterns. Site construction plans would be reviewed by applicable County planning departments prior to issuance of a building permit. During the design and building permit approval process, a hydrological analysis would be completed and/or a standard approved equipment and generator pad would be developed. BMPs such as hay bales, straw rolls, or similar methods would be implemented to direct runoff toward drains and limit sediment leaving the area during construction to limit erosion of exposed soils (e.g., during excavation). Hydrological analysis of surfaces that could generate runoff would be completed during the design and building permit approval process to ensure that local drainages can support any additional runoff that may occur as part of the proposed Project. Therefore, the proposed Project would not substantially alter the existing drainage pattern of the site or area

or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site.

- e) **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Less Than Significant Impact.

Construction. The proposed Project site is undeveloped and does not have an existing storm drain system. As discussed in sections 3.6 a) ii) and 3.6 b), construction plans would be reviewed by applicable County planning departments prior to issuance of a building permit. The building permit process would include review of the drainage issues for the site to assess the amount of runoff that would be generated and whether local drainage systems can support any additional runoff that may be generated by the Project. The proposed Project would not create or contribute runoff water which would exceed the capacity of existing stormwater drainage pattern.

Operational. The proposed Project site would have an up to 4,000-gallon double-walled diesel fuel tank. The fuel tank is a potential water pollutant source. The fuel tank would be installed in accordance with California Fire Code and the APSA. If the diesel fuel tank is greater than 660-gallon capacity, or has a fuel storage capacity greater than 1,320 gallons, an SPCC Plan would be prepared in accordance with 40 CFR Part 112 and the APSA. Fuel tanks would be installed in accordance with prescribed regulations and would not provide a substantial additional source of polluted runoff.

- f) **Otherwise substantially degrade water quality?**

Less Than Significant Impact.

Construction. During construction, BMPs such as sandbags, hay bales, silt fences, and placing berms around construction areas shall be in place to direct runoff to natural drainage features. Silt fences, hay bales, or other types of geofabric specifically designed to reduce siltation will be required to be in place and inspected during construction to substantially reduce and/or eliminate siltation of runoff from the job site during construction. Use of water at the site during construction would be minimal and will be limited to the compaction of soils, concrete wash-out, and potentially for wash-down of site equipment. Water used for soil compaction would result in little or no runoff. Specific concrete and vehicle wash areas will be set up and are required to have plastic or similar material laid out to catch runoff and prevent potential construction contaminates from reaching drainages. Therefore, methods to prevent runoff would be in place during construction of the Project, and water quality would not be substantially degraded.

Operational. Operation of the facility would not generate any wastewater. The only potential for degradation of water supplies would result from runoff at the facility. No hazardous materials would be stored on site other than fuel for the diesel generator. The fuel tank would meet or exceed regulatory requirements for fuel tanks and would be double-hulled to reduce the potential for any leaks. Fuel tanks are specifically designed following regulatory guidance and subsequent design standards to reduce or eliminate the potential for fuel spills. Therefore, operation of the Project would not substantially degrade water quality.

- g) **Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

No Impact. The Project does not include the construction of any housing and therefore would not result in placing housing in a flood hazard area.

- h) **Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

No Impact. The entire Project site including the potential power line areas is located within Flood Insurance Rate Map (FIRM) floodzone X –unshaded (FEMA 2008), which is an area of minimal flood hazard at a higher elevation than the 100-year and 500-year flood hazard inundation areas.

- i) **Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

No Impact. The Project site is located on a hilltop. The area would not be exposed to flooding.

- j) **Inundation by seiche, tsunami, or mudflow?**

No Impact. The Project site is located on a hilltop. It is 20 miles from the Pacific Ocean and would not be affected by a tsunami, nor is it adjacent to any body of water subject to a seiche that could inundate the site. The area is not susceptible to mudflows, as there are no slopes above the site that could generate a mudflow.

3.10 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) **Physically divide an established community?**

No Impact. The proposed Project is the construction and operation of a communications site. The Project location is not within an established community, and the construction and operation of Site INDWT has no potential to physically divide any community.

- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

No Impact. The site of the proposed telecommunications facility is designated as rural land in the Los Angeles County general plan and is zoned by the County as heavy agriculture (A-2). The Los Angeles County Code Title 22 (Section 22.16.030) indicates that radio towers are allowed in Zone A-2 with a conditional use permit. Therefore, the Project would not conflict with the zoning.

Installation of a new power line within or adjacent to an existing road would not conflict with any land use plan, policy, or regulation applicable to either the Los Angeles or Orange county portions of the power line area of the Project site.

- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?**

No Impact. The proposed Project site is not located within the area covered by an applicable habitat conservation plan or natural community conservation plan.

3.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No Impact. The Project site is not currently being used for mineral resource extraction. The proposed INDWT facility would be constructed adjacent to existing water tanks, and the power run would be installed within or adjacent to existing roads. Construction and operation of Site INDWT would not result in a change in site conditions that would affect mineral resource availability.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The Project site is not currently being used for mineral resource extraction. The site is not in an area identified by Los Angeles County as a mineral resource zone or oil and gas resource area (LADRP 2014b).

3.12 NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

The estimated noise levels from construction of the proposed INDWT site were calculated using the Federal Highway Administration Roadway Construction Noise Model v 1.1 (FHWA, 2008), which was developed from a compilation of empirical noise data that is applicable to a variety of construction equipment including equipment that will be used in the construction of this site. Operational noise was estimated from industry data from diesel generator sets and application of general principles of noise propagation.

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact.

Construction. Construction of the proposed Project site would generate noise from construction equipment usage, vehicle trips from construction workers, and supply trucks traveling to and from the proposed Project site. The Project site is located primarily in an unincorporated area of Los Angeles County with a segment of proposed electrical line alignment potentially located within Orange County limits; however, the noise generating activities would occur primarily within the unincorporated area of Los Angeles County. Los Angeles County does not have a specific construction noise level threshold; however, thresholds for mobile and stationary equipment which are used in construction and other activities have been established by the County. The Project site is located in an undeveloped area that is not accessible to the public. The nearest noise receptors are the Firestone Scout Reservation facilities to the east and a residential area to the north. Both are a half mile or more from Site INDWT.

Los Angeles County Code of Ordinances, Title 12 Environmental Protection, Chapter 12.08 Noise Control, Part 4 Specific Noise Restrictions identifies the following noise level thresholds:

- At residential structures maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment (1) daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.: Single Family Residential 75 dBA, multifamily residential 80 dBA, commercial 85 dBA; (2) daily 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays: single family residential 60 dBA, multifamily residential 64 dBA, commercial 70 dBA.
- At residential structures maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment (1) daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.: Single Family Residential 60 dBA, multifamily residential 65 dBA, commercial 70 dBA; (2) daily 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays: single family residential 50 dBA, multifamily residential 55 dBA, commercial 60 dBA.
- At business structures maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment daily, including Sunday and legal holidays, all hours: 85 dBA.

Los Angeles County noise restrictions include operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited.

Noise restrictions for Orange County are contained in the Orange County Code of Ordinances, Title 4-Health Sanitation and Animal Regulations, Division 6 Noise. Noise generated in unincorporated Orange County cannot exceed 55dBA from 7:00 a.m. to 10:00 p.m. at the exterior of an adjacent residential property. Section 4-6.7(a) of this ordinance provides an exemption for construction activities provided these activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a Federal holiday.

Estimated noise levels from construction of the proposed INDWT site would be 69 dBA at 300 feet. The nearest noise receptors to Site INDWT are the Firestone Scout Reservation facilities to the east and a residential area to the north. Both are a half mile away or more from the entire site (including the power runs that extend into Orange County), and noise levels would attenuate to ambient levels (50 dBA) over this distance. Therefore, construction noise levels at the proposed Project site would not generate noise in excess of standards established in either county's noise ordinance.

Operational. During operation of the Project site, the dominant noise source would be from the HVAC system associated with the equipment shelter, since this equipment would operate 24 hours a day. In addition, emergency generators would operate one hour per month and during a power outage. Because the air conditioners would operate 24 hours a day, data were calculated as community noise equivalent level (CNEL). Based on this calculation, the CNEL at 10 feet and 20 feet would be 59 dBA and 53 dBA, respectively. Noise from HVAC systems would not violate any thresholds established in the County ordinance. Noise emissions from generator operations would be 58 dBA at 21 feet. Both HVAC and generator noise levels would be below a 60-dBA CNEL threshold and would be considered "normally acceptable" for outdoor residential exposure established by the California Office of Planning and Research *General Plan Guidelines, Noise Element* (CA OPR 2017). In addition, no residential areas are within a half mile of the site.

b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Less Than Significant Impact.

Construction. During site construction, operation of heavy equipment may generate localized ground-borne vibration and noise that could be perceptible to sensitive receivers within close proximity. The Los Angeles County noise ordinance requires that construction vibration not exceed a perceivable motion velocity of 0.01 peak particle velocity (PPV) over the range of 1 to 100 Hertz at receiver sites. The ordinance prohibits construction activities in excess of this threshold. Referencing vibration source levels for construction equipment published in the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment* (FTA 2006), the distance beyond which potential vibration from construction of the proposed Project site would diminish below the 0.01 PPV vibration threshold is estimated at 164 to 420 feet, depending on soil type. No sensitive receivers are located within this distance of the Project site.

Operational. Site operations would not generate any ground borne vibrations or noise levels.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact.

Construction. Construction activities may temporarily increase noise levels in the vicinity of the Project (see item 3.12 d) below), but increases would be short-term (approximately six weeks).

Operational. Operation of the Project would not include any activities or equipment usage that would result in a permanent increase in noise levels in the vicinity of the proposed Project site.

- d) **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

Less Than Significant Impact.

Construction. Construction activities at the proposed Project site would produce an increase in noise levels in the vicinity of the site. The increases in noise levels would be temporary and of short duration. FTA *Transit Noise and Vibration Impact Assessment* guidelines for a general noise assessment indicate 90 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) and 80 dBA during nighttime hours (10:00 p.m. to 7:00 a.m.) are thresholds where adverse community reaction could occur for construction activities on a temporary basis (FTA 2006). Although the FTA guidelines do not constitute regulatory requirements, these impact thresholds are referenced in this analysis to determine the potential significance of project construction noise impacts. Estimated noise levels from construction of the proposed INDWT site would be 69 dBA at 300 feet. Because the nearest noise receptors are a residential area a half mile from the site, construction noise levels estimated for the proposed Project would not exceed the adverse community reaction guidelines for a temporary increase in construction noise.

Operational. The emergency generator that would be present at the Project site would be operated approximately one hour per month as part of routine maintenance testing, which could produce a temporary noise increase during the telecommunications facility operations. Noise emissions from generator operations would be 58 dBA at 21 feet on a temporary basis or for a 24-hour period, which is below the 60-dBA CNEL “normally acceptable” threshold for outdoor residential exposure. Because the nearest residential area is a half mile from the site, noise levels would not exceed this threshold.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

No Impact. The Project site is not located within an airport land use plan or within 2 miles of a public airport. The nearest public airports are Fullerton Airport, which is approximately 9 miles southwest, and Brackett Field in Pomona, which is more than 10 miles north-northeast of the Project site.

- f) **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

No Impact. The Project site is not located within the vicinity of a private airstrip.

3.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

No Impact. The Project would involve the construction and operation of Site INDWT. Site INDWT would improve and facilitate communications among emergency responders. While its intent is to improve public safety, it would not increase employment or housing; and it would not provide infrastructure that could induce population growth. Construction of the facility would result in a short-term increase in construction employment. The increase in construction employment would not be expected to induce substantial population growth in the area because the work force would be small enough to be accommodated by persons already living in the area and is anticipated to last approximately six weeks. During operation, the facility would be unstaffed and would not result in any new jobs at the site. Therefore, construction and operation of the Project would have no impact on population.

- b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No Impact. No housing is on or adjacent to the site. The construction and operation of Site INDWT would not displace any existing housing.

- c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No Impact. No housing is on or adjacent to the site. The construction and operation of Site INDWT would not displace any people.

3.14 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

No Impact. The purpose of the Project is to facilitate communications among emergency response agencies including fire, police, and hospitals. The Project would not result in the need for additional fire and police facilities, would not increase school populations and the need for additional school facilities, would not affect development or use of parks, or result in any other impacts to other public facilities. The Project would result in beneficial impacts to response agencies in the event of an emergency by facilitating interoperable communications for coordinated response.

3.15 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No Impact. The Project would not cause a direct population increase (see Section 3.13). The Project site is not in or adjacent to existing recreational areas or facilities, and the site is not accessible to the public for recreation. The telecommunications facility would not be staffed and would only be visited periodically for short periods of time by maintenance staff. The construction and operation of Site INDWT would have no effect on the use of existing neighborhood parks or regional parks or recreational facilities. The Project has no potential to result in substantial physical deterioration of recreational facilities.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

No Impact. The Project does not include or require construction or expansion of any recreational facilities.

3.16 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) **Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Less Than Significant Impact.

Construction. During construction, an average of 25 trips to the proposed Project site would be made daily. Construction-related traffic would access the site using existing unpaved roads that would be reached from Tonner Canyon Road. The access to the site lies beyond a gate on Tonner Canyon Road that limits public access beyond that point. No road improvements or new road construction would occur. This minor increase in traffic during construction would not disrupt traffic flow in the Project area and would not be in conflict with an applicable plan, ordinance, or policy associated with the performance of the circulation system (e.g., mass transit, nonmotorized travel, intersections, streets, highways and freeways, pedestrian and bicycle paths).

Operational. Traffic associated with operations and maintenance of each site is projected to be about four trips per month. This minor increase in traffic during operations would not disrupt traffic flow in the Project area and would not be in conflict with an applicable plan, ordinance, or policy associated with the performance of the circulation system (e.g., mass transit, nonmotorized travel, intersections, streets, highways and freeways, pedestrian and bicycle paths).

- b) **Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

No Impact. Construction and operation-related traffic would access the unpaved roads to get to the site via Tonner Canyon Road. Tonner Canyon Road can be reached by using SR 57 or Brea Canyon Road. Both of these intersections are in in Orange County. Neither intersection is included in Orange County's 2013 Congestion Management Program (CMP) (OCTA 2013). Although the County's CMP does not address these intersections, it does identify the AM and PM peak period levels of service for 2012 for the Tonner Canyon Road segment of the northbound SR 57 as level of service (LOS) C and for southbound SR 57 as LOS D. The effects of construction-related traffic would be nearly indistinguishable from existing levels of traffic because the approximately six-week construction period would typically add fewer than 25 round trips by vehicle per work day, and the increase in traffic would be less than 1 percent of the average daily traffic on this freeway segment. Operation phase traffic would be indistinguishable from existing levels of traffic on this segment because maintenance would typically generate no more than four round trips per month. Therefore, traffic associated with the Project would not conflict with the standards in a congestion management program.

- c) **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

No Impact. The proposed Project includes construction of an up to 70-foot monopole with an up to 15-foot-tall lightning rod. The presence of this new structure could potentially be a hazard to air navigation. Information on the proposed monopole was entered into the FAA Notice Criteria Tool which indicated that the proposed monopole is in proximity to a navigation facility and may impact the assurance of navigation signal reception. Therefore, the FAA requests that the proposed structure be filed with them. The Authority would file the notice with the FAA prior to construction of the monopole and would comply with the FAA's aeronautical study and hazard determination, modifying the proposed monopole as required (including reduction of proposed height and/or relocation with the INDWT site boundary) such that there is a No Hazard determination from the FAA. Because the proposed Project would meet FAA requirements, it would not pose safety risk or hazard to air navigation.

- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

No Impact. The proposed Project site would be accessed using existing roads. The Project would not entail any changes to transportation system designs and, therefore, would not introduce any design feature hazards or incompatible uses.

- e) **Result in inadequate emergency access?**

Less Than Significant Impact.

Construction. Construction-related traffic is estimated to not exceed 25 trips per day at the site. Construction activity would affect access only to the site (e.g., the existing water tank site) and would not affect any adjacent roads that could be used for emergency access.

Operational. Vehicle trips associated with operations would be limited to those required for occasional inspections, maintenance, and repair. Up to four vehicle trips per month would occur during operations, equating to a change in the thousandths of a percent of the current average daily traffic. This would not be of sufficient volume to affect the level of service of any roadway. No impairment of access roads would be necessary during operations, and operational impacts on emergency access would be less than significant. In addition, with operation of Site INDWT, communications for first responders would be enhanced and would provide opportunities for better communications associated with access during emergencies.

The proposed facilities would not be sited where they could affect emergency access. During the design process, siting of the facilities would be discussed with the property owner and operator to ensure existing operations and emergency access are not affected and access to existing facilities (i.e., the City of Industry water tanks) would not be blocked, as is required in the site lease/access agreement with the property owner. The LMR system contract requires compliance with applicable regulations and codes, including Life and Safety codes that contain requirements for emergency access. By incorporating code requirements in the placement and design of the site facilities, operation of the Project would have no impact on emergency access.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities?

No Impact. The Project consists of the construction and operation of a telecommunications site. The Project site is not accessible to the public; and no public transit, bicycle, or pedestrian facilities are located on or near the Project site. The Project would have no effect on any policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities nor would it decrease the performance or safety of these facilities.

3.17 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: ...				
a) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

Status of Cultural Resources within the Site INDWT Project Area's Direct and Indirect APEs. Based on records searches at the South Central Coastal Information Center, intensive field surveys of the entire direct APE, outreach to the Los Angeles and Orange counties Planning Departments, and consultation with 14 Native American tribes, no listed or eligible tribal cultural resources as defined in Public Resources Code section 5020.1(k) are within the direct or indirect APE of the Site INDWT Project area.

The only cultural resources identified within the vicinity of the Project area are three isolated archaeological resources, all of which are situated within the 1-mile indirect APE and approximately 0.42 to 0.54 mile from the Site INDWT Project area, which is well outside ground-disturbing areas. As recorded, these three resources are historic-era in age and none possess characteristics that would be significant to California Native American tribes.

Tribal Consultation. No tribes have requested consultation pursuant to AB 52 for the Site INDWT project area. However, after consultation with the NAHC (Totton, Gayle 2017), tribal consultation was conducted using traditional paths, which included requesting a search of the NAHC's Sacred Lands File and a list of California Native American tribes with interest in the INDWT geographic area (NAHC 2017). The NAHC was contacted using their required online form format on October 22, 2017, and their letter response was received by email on October 25, 2017. The NAHC stated that the records search of the Sacred Lands File was negative (i.e., no sacred lands were identified at the Project site; however, the letter further indicated that the APE is sensitive for cultural resources (NAHC 2017). Each tribe on the NAHC list was subsequently contacted through their preferred method of communication (e.g., direct mailings, including follow-up telephone calls and emails). In addition, because the FCC is responsible for

Section 106 compliance at all non-federal LMR project sites, the proposed INDWT tower location was entered into the FCC's TCNS, which notifies any federally recognized tribes having an interest in the INDWT geographic area. The federally recognized tribes were consulted using the preferred methods stated in the various TCNS responses, including submittal of INDWT-specific information (maps, photographs, survey results) provided by email, direct mailings, or through upload to their website, and through follow-up telephone conversations, as needed. Using this NAHC-approved combined method for tribal outreach, a total of 14 federally recognized and other California tribes were consulted for the Site INDWT Project area. Tribal consultation with the 14 tribes was completed in January 2018. The 14 tribes consulted are:

- Gabrieleño Band of Mission Indians-Kizh Nation
- Gabrieleño /Tongva San Gabriel Band of Mission Indians
- Gabrielino/Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Juaneño Band of Mission Indians
- Fernandeseño Tataviam Band of Mission Indians
- Eastern Shoshone Tribe
- Skull Valley Band of Goshute Indians
- San Manuel Band of Mission Indians
- Cahuilla Band of Indians
- Los Coyotes Reservation
- Santa Ynez Band of Mission Indians
- Soboba Band of Luiseno Indians

With the exception of four tribes, all of the tribes contacted deferred to tribes more local to the Site INDWT Project area, or expressed no interest in Site INDWT, or provided no response. Follow-on consultation was completed with the four tribes expressing interest in the Site INDWT geographic area: the Gabrieleño Band of Mission Indians-Kizh Nation, the Eastern Shoshone Tribe, the Skull Valley Band of Goshute Indians, and the Soboba Band of Luiseno Indians. Results of the completed follow-on consultation process for the four tribes are as follows:

- The Gabrieleño Band of Mission Indians-Kizh Nation indicated that Site INDWT lies within their ancestral tribal territory and within a sensitive area and that Project activities could cause a substantial adverse change in the significance of tribal cultural resources; however, they did not identify any specific tribal cultural resources within or adjacent to the Project site.

- The Eastern Shoshone Tribe indicated that they do not recommend this site as eligible for listing in the National Register of Historic Places. However, if cultural materials are discovered during construction or the project changes, the Tribe would like to be notified.
- The Skull Valley Band of Goshute Indians indicated that they have no issues with this project site. The Goshute requested notification if cultural materials or human remains are found within the APE or there are changes to the project.
- The Soboba Band of Luiseno Indians deferred to tribes closer to the project area.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) **listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)**

No Impact. No listed or eligible tribal cultural resources have been identified within the Site INDWT Project area.

- b) **a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Less than Significant Impact

Construction. The Gabrieleño-Kizh Nation considers this geographic area to be sensitive for possible sites, features, places, cultural landscapes, sacred places, or objects with cultural value to their tribe; however, no specific tribal resources have been identified. Because no tribal resources are known within the proposed Project area, impacts are expected to be less than significant. However, the following mitigation measures would be implemented during construction in the unexpected event that prehistoric archaeological resources or human remains are discovered:

CUL MM 3: Unexpected Discovery of Archaeological Materials

In the event that previously unidentified prehistoric or historic-age archaeological resources are uncovered, the following actions shall be taken:

- 1) All ground-disturbing work within 165 feet (50 meters) of the discovery shall be halted. The qualified archaeological monitor will mark the immediate area with highly visible flagging and immediately notify the Project Archaeologist.
- 2) The Project Archaeologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, the resource shall be documented on California State Department of Parks and Recreation cultural resource record forms, and no further effort shall be required.

- 3) If the resource cannot be avoided and may be subject to further impact, the Project Archaeologist shall evaluate the resource and determine whether it is (1) eligible for inclusion in the NRHP and is thus a historic property for the purposes of the NHPA and NEPA; (2) eligible for the CRHR and thus a historical resource for the purposes of CEQA; (3) a “unique” archaeological resource as defined by CEQA; (4) a Tribal resource as defined by AB 52. If the resource is determined not to be significant under any of these four categories, work may commence in the area following collection (as appropriate) and recording, including mapping and photography, of the archaeological materials or features.
- 4) If the resource meets the criteria for any or all of the categories described in CUL MM 3 (3), work shall remain halted, and the Project Archaeologist shall consult with LA-RICS Authority staff regarding methods to ensure that no substantial adverse changes occur. Preservation in place (i.e., avoidance) is the preferred method of ensuring no substantial adverse impacts occur on historic properties/historical resources and shall be required unless other equally effective methods are agreed upon among the Project Archaeologist, the Authority, and any other stakeholders. If the archaeological material appears to represent a site – defined as three or more artifacts and/or features in an intact deposit – an archaeological test program (Phase II) may be necessary. Associated mitigation measures include, but are not limited to, collection of the archaeological materials, recordation (e.g., DPR Primary Record and Site Forms) and analysis of any significant cultural materials in accordance with a Data Recovery Plan, and curation of artifacts at an approved curation facility. A curation agreement for this Project is already in place with the University of California, Los Angeles, Archaeological Collections Facility at the Fowler Museum. At the completion of the appropriate mitigation measures, a professional-level technical report shall be filed with the appropriate California Historical Resources Information System (CHRIS) Information Center (IC).
- 5) Work at the project location may commence upon completion of the appropriate mitigation treatment(s).

CUL MM 4: Unexpected Discovery of Human Remains

Operational. No tribal cultural resources have been identified that could be affected by operation of Site INDWT, and site operations would not include any ground disturbing activities that could affect any archaeological resources that could be considered sensitive to Native American tribes.

3.18 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

Less Than Significant Impact.

Construction. The proposed Project would require drilling a caisson up to 36 feet deep. Site INDWT is located on top of a ridgeline, and groundwater would not be expected to be encountered at this depth on a hilltop site. Construction of the site is not anticipated to result in the generation of any substantive amount of water during construction that would require dewatering. However, a geotechnical investigation would be completed prior to construction. If the geotechnical investigation identifies shallower groundwater that would require dewatering, a dewatering permit would be obtained prior to construction; and any water would be managed in accordance with the permit requirements and thus would meet the wastewater requirements of the Los Angeles RWQCB.

No Impact. The Project would not include construction or expansion of any water or wastewater treatment facilities, and operation of the site would not produce any wastewater that would require treatment.

- c) **Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

No Impact. The Project would require grading and the addition of up to 4,000 square feet of impermeable surfaces that would increase stormwater runoff. This is a very small area and would not change drainage patterns, and would not require development or expansion of water or wastewater treatment facilities. Building pads would be designed for positive drainage toward existing natural drain catchment areas with the capacity to support the additional runoff associated with new impervious surfaces. Effects on existing stormwater drainage facilities would be less than significant.

- d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

No Impact. Water would be required during construction of the site for activities such as concrete mixing and dust suppression. No water would be required for routine operation of the site. Water usage for construction is expected to be minor. Up to 500 gallons would be expected to be used during the construction period (LA-RICS 2016). Existing water supplies would be used to satisfy the short-term need. The total water requirement for the Project site would be about 0.0003 percent of the daily treated water supply of 165 million gallons per day processed by the Los Angeles County Sanitation District (LACSD). Water supplies from existing entitlements and resources would be sufficient to serve the Project, and impacts on water supplies would be less than significant.

- e) **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

No Impact. No water would be required nor provided at the facility; therefore, the Project would not result in generation of wastewater requiring treatment.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

Less Than Significant Impact.

Construction. Construction of the Project would not entail demolition of existing structures that would result in waste requiring disposal. Small amounts of debris may be created as a routine part of constructing new facilities. The Project's waste disposal needs would be accommodated by existing landfill facilities within Los Angeles County.

Operational. Operation of the Project would result in minimal solid waste primarily associated with maintenance activities. The Project's waste disposal needs would be accommodated by existing landfill facilities within Los Angeles County.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. Waste may be generated by construction of the Project, as described under Section 3.8 f). Operation of the Project would generate minimal solid waste. Solid waste generated during construction and operation of the site would be handled in a manner that is consistent with federal, State, and local statutes applicable to the type of solid waste generated.

3.19 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

Less Than Significant with Mitigation Incorporated. Potential impacts to biological resources during construction would be reduced to less than significant with implementation of MMs as discussed in Section 3.4. Therefore, the Project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. The Project would have no impact to historic cultural resources. Potential impacts to paleontological resources during construction would be reduced to less than significant with

implementation of MMs as discussed in Section 3.5. Therefore, the Project would not eliminate important examples of the major periods of California history or prehistory.

- b) Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Less Than Significant Impact. The proposed Project would have no impact on the following resource topics: agriculture and forest resources; land use and planning; mineral resources; population and housing; public services; and recreation. Therefore, the Project would not contribute to cumulative impacts to these resources.

The proposed Project would have less than significant or less than significant with mitigation incorporated to the following resources topics: aesthetics; air quality; biological resources; cultural resources; geology and soils; greenhouse gases; hazards and hazardous materials; hydrology and water quality; noise; traditional cultural resources; transportation/traffic; and utilities and service systems. These resources have been considered for potentially cumulatively considerable impacts. Projects within 2 miles of the Project site were identified and are provided in **Table 3.19-1.**

Table 3.19-1. Projects Within 2 Miles of Site INDWT.

Project	Distance and Direction from Project Site	Location	Description
SR 57 Truck Climbing Auxiliary Lane	1.05 mile west	SR 57 between Lambert Rd and the LA/Orange county line	Truck climbing lane
Tonner Hills Planned Community	1.44 miles south	686 acres on the east side of SR 57 north of Lambert Road and approximately 108 acres on the west side of SR57 at the southwest corner of Tonner Canyon Rd. and the Orange Freeway	795 dwelling units and approximately 570 acres of open space (nearly completed)
Brea Canyon Road Widening Project	1.17 miles west	Brea Canyon Rd between Canyondale Drive and the LA/Orange county line	Widen approximately 1.75 miles of Brea Canyon Road from 2 to 4 lanes
Millennium Development Project	2 miles northeast	County Estates community in Diamond Bar	48 single family lots

The geographic area for the consideration of cumulative impacts on each of these resources is based on the potential geographic extent of impact expected to each resource from the Project. The geographic area and the potential for cumulative impacts from other current or proposed projects identified within each area are discussed below by resource.

Aesthetics: The geographic area considered for cumulative impacts to aesthetics is one-half mile from the Project site based on FCC guidance on the distance for consideration of visual impacts from construction of a communications tower 200 feet tall or less. No other projects were identified within this distance. No cumulatively considerable impacts would occur.

Air Quality: Air emissions from the Project could contribute to cumulative air quality impacts with other projects and ongoing activities in the same air basin as the Project; therefore, the SCAB is the geographic area used for the consideration of cumulative impacts.

Construction. As discussed in Section 3.3 a), air emissions from construction and operation of Site INDWT would not exceed thresholds established by the SCAQMD. These emission thresholds were set by the SCAQMD to ensure that individual projects, when combined with other air pollution-emitting activities within their jurisdiction, do not compromise progress toward attainment of all NAAQS and CAAQS. Although the continued nonattainment status of the SCAB for O₃ (NAAQS/CAAQS), PM_{2.5} (NAAQS/CAAQS), and PM₁₀ (CAAQS) are an indication of significant cumulative impacts of all projects in these basins, air emissions from construction of the INDWT Project would remain below significance thresholds. Air emissions from construction of the Project would not be cumulatively considerable.

Operational. Because air emissions from operation of Site INDWT would not exceed thresholds established by the SCAQMD, operational air emissions from the Project would not be cumulatively considerable.

Biological Resources: The geographic area for the consideration of cumulative impacts to biological resources is two miles from the Project site in order to account for wide-ranging species such as large mammals or raptors.

Construction. Construction of Site INDWT could contribute to cumulative impacts associated with disturbance of protected nesting migratory and raptor bird species during construction. With implementation of mitigation measures as described in Section 3.4, impacts to nesting birds would be avoided during Project construction. Because impacts to nesting birds would be avoided, construction of the Project would not result in cumulatively considerable significant impacts on migratory birds.

Other projects that are or are proposed within 2 miles of the Site INDWT have the potential to impact sensitive species or their habitat or sensitive natural communities. The proposed Project would not result in any loss of habitat that is considered a sensitive community or that supports sensitive species. Potential impacts from construction activities to sensitive species and habitats would be avoided by implementation of mitigation measures as described in Section 3.4. The Project would not result in cumulatively considerable impacts to sensitive species or their habitat or sensitive natural communities.

Operational. Project operations are not expected to present an impact to nesting birds or sensitive species. No ground disturbing activities that could affect natural communities would occur. Operational phase impacts would not be cumulatively considerable.

As discussed in Section 3.4 a), installation of the monopole at Site INDWT could present a slight hazard to flying migratory birds. Therefore the Project could have the potential for cumulative impacts to migratory birds when considered with other existing and proposed towers and similar structures such as transmission line towers. However, monopoles are generally shorter and more visible to birds than lattice type structures and thus are more avoidable to birds and present less of a threat to flying birds. The proposed monopole would not exceed 85 feet in height above ground level including appurtenances which is shorter than many other potential obstacles to flying birds including natural features such as trees. Although the Project could contribute to cumulative impacts to migratory birds, the impact would not be considered cumulatively considerable.

Cultural Resources: The geographic area considered for cumulative impacts to cultural resources is one-half mile from the Project Site based on guidance provided by the FCC for consideration of visual impacts to cultural resources from construction of a 200-foot or less communications tower. No other projects were identified within this distance. No cumulatively considerable impacts would occur.

Geology and Soils: Potential impacts to geology and soils from the Project would be confined to the ground area that would be disturbed by Project construction activities and occupied by the completed facility; therefore, the geographic area considered for cumulative impacts is the Project site and immediately adjacent areas. No other projects were identified within this distance. No cumulatively considerable impacts would occur.

Greenhouse Gases: GHG emissions from the Project could contribute to cumulative impacts with other projects and ongoing activities. Because the site is subject to SCAQMD regulations regarding GHG emissions, the SCAB is the geographic area used for the consideration of cumulative impacts for GHG. The SCAQMD emission thresholds were set to ensure that individual projects, when combined with other air pollution-emitting activities in their jurisdictions, do not result in significant GHG impacts. In developing GHG thresholds, the SCAQMD made various assumptions about growth in population and housing and indicators of economic activity, including transportation activity as indicated by vehicle miles traveled. The proposed Project is not growth-inducing and would not result in an economic activity that would be inconsistent with these assumptions in forecasting district-wide emissions. Although the Project would result in an increase of GHG emissions, as shown in Section 3.7 a), combined GHG emissions from construction and operation of the Project would be less than SCQAMD significance thresholds. Project GHG emissions would not be cumulatively considerable.

Hazards and Hazardous Materials: Potential hazard and hazardous materials impacts from the Project would be confined to the area where Project construction and operational activities would occur; therefore, the geographic area considered for cumulative impacts is the Project site and adjacent areas. No other projects were identified within this distance. No cumulatively considerable impacts would occur.

Hydrology and Water Quality: Potential impacts to hydrology and water quality from the Project would be confined to the ground area that would be disturbed by Project construction activities and occupied by the completed facility, and areas immediately downslope and therefore potentially subject to runoff; therefore, the geographic area considered for cumulative impacts is the Project site and adjacent areas. No other project identified within this distance. No cumulatively considerable impacts would occur.

Noise: The geographic area considered for cumulative impacts from noise is 1,500 feet from the Project site and is based on the maximum distance construction noise from the Project would be expected to dissipate to ambient levels. No other projects were identified within this distance. No cumulatively considerable impacts would occur.

Traditional Cultural Resources: The geographic area considered for cumulative impacts to tribal cultural resources is one-half mile from the Project site for consistency with the distance considered for cultural resources which is based on FCC guidance for consideration of visual impacts to cultural resources from construction of a 200-foot or less communications tower. No other projects were identified within this distance. No cumulatively considerable impacts would occur.

Transportation/Traffic: The geographic area for consideration of cumulative transportation/traffic impacts is the road segments that are expected to be used to access the site, as identified below.

Construction. As discussed in Section 3.18, Project-related traffic would use non-public, unpaved roads to get to the site via Tonner Canyon Road. Tonner Canyon Road can be reached by using SR 57 or Brea Canyon Road, therefore Brea Canyon Road at Tonner Canyon Road and the segments of SR 57 north and south of Tonner Canyon are considered for cumulative impact analysis. Vehicle trips per day on these road segments are 3,000 on Tonner Canyon Road at SR 57, 17,000 and 16,000 on Brea Canyon north and south of Tonner Canyon Road respectively, and 234,000 and 241,000 trips per day on SR 57 north and south of Tonner Canyon Road respectively (OCTA 2017).

Project construction activities could add up to 25 vehicle trips per day. No other project has been identified that would be expected to generate or add traffic on Tonner Canyon Road. Other projects in the area may generate additional traffic on Brea Canyon Road and SR 57. If all 25 Project-related trips per day during construction were to occur on one segment of Brea Canyon Road, they would be an approximate 0.15 percent increase in daily traffic on that road segment. If all 25 Project-related construction traffic were to occur on one segment of SR 57, it would result in an approximate 0.01 percent increase in daily traffic on that segment. However, construction traffic would be unlikely to be confined to any one of these road segments, but rather would be expected to be spread out over multiple road segments. The Project's construction related traffic would be short term and would be too minimal to be cause a cumulatively considerable impact to traffic.

Operational. Operational traffic would consist of up to 4 vehicle trips per month and would be too minimal to be cumulatively considerable.

Utilities and Service Systems: Aspects of utilities and service systems that are relevant for consideration of cumulative impacts from the Project are wastewater and solid waste. The geographic areas for consideration of cumulative utilities and service systems impacts is the service areas for wastewater and solid waste that include the Project site. These are the jurisdictions of the Los Angeles RWQCB for wastewater and Los Angeles County Sanitation District for solid waste.

Construction. Wastewater would only be generated by the Project in the event that any groundwater encountered during Project construction needs to be removed. Any wastewater generated during construction would be managed in accordance with the Los Angeles RWQCB

permit that would be obtained prior to conducting dewatering. Project construction wastewater impacts would not be cumulatively considerable.

Solid waste generation by the Project would be minimal. Project construction does not entail demolition of existing structures and the only waste expected to be created would be minimal amounts generated by construction activities. Most construction-related waste would be recycled or reused resulting in little if any waste that would require disposal in a Los Angeles County landfill. Solid waste disposal from construction of the Project would not be a cumulatively considerable impact to landfills.

Operational. No wastewater would be generated during Project operations. Project operational wastewater impacts would not be cumulatively considerable.

Project operations would not generate solid waste on a routine basis, but minimal amounts requiring disposal in a landfill may occasionally be created as a part of facility maintenance. Disposal of minimal quantities of solid waste from operation of the Project would not be a cumulatively considerable impact to landfills.

c) **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

No Impact. The Proposed Project would improve communications for emergency response and would have a beneficial impact to public safety. The area near the Project site is not inhabited. People do not work in the area on a regular basis, and the area is not accessible to the public for recreation or other uses. No potential for substantial adverse effects on human beings have been identified.

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APPENDIX A

PROPOSED PROJECT SITE INDWT PHOTOS

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Photograph 1. View looking north across the proposed telecommunications facility site.



Photograph 2. View looking southeast across the proposed telecommunications facility site. The tire holds a salt lick used by livestock.



Photograph 3. View looking east across the proposed telecommunications facility site, towards the adjacent City of Industry water tanks. The tire holds a salt lick used by livestock.



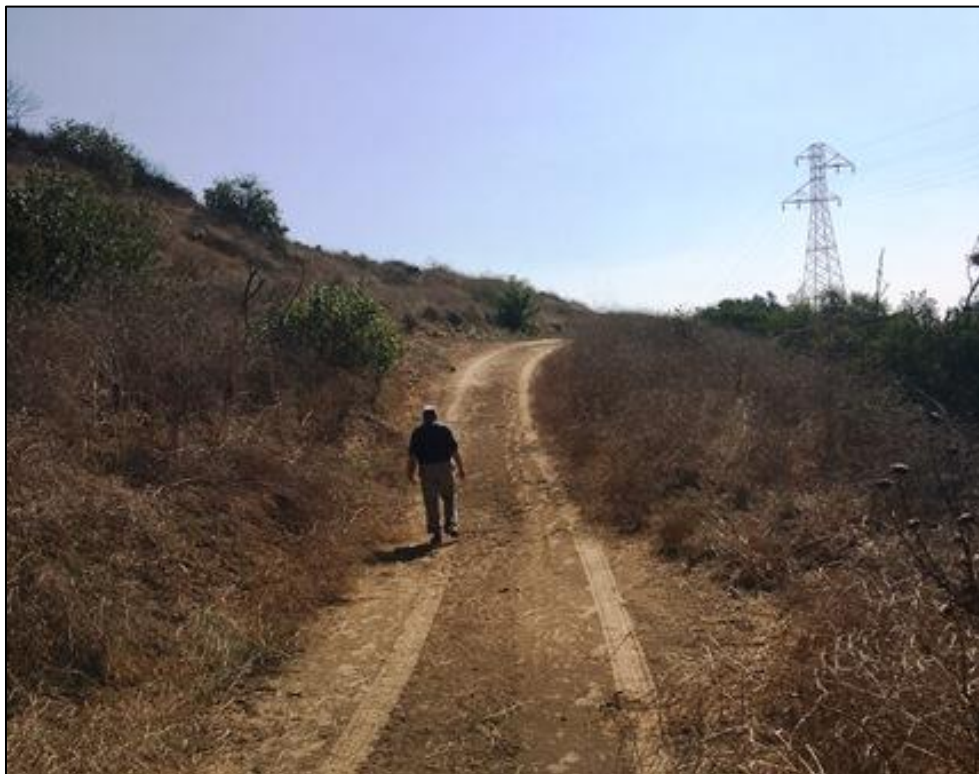
Photograph 4. View looking southwest across the proposed telecommunications facility site.



Photograph 5. View looking west along access road across the proposed telecommunications facility site showing site conditions from cattle grazing.



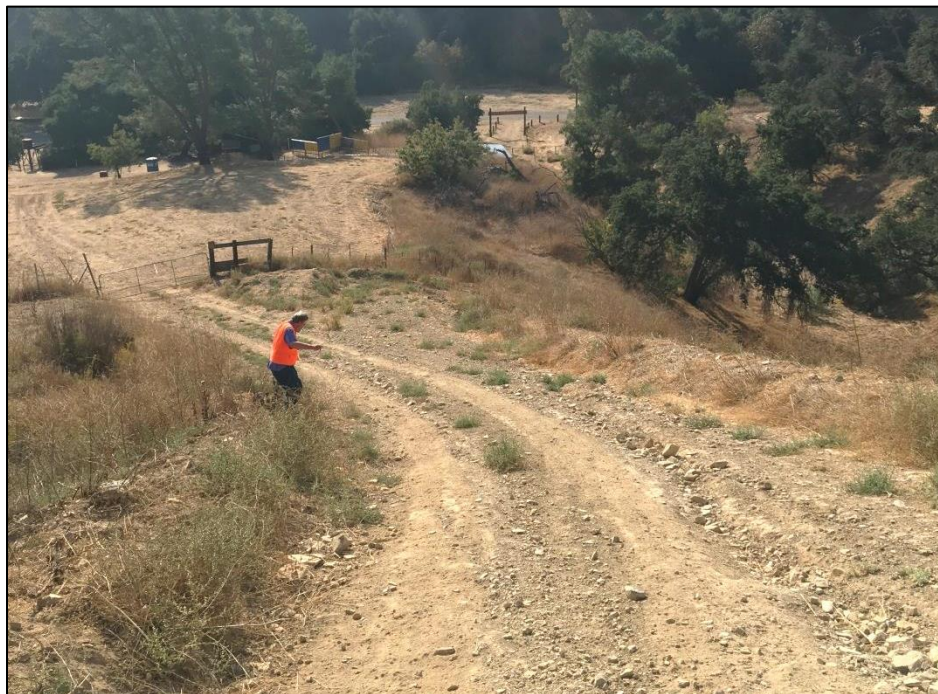
Photograph 6. View looking east toward proposed telecommunications site along the potential southwestern power run alignment. Power line would be installed adjacent to or within the road.



Photograph 7. View looking northeast along the potential southwestern power run alignment. Note the adjacent transmission line.



Photograph 8. Radio antenna complex at the end of the southwestern power run alignment. View looking south.



Photograph 9. View looking southeast along the potential southeastern power run alignment. Power line would be installed adjacent to or within the road. Tonner Canyon Road is in the background.



Photograph 10. View looking southwest along Tonner Canyon Road at the end of the potential southeastern power run alignment. Note power distribution line.

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APPENDIX B

**BIOLOGICAL FIELD NOTES FOR RECONNAISSANCE SURVEY
OF SITE INDWT**

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APPENDIX B

BIOLOGICAL FIELD NOTES FOR RECONNAISSANCE SURVEY OF SITE INDWT

A biological field survey was conducted by Jacobs Biologist David Charlton at Industry Water Tank (Site INDWT) on September 14, 2017, for the alternate power run down to the bottom of Tonner Canyon. The survey area contains the same disturbed oak-walnut woodland with non-native grassland understory as at the proposed tower site and western power run surveys. The area where the poles may be placed on either side of the road has been previously bladed. An underground waterline is installed on the north side. The proposed power access road near Tonner Canyon is extremely steep and was barely walkable. Since the area is seldom used and it was early in the morning, large flocks of birds were observed on the dead snags. Two red-tailed hawks were heard in the canyon, and a large stick nest was observed in a large Aleppo pine near where the access road ends in the bottom of Tonner Canyon.



Bottom of Tonner Canyon look at buildings for the Boy Scout Camp looking northeast



Bottom of Tonner Canyon adjacent to the access road looking west



Looking north at the beginning of the power access road in Tonner Canyon



On the power access road approaching Tonner Canyon looking south



Near the base of the power access road looking south



Looking at the beginning of the steep hill up the power access road

Biological Report on City of Industry Water Tanks

Crew: Steve Sanchez, Armando Fritz, Ralph Santillon, Dave Charlton, Dan Woodward, and two sheriff's representatives.

Site: IND Date: 12/14/16 Time: 10:30-1:00 Weather: Overcast but clearing 70 degrees

Conditions of site: Recent rains resulted in spring annuals germinating. Two watering troughs are on the east side of the water tanks. This explains the heavy presence of cattle grazing within the bare areas within the proposed polygon. The annuals are all non-native, and the ground surface is highly disturbed by cattle. There is evidence that the cows spend a lot of time under the shade of the nearby trees during hot weather. Vegetation on the north side is coast live oak-black walnut. The south-facing slopes are coastal sage scrub dominated by laurel sumac and coastal sagebrush. Plants are sparse and not good nesting habitat for gnatcatchers. Potential rare plant: Intermediate mariposa lily. Critical habitat for gnatcatcher is approximately 3.5 miles south. Wildlife: red ants, pocket gopher, and raven. Animals known to inhabit the area include coyote, bobcats, and raccoons.

Scientific Name	Common Name	Abundance
<i>Adenostoma fasciculatum</i>	chamise	R
<i>Ambrosia acanthicarpa</i>	sand bur	UN
<i>Artemisia californica</i>	California sagebrush	UN
<i>Avena barbata</i> & <i>A. fatua</i>	wild oats	Seedlings -- can't ID yet
<i>Baccharis salicifolia</i>	seep willow	R
<i>Bromus madritensis</i> var <i>rubens</i>	red brome	FC
<i>Chenopodium murale</i>	nettle-leaf goosefoot	C
<i>Croton californicus</i>	croton	UN
<i>Encelia californica</i>	coast sunflower	FC
<i>Erodium cicutarium</i>	red-stem filaree	C
<i>Hirshfeldia incana</i>	biennial mustard	R
<i>Isocoma menziesii</i>	coast goldenbush	UN
<i>Malacothamnus</i> cf <i>fasciculatus</i>	bush mallow	UN
<i>Malosma laurina</i>	laurel sumac	C
<i>Malva</i> cf <i>neglecta</i>	cheeseweed	C
<i>Marrubium vulgare</i>	horehound	FC
<i>Mirabilis laevis</i> var <i>crassifolia</i>	wishbone plant	R
<i>Rhus integrifolia</i>	lemonade berry	UN
<i>Salsola tragus</i>	tumbleweed	FC
<i>Salvia mellifera</i>	black sage	FC
<i>Silybum marianum</i>	milk thistle	UN
<i>Urtica urens</i>	annual nettle	UN
R = rare, UN = uncommon FC = Fairly common C = Common		



IND Overflow from water tanks created this spring



IND One of two water troughs that result in site containing high cattle activity



IND View of water tanks from the southeast



IND View looking south toward the lattice towers on the far ridge



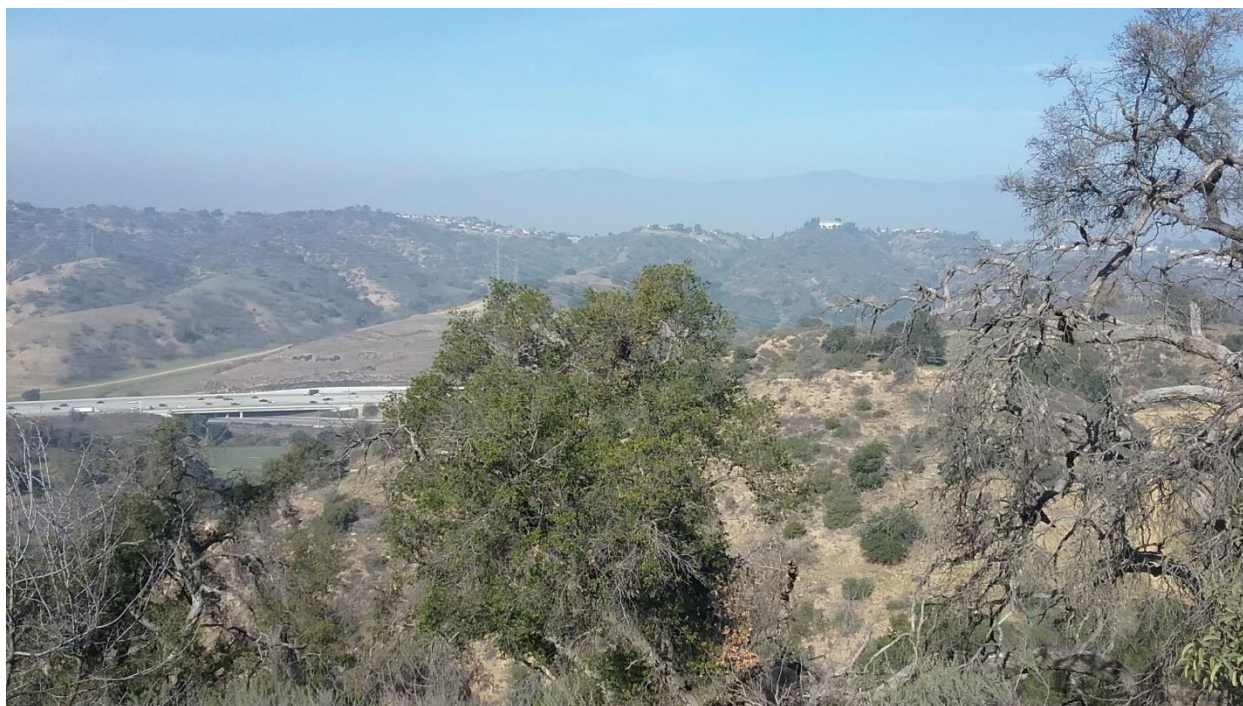
IND View of proposed polygon bare area looking north



IND View from site looking west



IND View from center of polygon looking north at water tanks and coast live oak and black walnut trees



IND Looking west at State Route 57



IND West of polygon looking west



IND Looking north at north-facing slope with dead trees and others in poor health due to drought and fires.



IND The soil surface is highly disturbed and only contains weedy non-natives. Soil contains a layer of pulverized manure.

The vicinity of the site contains native vegetation and includes the Firestone Boy Scout Camp and Camp Flores Transformation Center (health camp). The site is located in the far western portion of Chino Hills State Park in an area without public trails. Typical wildlife observed by the escort includes mountain lions, bobcat, coyote, striped skunk, opossum, and ground squirrel. Sensitive bird species include least Bell's vireo, California gnatcatcher, Cooper's hawk, sharp-shinned hawk, golden eagle, northern harrier, white-tailed kite, California horned lark, rufous crowned sparrow, grasshopper sparrow, yellow-breasted chat, yellow warbler, long-eared owl, Costa's hummingbird, and rufous hummingbird. Other sensitive species include coast horned lizard, San Diego woodrat, coast whiptail, red diamondback, and coast patch-nosed snake. The vegetation within the study area is non-native grassland and woodland dominated by coast live oak and California black walnut. Very little coastal sage scrub is available for gnatcatcher nesting habitat, although critical habitat and foraging habitat does occur nearby. The proposed polygon vegetation is highly disturbed by cattle that utilize the area under the shade trees because the water troughs are just north of the water tanks. The creek that runs parallel to State Route (SR-) 58 contains least Bell's vireo habitat and a small population of southwestern pond turtle. The California walnut woodland is a county protected community, with the vegetation in Tonner Canyon being one of the largest contiguous populations in the Los Angeles region.

Sensitive plant species have been observed on the south-facing slopes between the site and SR-58. Sensitive species have also been observed in the eastern portion of Chino Hills State Park. The most likely sensitive plant species to be found within the study area is the intermediate mariposa lily (*Calochortus weedii* var. *intermedius*), a CNPS 1B.2 species. This variety is a natural hybrid between *Calochortus weedii* and *Calochortus plummerae*. Phenotypic variety includes the full range of variation from nearly pure *C. weedii* to nearly pure *C. plummerae*. Keys do not capture the full range of variation resulting in some individuals not fitting either species. These individuals have been referred to as



“hybrids” in the past. Such individuals should not be considered a separate species but should be treated as part of the range of characters found in a hybrid and lumped in with the variety *intermedius*. This variety has the golden color of *C. weedii* and the purple color of *C. plummerae*. Either *C. weedii*, *C. plummerae*, or *C. intermedia* and the “hybrid” could occur in the general vicinity of the site.

Industry Water Tank – Plants Observed

Scientific Name	Common Name	Abundance
<i>Acmispon glaber+</i>	deerweed	UN
<i>Adenostoma fasciculatum</i>	chamise	R
<i>Ambrosia acanthicarpa</i>	sand bur	UN
<i>Ambrosia psilostachya+</i>	sand bur	LC
<i>Artemisia californica+</i>	California sagebrush	UN
<i>Avena barbata</i> & <i>A. fatua</i> *	wild oats	C
<i>Baccharis salicifolia</i>	seep willow	R
<i>Bloomeria crocea</i>	goldenstars	UN
<i>Bromus diandrus</i> *	rip gut brome	FC
<i>Bromus madritensis</i> var. <i>rubens</i> *	red brome	FC
<i>Centaurea melitensis+</i> *	star thistle	FC
<i>Chenopodium murale</i> *	nettle-leaf goosefoot	C
<i>Chrysopsis villosa</i>	golden aster	R
<i>Convolvulus arvensis</i> *	common bindweed	R
<i>Croton californica+</i>	croton	UN
<i>Croton setiger+</i>	doveweed	FC
<i>Cucurbita foetidissima+</i>	coyote melon	R
<i>Cynodon dactylon+</i> *	Bermuda grass	UN
<i>Datura wrightii+</i>	jimsonweed	UN
<i>Deinandra paniculata</i>	San Diego tarweed	UN
<i>Encelia californica</i>	coast sunflower	FC
<i>Erigeron canadensis</i> *	Canadian horseweed	R
<i>Eriogonum elongatum</i>	long-stemmed buckwheat	R
<i>Eriogonum fasciculatum</i>	California bush buckwheat	UN
<i>Erodium bothrys</i> *	white-stem filaree	LC
<i>Erodium cicutarium</i> *	red-stem filaree	C
<i>Euphorbia albomarginata</i>	rattlesnake spurge	UN
<i>Foeniculum vulgare+</i>	fennel	R
<i>Gutierrezia californica</i>	California matchweed	R
<i>Heteromeles arbutifolia</i>	toyon	UN
<i>Heterotheca grandiflora</i>	telegraph weed	UN
<i>Hirshfeldia incana+</i> *	biennial mustard	R
<i>Hordeum</i> sp, +	foxtail barley	UN
<i>Isocoma menziesii+</i>	coast goldenbush	UN
<i>Juglans nigra+</i>	California black walnut	FC
<i>Lamarckia aurea+</i> *	Lamarckia grass	UN
<i>Lonicera subspicata</i>	chaparral honeysuckle	R
<i>Lupinus hirsutissimus</i>	hairy lupine	R
<i>Malacothamnus</i> cf <i>fasciculatus</i>	bush mallow	UN
<i>Marah macrocarpa</i>	manroot	R

Industry Water Tank – Plants Observed

Scientific Name	Common Name	Abundance
<i>Malosma laurina</i> +	laurel sumac	C
<i>Malva cf neglecta</i> +*	cheeseweed	C
<i>Marrubium vulgare</i> +*	horehound	FC
<i>Mirabilis laevis</i> var. <i>crassifolia</i>	wishbone plant	R
<i>Nicotiana glauca</i> +*	Indian tobacco	UN
<i>Polygonum argyroleon</i> *	prostrate knotweed	UN
<i>Pseudognaphalium californicum</i>	California pearly everlasting	R
<i>Quercus agrifolia</i>	coast live oak	FC
<i>Rhus integrifolia</i>	lemonade berry	UN
<i>Solanum douglasii</i>	Douglas nightshade	R
<i>Salsola tragus</i> +*	tumbleweed	FC
<i>Salvia apiana</i>	white sage	R
<i>Salvia mellifera</i> +	black sage	FC
<i>Silybum marianum</i> +*	milk thistle	UN
<i>Stephanomeria exigua</i> +	small wirelettuce	R
<i>Toxicodendron diversiloba</i>	poison oak	UN
<i>Tribulus terrestris</i> *	goathead	R
<i>Urtica urens</i>	annual nettle	UN
R = rare UN = uncommon FC = Fairly common C = Common * non-native + found at power line walk to Tonner Canyon 59 species, 20 introduced 30% Survey Date: 12/14/16, 9/5/17, and 9/14/17		

Wildlife Observed: Three deer, red-tailed hawk, side-blotch lizard, cows, crows, cabbage white butterflies, scrub jay, bobcat tracks, quail, mourning doves, acorn woodpeckers

APPENDIX C

GREENHOUSE GAS EMISSION CALCULATIONS

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**TOTAL ANNUAL GREENHOUSE GAS
EMISSIONS FOR CONSTRUCTION**

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

LA RICS LMR Max Construction SCAQMD South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	0.00	1000sqft	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

Project Characteristics -

Land Use -

Construction Phase - LA-RICS INDTW CONSTRUCTION

Off-road Equipment - LA-RICS LMR Maximum Construction Scenario - Demolition Phase

Off-road Equipment - LA-RICS Maximum Construction Scenario - Excavation

Off-road Equipment - LA-RICS Maximum Construction Scenario - Pad Construction & Equipment Installation

Off-road Equipment - LA-RICS INDTW CONSTRUCTION

Trips and VMT - VMT based on 1.25 workers per piece of non-construction/architectural coating equipment

Demolition - Pad sq. footage for largest shelter 11'6" x 36'

Vehicle Emission Factors - EMFAC2014 annual emissions factors

Vehicle Emission Factors - EMFAC2014 summer emissions factors

Vehicle Emission Factors - EMFAC2014 winter emissions factors

Construction Off-road Equipment Mitigation - Tier 4 Final mitigationon selected equipment

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	250
tblAreaCoating	Area_EF_Nonresidential_Interior	100	250
tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_EF_Residential_Exterior	50	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	0.00	24.00
tblConstructionPhase	NumDays	0.00	15.00
tblConstructionPhase	PhaseEndDate	11/18/2018	12/20/2018
tblConstructionPhase	PhaseEndDate	11/18/2018	11/30/2018
tblConstructionPhase	PhaseEndDate	11/18/2018	11/30/2018
tblConstructionPhase	PhaseStartDate	11/19/2018	11/12/2018
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.8740e-003	0.00
tblFleetMix	MCY	4.6730e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.8900e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9900e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.0150e-003	0.00
tblOffRoadEquipment	HorsePower	231.00	450.00
tblOffRoadEquipment	HorsePower	63.00	60.00
tblOffRoadEquipment	HorsePower	9.00	450.00
tblOffRoadEquipment	HorsePower	158.00	23.00

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tbOffRoadEquipment	HorsePower	158.00	153.00
tbOffRoadEquipment	HorsePower	84.00	7.00
tbOffRoadEquipment	HorsePower	16.00	450.00
tbOffRoadEquipment	HorsePower	172.00	210.00
tbOffRoadEquipment	HorsePower	65.00	73.00
tbOffRoadEquipment	HorsePower	65.00	73.00
tbOffRoadEquipment	OffRoadEquipmentType	Off-Highway Trucks	Dumpers/Tenders
tbOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tbOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tbOffRoadEquipment	PhaseName		Pad Construction & Equip Install
tbOffRoadEquipment	PhaseName		Pad Construction & Equip Install
tbOffRoadEquipment	PhaseName		Site Preparation
tbOffRoadEquipment	PhaseName		Excavation
tbOffRoadEquipment	PhaseName		Pad Construction & Equip Install
tbOffRoadEquipment	PhaseName		Pad Construction & Equip Install
tbOffRoadEquipment	PhaseName		Excavation
tbOffRoadEquipment	PhaseName		Excavation
tbOffRoadEquipment	PhaseName		Site Preparation
tbOffRoadEquipment	UsageHours	4.00	0.60

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	7.90	6.90
tblTripsAndVMT	VendorTripLength	7.90	6.90
tblTripsAndVMT	VendorTripLength	7.90	6.90
tblTripsAndVMT	WorkerTripLength	19.80	14.70
tblTripsAndVMT	WorkerTripLength	19.80	14.70
tblTripsAndVMT	WorkerTripLength	19.80	14.70
tblTripsAndVMT	WorkerTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	13.00	1.00
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblVehicleEF	HHD	0.80	0.02
tblVehicleEF	HHD	0.09	0.01
tblVehicleEF	HHD	0.12	0.00
tblVehicleEF	HHD	3.00	2.87
tblVehicleEF	HHD	1.07	1.95
tblVehicleEF	HHD	3.38	64.37
tblVehicleEF	HHD	4,645.65	571.32
tblVehicleEF	HHD	1,675.01	1,664.78
tblVehicleEF	HHD	10.23	62.55
tblVehicleEF	HHD	23.95	5.34
tblVehicleEF	HHD	4.77	7.00
tblVehicleEF	HHD	19.70	3.90
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.12
tblVehicleEF	HHD	1.2600e-004	3.9220e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8000e-003	8.6730e-003
tblVehicleEF	HHD	0.02	0.11
tblVehicleEF	HHD	1.1700e-004	3.1510e-003
tblVehicleEF	HHD	1.3500e-004	2.6170e-003
tblVehicleEF	HHD	6.2610e-003	0.15
tblVehicleEF	HHD	0.75	0.53
tblVehicleEF	HHD	9.5000e-005	1.6620e-003
tblVehicleEF	HHD	0.15	0.28
tblVehicleEF	HHD	5.3200e-004	0.57
tblVehicleEF	HHD	0.11	2.39
tblVehicleEF	HHD	0.04	5.5900e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5900e-004	1.7260e-003
tblVehicleEF	HHD	1.3500e-004	2.6170e-003
tblVehicleEF	HHD	6.2610e-003	0.15
tblVehicleEF	HHD	0.88	0.60
tblVehicleEF	HHD	9.5000e-005	1.6620e-003
tblVehicleEF	HHD	0.26	0.32
tblVehicleEF	HHD	5.3200e-004	0.57
tblVehicleEF	HHD	0.12	2.56
tblVehicleEF	HHD	0.75	0.02
tblVehicleEF	HHD	0.09	0.01
tblVehicleEF	HHD	0.11	0.00
tblVehicleEF	HHD	2.19	2.09
tblVehicleEF	HHD	1.08	1.96

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	HHD	3.21	53.89
tblVehicleEF	HHD	4,918.20	605.27
tblVehicleEF	HHD	1,675.01	1,664.78
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tblVehicleEF	HHD	24.71	5.51
tblVehicleEF	HHD	4.51	6.62
tblVehicleEF	HHD	19.69	3.74
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.12
tblVehicleEF	HHD	1.2600e-004	3.9220e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8000e-003	8.6730e-003
tblVehicleEF	HHD	0.02	0.11
tblVehicleEF	HHD	1.1700e-004	3.1510e-003
tblVehicleEF	HHD	2.1600e-004	4.3010e-003
tblVehicleEF	HHD	6.4850e-003	0.15
tblVehicleEF	HHD	0.71	0.50
tblVehicleEF	HHD	1.5100e-004	2.8410e-003
tblVehicleEF	HHD	0.15	0.28
tblVehicleEF	HHD	5.2600e-004	0.57
tblVehicleEF	HHD	0.10	2.04
tblVehicleEF	HHD	0.05	5.9230e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5600e-004	1.5510e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	HHD	2.1600e-004	4.3010e-003
tblVehicleEF	HHD	6.4850e-003	0.15
tblVehicleEF	HHD	0.83	0.57
tblVehicleEF	HHD	1.5100e-004	2.8410e-003
tblVehicleEF	HHD	0.26	0.32
tblVehicleEF	HHD	5.2600e-004	0.57
tblVehicleEF	HHD	0.11	2.19
tblVehicleEF	HHD	0.86	0.03
tblVehicleEF	HHD	0.09	0.01
tblVehicleEF	HHD	0.12	0.00
tblVehicleEF	HHD	4.12	3.96
tblVehicleEF	HHD	1.07	1.95
tblVehicleEF	HHD	3.40	65.09
tblVehicleEF	HHD	4,269.27	524.45
tblVehicleEF	HHD	1,675.01	1,664.78
tblVehicleEF	HHD	10.23	62.55
tblVehicleEF	HHD	22.90	5.10
tblVehicleEF	HHD	4.69	6.89
tblVehicleEF	HHD	19.70	3.92
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.12
tblVehicleEF	HHD	1.2600e-004	3.9220e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8000e-003	8.6730e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	HHD	0.02	0.11
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tblVehicleEF	HHD	9.5000e-005	1.7380e-003
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tblVehicleEF	HHD	5.7100e-004	0.61
tblVehicleEF	HHD	0.11	2.42
tblVehicleEF	HHD	0.04	5.1320e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5900e-004	1.7380e-003
tblVehicleEF	HHD	1.3700e-004	2.9070e-003
tblVehicleEF	HHD	7.1500e-003	0.19
tblVehicleEF	HHD	0.95	0.65
tblVehicleEF	HHD	9.5000e-005	1.7380e-003
tblVehicleEF	HHD	0.26	0.32
tblVehicleEF	HHD	5.7100e-004	0.61
tblVehicleEF	HHD	0.12	2.59
tblVehicleEF	LDA	6.4980e-003	0.01
tblVehicleEF	LDA	7.8410e-003	0.01
tblVehicleEF	LDA	0.77	1.23
tblVehicleEF	LDA	1.52	2.35
tblVehicleEF	LDA	297.20	308.21
tblVehicleEF	LDA	63.04	64.83
tblVehicleEF	LDA	0.07	0.11
tblVehicleEF	LDA	0.10	0.16

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDA	2.1440e-003	2.0560e-003
tblVehicleEF	LDA	2.3480e-003	2.8070e-003
tblVehicleEF	LDA	1.9770e-003	1.8810e-003
tblVehicleEF	LDA	2.1590e-003	2.5670e-003
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.12	0.15
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.04	0.33
tblVehicleEF	LDA	0.11	0.19
tblVehicleEF	LDA	2.9780e-003	3.6090e-003
tblVehicleEF	LDA	6.5700e-004	7.7600e-004
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.12	0.15
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.05
tblVehicleEF	LDA	0.04	0.33
tblVehicleEF	LDA	0.12	0.20
tblVehicleEF	LDA	6.9350e-003	0.01
tblVehicleEF	LDA	6.9360e-003	0.01
tblVehicleEF	LDA	0.85	1.35
tblVehicleEF	LDA	1.30	1.87
tblVehicleEF	LDA	312.62	324.08
tblVehicleEF	LDA	63.04	64.83
tblVehicleEF	LDA	0.06	0.10
tblVehicleEF	LDA	0.09	0.15
tblVehicleEF	LDA	2.1440e-003	2.0560e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDA	2.3480e-003	2.8070e-003
tblVehicleEF	LDA	1.9770e-003	1.8810e-003
tblVehicleEF	LDA	2.1590e-003	2.5670e-003
tblVehicleEF	LDA	0.08	0.11
tblVehicleEF	LDA	0.13	0.16
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.04	0.31
tblVehicleEF	LDA	0.09	0.16
tblVehicleEF	LDA	3.1330e-003	3.7970e-003
tblVehicleEF	LDA	6.5300e-004	7.6700e-004
tblVehicleEF	LDA	0.08	0.11
tblVehicleEF	LDA	0.13	0.16
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.04	0.31
tblVehicleEF	LDA	0.10	0.17
tblVehicleEF	LDA	6.3690e-003	0.01
tblVehicleEF	LDA	8.0010e-003	0.01
tblVehicleEF	LDA	0.74	1.19
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tblVehicleEF	LDA	292.41	303.27
tblVehicleEF	LDA	63.04	64.83
tblVehicleEF	LDA	0.06	0.11
tblVehicleEF	LDA	0.10	0.16
tblVehicleEF	LDA	2.1440e-003	2.0560e-003
tblVehicleEF	LDA	2.3480e-003	2.8070e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDA	1.9770e-003	1.8810e-003
tblVehicleEF	LDA	2.1590e-003	2.5670e-003
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.14	0.17
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.05	0.37
tblVehicleEF	LDA	0.11	0.19
tblVehicleEF	LDA	2.9300e-003	3.5500e-003
tblVehicleEF	LDA	6.5700e-004	7.7700e-004
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.14	0.17
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.05
tblVehicleEF	LDA	0.05	0.37
tblVehicleEF	LDA	0.12	0.21
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.00	3.18
tblVehicleEF	LDT1	3.80	5.68
tblVehicleEF	LDT1	357.93	363.50
tblVehicleEF	LDT1	74.90	75.69
tblVehicleEF	LDT1	0.19	0.31
tblVehicleEF	LDT1	0.22	0.33
tblVehicleEF	LDT1	3.6930e-003	4.9100e-003
tblVehicleEF	LDT1	3.9290e-003	5.3790e-003
tblVehicleEF	LDT1	3.4020e-003	4.5060e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDT1	3.6140e-003	4.9390e-003
tblVehicleEF	LDT1	0.16	0.19
tblVehicleEF	LDT1	0.33	0.33
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.05	0.10
tblVehicleEF	LDT1	0.20	1.16
tblVehicleEF	LDT1	0.27	0.44
tblVehicleEF	LDT1	3.6060e-003	4.1700e-003
tblVehicleEF	LDT1	8.1600e-004	9.4200e-004
tblVehicleEF	LDT1	0.16	0.19
tblVehicleEF	LDT1	0.33	0.33
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.07	0.13
tblVehicleEF	LDT1	0.20	1.16
tblVehicleEF	LDT1	0.30	0.47
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.18	3.44
tblVehicleEF	LDT1	3.23	4.50
tblVehicleEF	LDT1	375.14	381.33
tblVehicleEF	LDT1	74.90	75.69
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	0.21	0.30
tblVehicleEF	LDT1	3.6930e-003	4.9100e-003
tblVehicleEF	LDT1	3.9290e-003	5.3790e-003
tblVehicleEF	LDT1	3.4020e-003	4.5060e-003
tblVehicleEF	LDT1	3.6140e-003	4.9390e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDT1	0.26	0.31
tblVehicleEF	LDT1	0.35	0.36
tblVehicleEF	LDT1	0.19	0.22
tblVehicleEF	LDT1	0.05	0.10
tblVehicleEF	LDT1	0.19	1.09
tblVehicleEF	LDT1	0.24	0.38
tblVehicleEF	LDT1	3.7810e-003	4.3790e-003
tblVehicleEF	LDT1	8.0600e-004	9.2200e-004
tblVehicleEF	LDT1	0.26	0.31
tblVehicleEF	LDT1	0.35	0.36
tblVehicleEF	LDT1	0.19	0.22
tblVehicleEF	LDT1	0.07	0.13
tblVehicleEF	LDT1	0.19	1.09
tblVehicleEF	LDT1	0.26	0.40
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	1.94	3.09
tblVehicleEF	LDT1	3.90	5.86
tblVehicleEF	LDT1	352.49	358.15
tblVehicleEF	LDT1	74.90	75.69
tblVehicleEF	LDT1	0.19	0.30
tblVehicleEF	LDT1	0.23	0.33
tblVehicleEF	LDT1	3.6930e-003	4.9100e-003
tblVehicleEF	LDT1	3.9290e-003	5.3790e-003
tblVehicleEF	LDT1	3.4020e-003	4.5060e-003
tblVehicleEF	LDT1	3.6140e-003	4.9390e-003
tblVehicleEF	LDT1	0.16	0.20

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDT1	0.38	0.38
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.05	0.10
tblVehicleEF	LDT1	0.24	1.38
tblVehicleEF	LDT1	0.28	0.45
tblVehicleEF	LDT1	3.5510e-003	4.1070e-003
tblVehicleEF	LDT1	8.1800e-004	9.4500e-004
tblVehicleEF	LDT1	0.16	0.20
tblVehicleEF	LDT1	0.38	0.38
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.07	0.13
tblVehicleEF	LDT1	0.24	1.38
tblVehicleEF	LDT1	0.31	0.48
tblVehicleEF	LDT2	8.6510e-003	0.02
tblVehicleEF	LDT2	9.5370e-003	0.01
tblVehicleEF	LDT2	1.00	1.74
tblVehicleEF	LDT2	1.89	3.41
tblVehicleEF	LDT2	407.00	438.82
tblVehicleEF	LDT2	85.85	91.13
tblVehicleEF	LDT2	0.11	0.20
tblVehicleEF	LDT2	0.17	0.33
tblVehicleEF	LDT2	2.0070e-003	2.1060e-003
tblVehicleEF	LDT2	2.3040e-003	2.7960e-003
tblVehicleEF	LDT2	1.8460e-003	1.9330e-003
tblVehicleEF	LDT2	2.1190e-003	2.5710e-003
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.13	0.17

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.04
tblVehicleEF	LDT2	0.07	0.54
tblVehicleEF	LDT2	0.13	0.26
tblVehicleEF	LDT2	4.0790e-003	4.9110e-003
tblVehicleEF	LDT2	8.9100e-004	1.0600e-003
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.13	0.17
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.03	0.07
tblVehicleEF	LDT2	0.07	0.54
tblVehicleEF	LDT2	0.14	0.27
tblVehicleEF	LDT2	9.2110e-003	0.02
tblVehicleEF	LDT2	8.4430e-003	0.01
tblVehicleEF	LDT2	1.11	1.90
tblVehicleEF	LDT2	1.62	2.69
tblVehicleEF	LDT2	427.27	460.85
tblVehicleEF	LDT2	85.85	91.13
tblVehicleEF	LDT2	0.09	0.18
tblVehicleEF	LDT2	0.16	0.30
tblVehicleEF	LDT2	2.0070e-003	2.1060e-003
tblVehicleEF	LDT2	2.3040e-003	2.7960e-003
tblVehicleEF	LDT2	1.8460e-003	1.9330e-003
tblVehicleEF	LDT2	2.1190e-003	2.5710e-003
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.14	0.18
tblVehicleEF	LDT2	0.08	0.10

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDT2	0.02	0.05
tblVehicleEF	LDT2	0.06	0.51
tblVehicleEF	LDT2	0.11	0.22
tblVehicleEF	LDT2	4.2830e-003	5.1600e-003
tblVehicleEF	LDT2	8.8600e-004	1.0470e-003
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.14	0.18
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.03	0.07
tblVehicleEF	LDT2	0.06	0.51
tblVehicleEF	LDT2	0.12	0.23
tblVehicleEF	LDT2	8.4870e-003	0.02
tblVehicleEF	LDT2	9.7290e-003	0.01
tblVehicleEF	LDT2	0.97	1.68
tblVehicleEF	LDT2	1.94	3.52
tblVehicleEF	LDT2	400.61	432.02
tblVehicleEF	LDT2	85.85	91.13
tblVehicleEF	LDT2	0.10	0.20
tblVehicleEF	LDT2	0.17	0.33
tblVehicleEF	LDT2	2.0070e-003	2.1060e-003
tblVehicleEF	LDT2	2.3040e-003	2.7960e-003
tblVehicleEF	LDT2	1.8460e-003	1.9330e-003
tblVehicleEF	LDT2	2.1190e-003	2.5710e-003
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.19
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.04

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LDT2	0.08	0.63
tblVehicleEF	LDT2	0.13	0.26
tblVehicleEF	LDT2	4.0150e-003	4.8340e-003
tblVehicleEF	LDT2	8.9200e-004	1.0620e-003
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.19
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.08	0.63
tblVehicleEF	LDT2	0.14	0.28
tblVehicleEF	LHD1	6.4170e-003	1.3110e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	1.13	1.62
tblVehicleEF	LHD1	3.25	5.26
tblVehicleEF	LHD1	8.97	8.33
tblVehicleEF	LHD1	628.02	575.99
tblVehicleEF	LHD1	35.73	44.68
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	1.51	1.39
tblVehicleEF	LHD1	1.14	1.46
tblVehicleEF	LHD1	8.1500e-004	4.8300e-004
tblVehicleEF	LHD1	0.08	0.05
tblVehicleEF	LHD1	9.8570e-003	8.9380e-003
tblVehicleEF	LHD1	0.01	8.5960e-003
tblVehicleEF	LHD1	1.2060e-003	1.4100e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD1	7.8000e-004	4.4400e-004
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	2.4640e-003	2.2350e-003
tblVehicleEF	LHD1	0.01	7.9120e-003
tblVehicleEF	LHD1	1.1110e-003	1.2920e-003
tblVehicleEF	LHD1	3.4850e-003	3.0250e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9910e-003	1.7160e-003
tblVehicleEF	LHD1	0.08	0.12
tblVehicleEF	LHD1	0.32	0.44
tblVehicleEF	LHD1	0.33	0.48
tblVehicleEF	LHD1	9.1000e-005	8.8000e-005
tblVehicleEF	LHD1	6.1830e-003	5.8690e-003
tblVehicleEF	LHD1	4.1900e-004	5.5500e-004
tblVehicleEF	LHD1	3.4850e-003	3.0250e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.9910e-003	1.7160e-003
tblVehicleEF	LHD1	0.10	0.14
tblVehicleEF	LHD1	0.32	0.44
tblVehicleEF	LHD1	0.36	0.51
tblVehicleEF	LHD1	6.4170e-003	1.3110e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	1.14	1.65

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD1	3.10	4.26
tblVehicleEF	LHD1	8.97	8.33
tblVehicleEF	LHD1	628.02	575.99
tblVehicleEF	LHD1	35.73	44.68
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	1.42	1.29
tblVehicleEF	LHD1	1.10	1.40
tblVehicleEF	LHD1	8.1500e-004	4.8300e-004
tblVehicleEF	LHD1	0.08	0.05
tblVehicleEF	LHD1	9.8570e-003	8.9380e-003
tblVehicleEF	LHD1	0.01	8.5960e-003
tblVehicleEF	LHD1	1.2060e-003	1.4100e-003
tblVehicleEF	LHD1	7.8000e-004	4.4400e-004
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	2.4640e-003	2.2350e-003
tblVehicleEF	LHD1	0.01	7.9120e-003
tblVehicleEF	LHD1	1.1110e-003	1.2920e-003
tblVehicleEF	LHD1	5.3620e-003	4.7540e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.0080e-003	2.7430e-003
tblVehicleEF	LHD1	0.08	0.12
tblVehicleEF	LHD1	0.31	0.43
tblVehicleEF	LHD1	0.32	0.43
tblVehicleEF	LHD1	9.1000e-005	8.8000e-005
tblVehicleEF	LHD1	6.1840e-003	5.8700e-003
tblVehicleEF	LHD1	4.1600e-004	5.3800e-004

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD1	5.3620e-003	4.7540e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	3.0080e-003	2.7430e-003
tblVehicleEF	LHD1	0.10	0.14
tblVehicleEF	LHD1	0.31	0.43
tblVehicleEF	LHD1	0.35	0.45
tblVehicleEF	LHD1	6.4170e-003	1.3110e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	1.12	1.62
tblVehicleEF	LHD1	3.26	5.31
tblVehicleEF	LHD1	8.97	8.33
tblVehicleEF	LHD1	628.02	575.99
tblVehicleEF	LHD1	35.73	44.68
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	1.48	1.37
tblVehicleEF	LHD1	1.15	1.47
tblVehicleEF	LHD1	8.1500e-004	4.8300e-004
tblVehicleEF	LHD1	0.08	0.05
tblVehicleEF	LHD1	9.8570e-003	8.9380e-003
tblVehicleEF	LHD1	0.01	8.5960e-003
tblVehicleEF	LHD1	1.2060e-003	1.4100e-003
tblVehicleEF	LHD1	7.8000e-004	4.4400e-004
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	2.4640e-003	2.2350e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD1	0.01	7.9120e-003
tblVehicleEF	LHD1	1.1110e-003	1.2920e-003
tblVehicleEF	LHD1	3.7080e-003	3.3330e-003
tblVehicleEF	LHD1	0.13	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.0050e-003	1.7620e-003
tblVehicleEF	LHD1	0.08	0.12
tblVehicleEF	LHD1	0.35	0.48
tblVehicleEF	LHD1	0.33	0.49
tblVehicleEF	LHD1	9.1000e-005	8.8000e-005
tblVehicleEF	LHD1	6.1830e-003	5.8690e-003
tblVehicleEF	LHD1	4.1900e-004	5.5600e-004
tblVehicleEF	LHD1	3.7080e-003	3.3330e-003
tblVehicleEF	LHD1	0.13	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.0050e-003	1.7620e-003
tblVehicleEF	LHD1	0.10	0.14
tblVehicleEF	LHD1	0.35	0.48
tblVehicleEF	LHD1	0.36	0.52
tblVehicleEF	LHD2	4.7490e-003	1.0270e-003
tblVehicleEF	LHD2	6.4910e-003	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.53	1.19
tblVehicleEF	LHD2	1.73	3.41
tblVehicleEF	LHD2	13.70	9.17
tblVehicleEF	LHD2	639.78	555.47

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD2	30.01	30.93
tblVehicleEF	LHD2	0.11	0.10
tblVehicleEF	LHD2	1.23	2.24
tblVehicleEF	LHD2	0.69	0.98
tblVehicleEF	LHD2	1.2020e-003	1.0610e-003
tblVehicleEF	LHD2	0.09	0.06
tblVehicleEF	LHD2	0.01	9.9690e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.7900e-004	9.4300e-004
tblVehicleEF	LHD2	1.1500e-003	9.7600e-004
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	2.6270e-003	2.4920e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.3300e-004	8.4800e-004
tblVehicleEF	LHD2	1.5350e-003	1.9500e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.1500e-004	1.1090e-003
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.12	0.30
tblVehicleEF	LHD2	0.17	0.32
tblVehicleEF	LHD2	1.3400e-004	9.4000e-005
tblVehicleEF	LHD2	6.2430e-003	5.5890e-003
tblVehicleEF	LHD2	3.3200e-004	3.8000e-004
tblVehicleEF	LHD2	1.5350e-003	1.9500e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.03

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD2	9.1500e-004	1.1090e-003
tblVehicleEF	LHD2	0.07	0.13
tblVehicleEF	LHD2	0.12	0.30
tblVehicleEF	LHD2	0.18	0.34
tblVehicleEF	LHD2	4.7490e-003	1.0270e-003
tblVehicleEF	LHD2	6.5890e-003	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.54	1.20
tblVehicleEF	LHD2	1.65	2.79
tblVehicleEF	LHD2	13.70	9.17
tblVehicleEF	LHD2	639.78	555.47
tblVehicleEF	LHD2	30.01	30.93
tblVehicleEF	LHD2	0.11	0.10
tblVehicleEF	LHD2	1.16	2.10
tblVehicleEF	LHD2	0.67	0.95
tblVehicleEF	LHD2	1.2020e-003	1.0610e-003
tblVehicleEF	LHD2	0.09	0.06
tblVehicleEF	LHD2	0.01	9.9690e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.7900e-004	9.4300e-004
tblVehicleEF	LHD2	1.1500e-003	9.7600e-004
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	2.6270e-003	2.4920e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.3300e-004	8.4800e-004
tblVehicleEF	LHD2	2.3440e-003	3.0390e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3630e-003	1.7540e-003
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.11	0.29
tblVehicleEF	LHD2	0.16	0.28
tblVehicleEF	LHD2	1.3400e-004	9.4000e-005
tblVehicleEF	LHD2	6.2440e-003	5.5890e-003
tblVehicleEF	LHD2	3.3100e-004	3.6900e-004
tblVehicleEF	LHD2	2.3440e-003	3.0390e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.3630e-003	1.7540e-003
tblVehicleEF	LHD2	0.07	0.13
tblVehicleEF	LHD2	0.11	0.29
tblVehicleEF	LHD2	0.18	0.30
tblVehicleEF	LHD2	4.7490e-003	1.0270e-003
tblVehicleEF	LHD2	6.4700e-003	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.53	1.19
tblVehicleEF	LHD2	1.74	3.46
tblVehicleEF	LHD2	13.70	9.17
tblVehicleEF	LHD2	639.78	555.47
tblVehicleEF	LHD2	30.01	30.93
tblVehicleEF	LHD2	0.11	0.10
tblVehicleEF	LHD2	1.21	2.20

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD2	0.70	0.99
tblVehicleEF	LHD2	1.2020e-003	1.0610e-003
tblVehicleEF	LHD2	0.09	0.06
tblVehicleEF	LHD2	0.01	9.9690e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.7900e-004	9.4300e-004
tblVehicleEF	LHD2	1.1500e-003	9.7600e-004
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	2.6270e-003	2.4920e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.3300e-004	8.4800e-004
tblVehicleEF	LHD2	1.6050e-003	2.1370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.0900e-004	1.1260e-003
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.13	0.33
tblVehicleEF	LHD2	0.17	0.32
tblVehicleEF	LHD2	1.3400e-004	9.4000e-005
tblVehicleEF	LHD2	6.2430e-003	5.5890e-003
tblVehicleEF	LHD2	3.3200e-004	3.8100e-004
tblVehicleEF	LHD2	1.6050e-003	2.1370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	9.0900e-004	1.1260e-003
tblVehicleEF	LHD2	0.07	0.13
tblVehicleEF	LHD2	0.13	0.33

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	LHD2	0.18	0.34
tblVehicleEF	MCY	0.49	0.00
tblVehicleEF	MCY	0.15	0.00
tblVehicleEF	MCY	19.76	23.31
tblVehicleEF	MCY	9.59	9.78
tblVehicleEF	MCY	181.27	146.62
tblVehicleEF	MCY	46.13	44.89
tblVehicleEF	MCY	1.13	1.19
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.01	0.04
tblVehicleEF	MCY	4.0000e-003	8.0000e-003
tblVehicleEF	MCY	2.0990e-003	5.7600e-004
tblVehicleEF	MCY	4.0820e-003	1.8570e-003
tblVehicleEF	MCY	5.0400e-003	0.02
tblVehicleEF	MCY	1.0000e-003	2.0000e-003
tblVehicleEF	MCY	1.9660e-003	4.6500e-004
tblVehicleEF	MCY	3.8580e-003	1.4690e-003
tblVehicleEF	MCY	1.15	0.99
tblVehicleEF	MCY	0.71	0.47
tblVehicleEF	MCY	0.70	0.57
tblVehicleEF	MCY	2.54	2.50
tblVehicleEF	MCY	0.67	1.63
tblVehicleEF	MCY	2.09	2.14
tblVehicleEF	MCY	2.2110e-003	1.9480e-003
tblVehicleEF	MCY	6.8000e-004	6.8100e-004
tblVehicleEF	MCY	1.15	0.99
tblVehicleEF	MCY	0.71	0.47

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MCY	0.70	0.57
tblVehicleEF	MCY	3.12	2.74
tblVehicleEF	MCY	0.67	1.63
tblVehicleEF	MCY	2.28	2.30
tblVehicleEF	MCY	0.48	0.00
tblVehicleEF	MCY	0.14	0.00
tblVehicleEF	MCY	19.11	22.46
tblVehicleEF	MCY	8.83	8.74
tblVehicleEF	MCY	181.27	146.62
tblVehicleEF	MCY	46.13	44.89
tblVehicleEF	MCY	0.99	1.04
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.01	0.04
tblVehicleEF	MCY	4.0000e-003	8.0000e-003
tblVehicleEF	MCY	2.0990e-003	5.7600e-004
tblVehicleEF	MCY	4.0820e-003	1.8570e-003
tblVehicleEF	MCY	5.0400e-003	0.02
tblVehicleEF	MCY	1.0000e-003	2.0000e-003
tblVehicleEF	MCY	1.9660e-003	4.6500e-004
tblVehicleEF	MCY	3.8580e-003	1.4690e-003
tblVehicleEF	MCY	1.91	1.69
tblVehicleEF	MCY	0.80	0.56
tblVehicleEF	MCY	1.22	1.08
tblVehicleEF	MCY	2.47	2.42
tblVehicleEF	MCY	0.64	1.54
tblVehicleEF	MCY	1.86	1.87
tblVehicleEF	MCY	2.1990e-003	1.9330e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MCY	6.6000e-004	6.5600e-004
tblVehicleEF	MCY	1.91	1.69
tblVehicleEF	MCY	0.80	0.56
tblVehicleEF	MCY	1.22	1.08
tblVehicleEF	MCY	3.05	2.66
tblVehicleEF	MCY	0.64	1.54
tblVehicleEF	MCY	2.03	2.01
tblVehicleEF	MCY	0.50	0.00
tblVehicleEF	MCY	0.16	0.00
tblVehicleEF	MCY	19.78	23.22
tblVehicleEF	MCY	9.67	9.83
tblVehicleEF	MCY	181.27	146.62
tblVehicleEF	MCY	46.13	44.89
tblVehicleEF	MCY	1.10	1.16
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.01	0.04
tblVehicleEF	MCY	4.0000e-003	8.0000e-003
tblVehicleEF	MCY	2.0990e-003	5.7600e-004
tblVehicleEF	MCY	4.0820e-003	1.8570e-003
tblVehicleEF	MCY	5.0400e-003	0.02
tblVehicleEF	MCY	1.0000e-003	2.0000e-003
tblVehicleEF	MCY	1.9660e-003	4.6500e-004
tblVehicleEF	MCY	3.8580e-003	1.4690e-003
tblVehicleEF	MCY	1.28	1.12
tblVehicleEF	MCY	0.93	0.62
tblVehicleEF	MCY	0.69	0.56
tblVehicleEF	MCY	2.55	2.51

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MCY	0.77	1.90
tblVehicleEF	MCY	2.12	2.16
tblVehicleEF	MCY	2.2120e-003	1.9470e-003
tblVehicleEF	MCY	6.8200e-004	6.8300e-004
tblVehicleEF	MCY	1.28	1.12
tblVehicleEF	MCY	0.93	0.62
tblVehicleEF	MCY	0.69	0.56
tblVehicleEF	MCY	3.13	2.75
tblVehicleEF	MCY	0.77	1.90
tblVehicleEF	MCY	2.31	2.32
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	1.80	2.48
tblVehicleEF	MDV	3.44	5.20
tblVehicleEF	MDV	542.86	569.41
tblVehicleEF	MDV	112.92	117.95
tblVehicleEF	MDV	0.20	0.32
tblVehicleEF	MDV	0.33	0.51
tblVehicleEF	MDV	2.2600e-003	2.3560e-003
tblVehicleEF	MDV	2.6010e-003	3.2850e-003
tblVehicleEF	MDV	2.0860e-003	2.1660e-003
tblVehicleEF	MDV	2.3950e-003	3.0250e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.18	0.19
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.10	0.61

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MDV	0.28	0.45
tblVehicleEF	MDV	5.4460e-003	6.2130e-003
tblVehicleEF	MDV	1.1900e-003	1.3570e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.18	0.19
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.07	0.10
tblVehicleEF	MDV	0.10	0.61
tblVehicleEF	MDV	0.30	0.48
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	1.96	2.72
tblVehicleEF	MDV	2.95	4.10
tblVehicleEF	MDV	569.76	598.53
tblVehicleEF	MDV	112.92	117.95
tblVehicleEF	MDV	0.18	0.28
tblVehicleEF	MDV	0.30	0.47
tblVehicleEF	MDV	2.2600e-003	2.3560e-003
tblVehicleEF	MDV	2.6010e-003	3.2850e-003
tblVehicleEF	MDV	2.0860e-003	2.1660e-003
tblVehicleEF	MDV	2.3950e-003	3.0250e-003
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.19	0.21
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.05	0.08
tblVehicleEF	MDV	0.09	0.58
tblVehicleEF	MDV	0.24	0.38

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MDV	5.7170e-003	6.5340e-003
tblVehicleEF	MDV	1.1820e-003	1.3370e-003
tblVehicleEF	MDV	0.13	0.14
tblVehicleEF	MDV	0.19	0.21
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.07	0.11
tblVehicleEF	MDV	0.09	0.58
tblVehicleEF	MDV	0.27	0.41
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	1.75	2.40
tblVehicleEF	MDV	3.52	5.36
tblVehicleEF	MDV	534.57	560.75
tblVehicleEF	MDV	112.92	117.95
tblVehicleEF	MDV	0.20	0.31
tblVehicleEF	MDV	0.33	0.51
tblVehicleEF	MDV	2.2600e-003	2.3560e-003
tblVehicleEF	MDV	2.6010e-003	3.2850e-003
tblVehicleEF	MDV	2.0860e-003	2.1660e-003
tblVehicleEF	MDV	2.3950e-003	3.0250e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.19	0.22
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.11	0.71
tblVehicleEF	MDV	0.28	0.46
tblVehicleEF	MDV	5.3620e-003	6.1170e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MDV	1.1920e-003	1.3600e-003
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.19	0.22
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.07	0.10
tblVehicleEF	MDV	0.11	0.71
tblVehicleEF	MDV	0.31	0.49
tblVehicleEF	MH	0.04	0.00
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.93	5.07
tblVehicleEF	MH	7.37	9.55
tblVehicleEF	MH	1,116.45	655.44
tblVehicleEF	MH	64.06	32.38
tblVehicleEF	MH	1.49	1.74
tblVehicleEF	MH	0.92	0.90
tblVehicleEF	MH	0.13	0.05
tblVehicleEF	MH	0.01	8.5860e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.7470e-003	1.7920e-003
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2100e-003	2.1470e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.6230e-003	1.5470e-003
tblVehicleEF	MH	1.32	1.38
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.52	0.54
tblVehicleEF	MH	0.14	0.16

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MH	0.02	2.06
tblVehicleEF	MH	0.46	0.59
tblVehicleEF	MH	0.01	6.7220e-003
tblVehicleEF	MH	7.7000e-004	5.0000e-004
tblVehicleEF	MH	1.32	1.38
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.52	0.54
tblVehicleEF	MH	0.19	0.20
tblVehicleEF	MH	0.02	2.06
tblVehicleEF	MH	0.50	0.63
tblVehicleEF	MH	0.04	0.00
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.98	5.12
tblVehicleEF	MH	6.95	7.61
tblVehicleEF	MH	1,116.45	655.44
tblVehicleEF	MH	64.06	32.38
tblVehicleEF	MH	1.37	1.59
tblVehicleEF	MH	0.88	0.86
tblVehicleEF	MH	0.13	0.05
tblVehicleEF	MH	0.01	8.5860e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.7470e-003	1.7920e-003
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2100e-003	2.1470e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.6230e-003	1.5470e-003
tblVehicleEF	MH	2.01	2.13

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.81	0.86
tblVehicleEF	MH	0.14	0.16
tblVehicleEF	MH	0.02	2.02
tblVehicleEF	MH	0.44	0.50
tblVehicleEF	MH	0.01	6.7230e-003
tblVehicleEF	MH	7.6300e-004	4.6700e-004
tblVehicleEF	MH	2.01	2.13
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.81	0.86
tblVehicleEF	MH	0.20	0.20
tblVehicleEF	MH	0.02	2.02
tblVehicleEF	MH	0.48	0.53
tblVehicleEF	MH	0.04	0.00
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.91	5.06
tblVehicleEF	MH	7.41	9.61
tblVehicleEF	MH	1,116.45	655.44
tblVehicleEF	MH	64.06	32.38
tblVehicleEF	MH	1.46	1.71
tblVehicleEF	MH	0.93	0.90
tblVehicleEF	MH	0.13	0.05
tblVehicleEF	MH	0.01	8.5860e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.7470e-003	1.7920e-003
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2100e-003	2.1470e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.6230e-003	1.5470e-003
tblVehicleEF	MH	1.51	1.64
tblVehicleEF	MH	0.11	0.12
tblVehicleEF	MH	0.55	0.58
tblVehicleEF	MH	0.14	0.16
tblVehicleEF	MH	0.02	2.18
tblVehicleEF	MH	0.46	0.59
tblVehicleEF	MH	0.01	6.7220e-003
tblVehicleEF	MH	7.7100e-004	5.0100e-004
tblVehicleEF	MH	1.51	1.64
tblVehicleEF	MH	0.11	0.12
tblVehicleEF	MH	0.55	0.58
tblVehicleEF	MH	0.19	0.20
tblVehicleEF	MH	0.02	2.18
tblVehicleEF	MH	0.51	0.64
tblVehicleEF	MHD	0.02	7.6240e-003
tblVehicleEF	MHD	0.01	5.8760e-003
tblVehicleEF	MHD	0.06	0.00
tblVehicleEF	MHD	0.48	1.84
tblVehicleEF	MHD	0.72	1.37
tblVehicleEF	MHD	7.66	21.37
tblVehicleEF	MHD	141.59	608.92
tblVehicleEF	MHD	1,148.11	998.42
tblVehicleEF	MHD	63.11	59.25
tblVehicleEF	MHD	1.08	6.68
tblVehicleEF	MHD	2.53	3.73

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MHD	10.44	2.19
tblVehicleEF	MHD	4.1190e-003	0.03
tblVehicleEF	MHD	0.13	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.09
tblVehicleEF	MHD	9.6700e-004	3.7660e-003
tblVehicleEF	MHD	3.9400e-003	0.03
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	3.0000e-003	2.8110e-003
tblVehicleEF	MHD	0.07	0.09
tblVehicleEF	MHD	8.9000e-004	3.1830e-003
tblVehicleEF	MHD	1.4130e-003	3.6720e-003
tblVehicleEF	MHD	0.05	0.15
tblVehicleEF	MHD	0.04	0.16
tblVehicleEF	MHD	8.4300e-004	2.1070e-003
tblVehicleEF	MHD	0.13	0.17
tblVehicleEF	MHD	0.02	0.62
tblVehicleEF	MHD	0.47	1.44
tblVehicleEF	MHD	1.3630e-003	5.9580e-003
tblVehicleEF	MHD	0.01	9.8350e-003
tblVehicleEF	MHD	7.6600e-004	9.8800e-004
tblVehicleEF	MHD	1.4130e-003	3.6720e-003
tblVehicleEF	MHD	0.05	0.15
tblVehicleEF	MHD	0.05	0.19
tblVehicleEF	MHD	8.4300e-004	2.1070e-003
tblVehicleEF	MHD	0.16	0.19
tblVehicleEF	MHD	0.02	0.62

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MHD	0.51	1.55
tblVehicleEF	MHD	0.02	7.1850e-003
tblVehicleEF	MHD	0.01	5.8760e-003
tblVehicleEF	MHD	0.06	0.00
tblVehicleEF	MHD	0.35	1.33
tblVehicleEF	MHD	0.73	1.38
tblVehicleEF	MHD	7.28	17.62
tblVehicleEF	MHD	149.97	645.10
tblVehicleEF	MHD	1,148.11	998.42
tblVehicleEF	MHD	63.11	59.25
tblVehicleEF	MHD	1.11	6.90
tblVehicleEF	MHD	2.38	3.51
tblVehicleEF	MHD	10.39	2.10
tblVehicleEF	MHD	3.4720e-003	0.02
tblVehicleEF	MHD	0.13	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.09
tblVehicleEF	MHD	9.6700e-004	3.7660e-003
tblVehicleEF	MHD	3.3220e-003	0.02
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	3.0000e-003	2.8110e-003
tblVehicleEF	MHD	0.07	0.09
tblVehicleEF	MHD	8.9000e-004	3.1830e-003
tblVehicleEF	MHD	2.1640e-003	5.7640e-003
tblVehicleEF	MHD	0.05	0.16
tblVehicleEF	MHD	0.03	0.15
tblVehicleEF	MHD	1.2710e-003	3.3810e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MHD	0.13	0.17
tblVehicleEF	MHD	0.02	0.61
tblVehicleEF	MHD	0.45	1.25
tblVehicleEF	MHD	1.4420e-003	6.3120e-003
tblVehicleEF	MHD	0.01	9.8350e-003
tblVehicleEF	MHD	7.5900e-004	9.2300e-004
tblVehicleEF	MHD	2.1640e-003	5.7640e-003
tblVehicleEF	MHD	0.05	0.16
tblVehicleEF	MHD	0.05	0.18
tblVehicleEF	MHD	1.2710e-003	3.3810e-003
tblVehicleEF	MHD	0.16	0.19
tblVehicleEF	MHD	0.02	0.61
tblVehicleEF	MHD	0.49	1.34
tblVehicleEF	MHD	0.02	8.2310e-003
tblVehicleEF	MHD	0.01	5.8760e-003
tblVehicleEF	MHD	0.06	0.00
tblVehicleEF	MHD	0.67	2.53
tblVehicleEF	MHD	0.72	1.37
tblVehicleEF	MHD	7.72	21.81
tblVehicleEF	MHD	130.01	558.96
tblVehicleEF	MHD	1,148.11	998.42
tblVehicleEF	MHD	63.11	59.25
tblVehicleEF	MHD	1.03	6.39
tblVehicleEF	MHD	2.48	3.66
tblVehicleEF	MHD	10.45	2.21
tblVehicleEF	MHD	5.0120e-003	0.03
tblVehicleEF	MHD	0.13	0.11

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.09
tblVehicleEF	MHD	9.6700e-004	3.7660e-003
tblVehicleEF	MHD	4.7950e-003	0.03
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	3.0000e-003	2.8110e-003
tblVehicleEF	MHD	0.07	0.09
tblVehicleEF	MHD	8.9000e-004	3.1830e-003
tblVehicleEF	MHD	1.5060e-003	4.1180e-003
tblVehicleEF	MHD	0.06	0.18
tblVehicleEF	MHD	0.04	0.18
tblVehicleEF	MHD	8.4900e-004	2.1990e-003
tblVehicleEF	MHD	0.13	0.17
tblVehicleEF	MHD	0.03	0.67
tblVehicleEF	MHD	0.47	1.47
tblVehicleEF	MHD	1.2550e-003	5.4690e-003
tblVehicleEF	MHD	0.01	9.8350e-003
tblVehicleEF	MHD	7.6700e-004	9.9500e-004
tblVehicleEF	MHD	1.5060e-003	4.1180e-003
tblVehicleEF	MHD	0.06	0.18
tblVehicleEF	MHD	0.05	0.20
tblVehicleEF	MHD	8.4900e-004	2.1990e-003
tblVehicleEF	MHD	0.16	0.19
tblVehicleEF	MHD	0.03	0.67
tblVehicleEF	MHD	0.52	1.57
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.01	3.0860e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	OBUS	0.03	0.00
tblVehicleEF	OBUS	0.29	2.24
tblVehicleEF	OBUS	0.79	1.60
tblVehicleEF	OBUS	6.58	11.29
tblVehicleEF	OBUS	99.76	576.20
tblVehicleEF	OBUS	1,260.80	1,090.39
tblVehicleEF	OBUS	70.22	36.66
tblVehicleEF	OBUS	0.62	6.46
tblVehicleEF	OBUS	2.19	4.83
tblVehicleEF	OBUS	2.52	1.54
tblVehicleEF	OBUS	3.3900e-004	0.02
tblVehicleEF	OBUS	0.13	0.09
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.01	0.06
tblVehicleEF	OBUS	8.3100e-004	1.1410e-003
tblVehicleEF	OBUS	3.2400e-004	0.02
tblVehicleEF	OBUS	0.06	0.04
tblVehicleEF	OBUS	3.0000e-003	2.6140e-003
tblVehicleEF	OBUS	0.01	0.06
tblVehicleEF	OBUS	7.6700e-004	9.9500e-004
tblVehicleEF	OBUS	1.6300e-003	1.0210e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.40
tblVehicleEF	OBUS	8.1800e-004	5.0600e-004
tblVehicleEF	OBUS	0.08	0.17
tblVehicleEF	OBUS	0.04	0.30
tblVehicleEF	OBUS	0.42	0.71

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	OBUS	9.6400e-004	5.6380e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1800e-004	5.7500e-004
tblVehicleEF	OBUS	1.6300e-003	1.0210e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.06	0.45
tblVehicleEF	OBUS	8.1800e-004	5.0600e-004
tblVehicleEF	OBUS	0.09	0.20
tblVehicleEF	OBUS	0.04	0.30
tblVehicleEF	OBUS	0.46	0.76
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.01	3.0860e-003
tblVehicleEF	OBUS	0.03	0.00
tblVehicleEF	OBUS	0.27	1.63
tblVehicleEF	OBUS	0.80	1.62
tblVehicleEF	OBUS	6.21	9.20
tblVehicleEF	OBUS	104.67	610.43
tblVehicleEF	OBUS	1,260.80	1,090.39
tblVehicleEF	OBUS	70.22	36.66
tblVehicleEF	OBUS	0.64	6.67
tblVehicleEF	OBUS	2.06	4.54
tblVehicleEF	OBUS	2.48	1.48
tblVehicleEF	OBUS	2.8600e-004	0.02
tblVehicleEF	OBUS	0.13	0.09
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.01	0.06
tblVehicleEF	OBUS	8.3100e-004	1.1410e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	OBUS	2.7400e-004	0.02
tblVehicleEF	OBUS	0.06	0.04
tblVehicleEF	OBUS	3.0000e-003	2.6140e-003
tblVehicleEF	OBUS	0.01	0.06
tblVehicleEF	OBUS	7.6700e-004	9.9500e-004
tblVehicleEF	OBUS	2.4520e-003	1.5430e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.37
tblVehicleEF	OBUS	1.2320e-003	7.8000e-004
tblVehicleEF	OBUS	0.08	0.17
tblVehicleEF	OBUS	0.04	0.29
tblVehicleEF	OBUS	0.40	0.63
tblVehicleEF	OBUS	1.0110e-003	5.9730e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1200e-004	5.4000e-004
tblVehicleEF	OBUS	2.4520e-003	1.5430e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.06	0.43
tblVehicleEF	OBUS	1.2320e-003	7.8000e-004
tblVehicleEF	OBUS	0.09	0.20
tblVehicleEF	OBUS	0.04	0.29
tblVehicleEF	OBUS	0.44	0.67
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.01	3.0860e-003
tblVehicleEF	OBUS	0.03	0.00
tblVehicleEF	OBUS	0.31	3.09
tblVehicleEF	OBUS	0.79	1.60

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	OBUS	6.63	11.51
tblVehicleEF	OBUS	92.98	528.93
tblVehicleEF	OBUS	1,260.80	1,090.39
tblVehicleEF	OBUS	70.22	36.66
tblVehicleEF	OBUS	0.59	6.17
tblVehicleEF	OBUS	2.15	4.74
tblVehicleEF	OBUS	2.53	1.55
tblVehicleEF	OBUS	4.1300e-004	0.03
tblVehicleEF	OBUS	0.13	0.09
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.01	0.06
tblVehicleEF	OBUS	8.3100e-004	1.1410e-003
tblVehicleEF	OBUS	3.9500e-004	0.02
tblVehicleEF	OBUS	0.06	0.04
tblVehicleEF	OBUS	3.0000e-003	2.6140e-003
tblVehicleEF	OBUS	0.01	0.06
tblVehicleEF	OBUS	7.6700e-004	9.9500e-004
tblVehicleEF	OBUS	1.7120e-003	1.1110e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.43
tblVehicleEF	OBUS	8.1800e-004	5.1600e-004
tblVehicleEF	OBUS	0.08	0.17
tblVehicleEF	OBUS	0.05	0.32
tblVehicleEF	OBUS	0.42	0.73
tblVehicleEF	OBUS	8.9900e-004	5.1760e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1900e-004	5.7900e-004

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	OBUS	1.7120e-003	1.1110e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.06	0.49
tblVehicleEF	OBUS	8.1800e-004	5.1600e-004
tblVehicleEF	OBUS	0.09	0.20
tblVehicleEF	OBUS	0.05	0.32
tblVehicleEF	OBUS	0.46	0.78
tblVehicleEF	SBUS	0.88	5.4240e-003
tblVehicleEF	SBUS	0.02	7.7120e-003
tblVehicleEF	SBUS	0.08	0.00
tblVehicleEF	SBUS	7.59	1.05
tblVehicleEF	SBUS	0.94	5.14
tblVehicleEF	SBUS	7.92	34.39
tblVehicleEF	SBUS	1,174.33	576.19
tblVehicleEF	SBUS	1,118.12	1,136.12
tblVehicleEF	SBUS	50.02	130.61
tblVehicleEF	SBUS	11.41	8.14
tblVehicleEF	SBUS	5.43	8.33
tblVehicleEF	SBUS	13.15	2.27
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.74	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	6.9000e-004	7.3700e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.32	0.25
tblVehicleEF	SBUS	2.7130e-003	2.7590e-003

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	SBUS	0.03	0.08
tblVehicleEF	SBUS	6.3400e-004	6.3160e-003
tblVehicleEF	SBUS	3.8500e-003	0.04
tblVehicleEF	SBUS	0.03	0.29
tblVehicleEF	SBUS	0.92	0.12
tblVehicleEF	SBUS	1.7780e-003	0.02
tblVehicleEF	SBUS	0.13	0.44
tblVehicleEF	SBUS	0.02	2.25
tblVehicleEF	SBUS	0.42	2.36
tblVehicleEF	SBUS	0.01	5.6380e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.3700e-004	1.9520e-003
tblVehicleEF	SBUS	3.8500e-003	0.04
tblVehicleEF	SBUS	0.03	0.29
tblVehicleEF	SBUS	1.32	0.13
tblVehicleEF	SBUS	1.7780e-003	0.02
tblVehicleEF	SBUS	0.15	0.49
tblVehicleEF	SBUS	0.02	2.25
tblVehicleEF	SBUS	0.46	2.53
tblVehicleEF	SBUS	0.88	5.1110e-003
tblVehicleEF	SBUS	0.02	7.7120e-003
tblVehicleEF	SBUS	0.07	0.00
tblVehicleEF	SBUS	7.45	0.77
tblVehicleEF	SBUS	0.95	5.11
tblVehicleEF	SBUS	6.31	29.56
tblVehicleEF	SBUS	1,229.44	610.42
tblVehicleEF	SBUS	1,118.12	1,136.12

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	SBUS	50.02	130.61
tblVehicleEF	SBUS	11.78	8.40
tblVehicleEF	SBUS	5.12	7.84
tblVehicleEF	SBUS	13.12	2.15
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.74	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	6.9000e-004	7.3700e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.32	0.25
tblVehicleEF	SBUS	2.7130e-003	2.7590e-003
tblVehicleEF	SBUS	0.03	0.08
tblVehicleEF	SBUS	6.3400e-004	6.3160e-003
tblVehicleEF	SBUS	5.8570e-003	0.06
tblVehicleEF	SBUS	0.03	0.29
tblVehicleEF	SBUS	0.91	0.11
tblVehicleEF	SBUS	2.7600e-003	0.03
tblVehicleEF	SBUS	0.13	0.44
tblVehicleEF	SBUS	0.02	2.07
tblVehicleEF	SBUS	0.37	2.08
tblVehicleEF	SBUS	0.01	5.9730e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.1100e-004	1.8670e-003
tblVehicleEF	SBUS	5.8570e-003	0.06
tblVehicleEF	SBUS	0.03	0.29
tblVehicleEF	SBUS	1.32	0.13

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	SBUS	2.7600e-003	0.03
tblVehicleEF	SBUS	0.15	0.49
tblVehicleEF	SBUS	0.02	2.07
tblVehicleEF	SBUS	0.40	2.23
tblVehicleEF	SBUS	0.88	5.8550e-003
tblVehicleEF	SBUS	0.02	7.7120e-003
tblVehicleEF	SBUS	0.08	0.00
tblVehicleEF	SBUS	7.79	1.45
tblVehicleEF	SBUS	0.93	5.12
tblVehicleEF	SBUS	8.16	35.31
tblVehicleEF	SBUS	1,098.22	528.91
tblVehicleEF	SBUS	1,118.12	1,136.12
tblVehicleEF	SBUS	50.02	130.61
tblVehicleEF	SBUS	10.91	7.78
tblVehicleEF	SBUS	5.34	8.20
tblVehicleEF	SBUS	13.16	2.30
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.74	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	6.9000e-004	7.3700e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.32	0.25
tblVehicleEF	SBUS	2.7130e-003	2.7590e-003
tblVehicleEF	SBUS	0.03	0.08
tblVehicleEF	SBUS	6.3400e-004	6.3160e-003
tblVehicleEF	SBUS	4.0850e-003	0.05

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	SBUS	0.03	0.36
tblVehicleEF	SBUS	0.92	0.13
tblVehicleEF	SBUS	1.7790e-003	0.02
tblVehicleEF	SBUS	0.13	0.43
tblVehicleEF	SBUS	0.02	2.65
tblVehicleEF	SBUS	0.43	2.42
tblVehicleEF	SBUS	0.01	5.1750e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.4100e-004	1.9680e-003
tblVehicleEF	SBUS	4.0850e-003	0.05
tblVehicleEF	SBUS	0.03	0.36
tblVehicleEF	SBUS	1.33	0.14
tblVehicleEF	SBUS	1.7790e-003	0.02
tblVehicleEF	SBUS	0.15	0.48
tblVehicleEF	SBUS	0.02	2.65
tblVehicleEF	SBUS	0.47	2.59
tblVehicleEF	UBUS	2.86	0.00
tblVehicleEF	UBUS	0.06	0.00
tblVehicleEF	UBUS	12.55	5.52
tblVehicleEF	UBUS	10.67	10.88
tblVehicleEF	UBUS	1,990.56	2,143.37
tblVehicleEF	UBUS	98.44	29.70
tblVehicleEF	UBUS	11.01	13.19
tblVehicleEF	UBUS	15.58	1.23
tblVehicleEF	UBUS	0.62	0.68
tblVehicleEF	UBUS	0.01	8.0000e-003
tblVehicleEF	UBUS	0.14	0.21

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	UBUS	1.0840e-003	8.3600e-004
tblVehicleEF	UBUS	0.26	0.29
tblVehicleEF	UBUS	3.0000e-003	2.0000e-003
tblVehicleEF	UBUS	0.13	0.19
tblVehicleEF	UBUS	1.0000e-003	7.4300e-004
tblVehicleEF	UBUS	5.3010e-003	5.8730e-003
tblVehicleEF	UBUS	0.09	0.10
tblVehicleEF	UBUS	2.8840e-003	3.2100e-003
tblVehicleEF	UBUS	0.95	0.83
tblVehicleEF	UBUS	0.02	0.72
tblVehicleEF	UBUS	0.80	0.80
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	1.1770e-003	5.0000e-004
tblVehicleEF	UBUS	5.3010e-003	5.8730e-003
tblVehicleEF	UBUS	0.09	0.10
tblVehicleEF	UBUS	2.8840e-003	3.2100e-003
tblVehicleEF	UBUS	3.92	0.92
tblVehicleEF	UBUS	0.02	0.72
tblVehicleEF	UBUS	0.88	0.85
tblVehicleEF	UBUS	2.86	0.00
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	12.59	5.55
tblVehicleEF	UBUS	9.25	9.18
tblVehicleEF	UBUS	1,990.56	2,143.37
tblVehicleEF	UBUS	98.44	29.70
tblVehicleEF	UBUS	10.38	12.43
tblVehicleEF	UBUS	15.52	1.18

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	UBUS	0.62	0.68
tblVehicleEF	UBUS	0.01	8.0000e-003
tblVehicleEF	UBUS	0.14	0.21
tblVehicleEF	UBUS	1.0840e-003	8.3600e-004
tblVehicleEF	UBUS	0.26	0.29
tblVehicleEF	UBUS	3.0000e-003	2.0000e-003
tblVehicleEF	UBUS	0.13	0.19
tblVehicleEF	UBUS	1.0000e-003	7.4300e-004
tblVehicleEF	UBUS	7.7720e-003	8.6970e-003
tblVehicleEF	UBUS	0.09	0.11
tblVehicleEF	UBUS	4.2990e-003	4.9400e-003
tblVehicleEF	UBUS	0.96	0.83
tblVehicleEF	UBUS	0.02	0.67
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	1.1520e-003	4.7100e-004
tblVehicleEF	UBUS	7.7720e-003	8.6970e-003
tblVehicleEF	UBUS	0.09	0.11
tblVehicleEF	UBUS	4.2990e-003	4.9400e-003
tblVehicleEF	UBUS	3.94	0.93
tblVehicleEF	UBUS	0.02	0.67
tblVehicleEF	UBUS	0.80	0.76
tblVehicleEF	UBUS	2.86	0.00
tblVehicleEF	UBUS	0.06	0.00
tblVehicleEF	UBUS	12.54	5.52
tblVehicleEF	UBUS	10.84	11.03
tblVehicleEF	UBUS	1,990.56	2,143.37

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

tblVehicleEF	UBUS	98.44	29.70
tblVehicleEF	UBUS	10.80	12.94
tblVehicleEF	UBUS	15.59	1.24
tblVehicleEF	UBUS	0.62	0.68
tblVehicleEF	UBUS	0.01	8.0000e-003
tblVehicleEF	UBUS	0.14	0.21
tblVehicleEF	UBUS	1.0840e-003	8.3600e-004
tblVehicleEF	UBUS	0.26	0.29
tblVehicleEF	UBUS	3.0000e-003	2.0000e-003
tblVehicleEF	UBUS	0.13	0.19
tblVehicleEF	UBUS	1.0000e-003	7.4300e-004
tblVehicleEF	UBUS	6.0670e-003	6.8580e-003
tblVehicleEF	UBUS	0.11	0.13
tblVehicleEF	UBUS	3.0940e-003	3.5170e-003
tblVehicleEF	UBUS	0.95	0.82
tblVehicleEF	UBUS	0.03	0.84
tblVehicleEF	UBUS	0.81	0.81
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	1.1800e-003	5.0300e-004
tblVehicleEF	UBUS	6.0670e-003	6.8580e-003
tblVehicleEF	UBUS	0.11	0.13
tblVehicleEF	UBUS	3.0940e-003	3.5170e-003
tblVehicleEF	UBUS	3.92	0.92
tblVehicleEF	UBUS	0.03	0.84
tblVehicleEF	UBUS	0.89	0.86

2.0 Emissions Summary

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.4777	4.7118	4.9551	7.5900e-003	0.5750	0.2317	0.8067	0.0691	0.2137	0.2828	0.0000	756.8408	756.8408	0.2196	0.0000	762.3317
Maximum	0.4777	4.7118	4.9551	7.5900e-003	0.5750	0.2317	0.8067	0.0691	0.2137	0.2828	0.0000	756.8408	756.8408	0.2196	0.0000	762.3317

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.1967	2.1683	4.6005	7.5900e-003	0.5750	0.0691	0.6441	0.0691	0.0641	0.1332	0.0000	756.8408	756.8408	0.2196	0.0000	762.3317
Maximum	0.1967	2.1683	4.6005	7.5900e-003	0.5750	0.0691	0.6441	0.0691	0.0641	0.1332	0.0000	756.8408	756.8408	0.2196	0.0000	762.3317

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	58.82	53.98	7.16	0.00	0.00	70.17	20.16	0.00	70.00	52.89	0.00	0.00	0.00	0.00	0.00	0.00

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/12/2018	11/30/2018	5	15	
2	Excavation	Trenching	11/19/2018	11/30/2018	5	10	
3	Pad Construction & Equip Install	Building Construction	11/19/2018	12/20/2018	5	24	

Acres of Grading (Site Preparation Phase): 7.5**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Skid Steer Loaders	1	2.70	73	0.37
Site Preparation	Excavators	2	4.00	23	0.38
Excavation	Excavators	1	5.00	153	0.38
Excavation	Other Construction Equipment	1	1.00	210	0.42
Excavation	Skid Steer Loaders	1	4.00	73	0.37
Pad Construction & Equip Install	Aerial Lifts	1	0.80	60	0.31
Pad Construction & Equip Install	Cement and Mortar Mixers	1	0.60	450	0.56
Pad Construction & Equip Install	Cranes	1	0.60	450	0.29
Pad Construction & Equip Install	Generator Sets	1	2.50	7	0.74
Pad Construction & Equip Install	Dumpers/Tenders	1	0.30	450	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Pad Construction & Equip Install	9	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	3	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

3.2 Site Preparation - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.1407	1.1373	1.2522	1.6200e-003		0.0663	0.0663		0.0610	0.0610		162.8592	162.8592	0.0507		164.1267
Total	0.1407	1.1373	1.2522	1.6200e-003	0.5303	0.0663	0.5965	0.0573	0.0610	0.1182		162.8592	162.8592	0.0507		164.1267

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.8600e-003	4.2300e-003	0.0456	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		11.4325	11.4325	3.9000e-004		11.4423
Total	5.8600e-003	4.2300e-003	0.0456	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		11.4325	11.4325	3.9000e-004		11.4423

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

3.2 Site Preparation - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.0270	0.4502	0.5613	1.6200e-003		0.0119	0.0119		0.0110	0.0110	0.0000	162.8592	162.8592	0.0507		164.1267
Total	0.0270	0.4502	0.5613	1.6200e-003	0.5303	0.0119	0.5421	0.0573	0.0110	0.0682	0.0000	162.8592	162.8592	0.0507		164.1267

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.8600e-003	4.2300e-003	0.0456	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		11.4325	11.4325	3.9000e-004		11.4423
Total	5.8600e-003	4.2300e-003	0.0456	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		11.4325	11.4325	3.9000e-004		11.4423

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

3.3 Excavation - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2264	2.5549	2.7642	4.2900e-003		0.1242	0.1242		0.1142	0.1142		431.1982	431.1982	0.1342		434.5541
Total	0.2264	2.5549	2.7642	4.2900e-003		0.1242	0.1242		0.1142	0.1142		431.1982	431.1982	0.1342		434.5541

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0117	8.4600e-003	0.0912	2.3000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003		22.8651	22.8651	7.8000e-004		22.8846
Total	0.0117	8.4600e-003	0.0912	2.3000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003		22.8651	22.8651	7.8000e-004		22.8846

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

3.3 Excavation - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0785	0.8336	3.2028	4.2900e-003		0.0227	0.0227		0.0214	0.0214	0.0000	431.1982	431.1982	0.1342		434.5541
Total	0.0785	0.8336	3.2028	4.2900e-003		0.0227	0.0227		0.0214	0.0214	0.0000	431.1982	431.1982	0.1342		434.5541

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0117	8.4600e-003	0.0912	2.3000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003		22.8651	22.8651	7.8000e-004		22.8846
Total	0.0117	8.4600e-003	0.0912	2.3000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003		22.8651	22.8651	7.8000e-004		22.8846

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

3.4 Pad Consruction & Equip Install - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0872	1.0027	0.7563	1.2300e-003		0.0409	0.0409		0.0382	0.0382		117.0534	117.0534	0.0331		117.8816
Total	0.0872	1.0027	0.7563	1.2300e-003		0.0409	0.0409		0.0382	0.0382		117.0534	117.0534	0.0331		117.8816

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.8600e-003	4.2300e-003	0.0456	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		11.4325	11.4325	3.9000e-004		11.4423
Total	5.8600e-003	4.2300e-003	0.0456	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		11.4325	11.4325	3.9000e-004		11.4423

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

3.4 Pad Consruction & Equip Install - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0678	0.8677	0.6541	1.2300e-003		0.0342	0.0342		0.0314	0.0314	0.0000	117.0534	117.0534	0.0331		117.8816
Total	0.0678	0.8677	0.6541	1.2300e-003		0.0342	0.0342		0.0314	0.0314	0.0000	117.0534	117.0534	0.0331		117.8816

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.8600e-003	4.2300e-003	0.0456	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		11.4325	11.4325	3.9000e-004		11.4423
Total	5.8600e-003	4.2300e-003	0.0456	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		11.4325	11.4325	3.9000e-004		11.4423

4.0 Operational Detail - Mobile

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	18.50	10.10	7.90	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

LA RICS LMR Max Construction SCAQMD - South Coast Air Basin, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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**GREENHOUSE GAS EMISSIONS FROM
MAINTENANCE VEHICLES, GENERATOR TESTING,
AND HVAC UNIT OPERATION**

SCAQMD Site INDTW

Assumptions: monthly generator test, each site, one hour duration
 assume 14.7 miles for each leg of site visit, all trips retrace to origin point (double trip distances per site)
 biannual maintenance, occurs on same day as generator test (e.g. not extra trips)

Maintenance Vehicle Trip Emissions

	# Vehicle Events per Month ² NR Emissions (lbs/month)				Total Monthly Vehicle Miles		Run Emissions (lbs/month)		Total Emissions (lbs/day) ⁴
	Non-Running ¹	Month ²	Running ³	Running ⁴					
ROG	3.260551	2	0.014376421	3.577897	0.337325	29.4	0.037639464	0.0017101	
NOx	0	2	0	0.581023	1.613247	29.4	0.107124838	0.0035219	
CO	0	2	0	8.384708	5.611858	29.4	0.400703778	0.0131737	
PM ₁₀	0	2	0	0.008852	0.886933	29.4	0.057525805	0.0018912	
PM _{2.5}	0	2	0	0.008146	0.329402	29.4	0.021386187	0.0007031	
SOx	0	2	0	0.002457	0.329402	29.4	0.021361103	0.0007023	

1. IDLEX, DIURN, RESTL (grams/veh/day)
2. Multiple vehicles single event or single vehicle, multiple events.
3. STREX, HTSK, RUNL (grams/trip)
4. RUNEX (grams/mi)
5. Based on average 30.417 days per month

ROG	NOx	CO	PM ₁₀	PM _{2.5}
0.0017101	0.003522	0.01317368	0.0018912	0.000703

Generator Testing

SCAB Fleet Average Emission Factors (Diesel)

LMR Maintenance Emissions

Air Basin	SC
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		(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	
Equipment	MaxHP	ROG	CO	NOX	SOX	PM	CO2	CH4	
Generator Sets	15	0.0123	0.0644	0.0852	0.0002	0.0043	10.2	0.0011	
	25	0.0231	0.0788	0.1449	0.0002	0.0070	17.6	0.0021	
	50	0.0491	0.2265	0.2357	0.0004	0.0138	30.6	0.0044	
	120	0.0642	0.4694	0.5181	0.0009	0.0333	77.9	0.0058	
	175	0.0808	0.7324	0.7528	0.0016	0.0337	142	0.0073	125 kW = 162.6278 BHP
	250	0.0857	0.3931	0.9756	0.0024	0.0274	213	0.0077	
	500	0.1264	0.6113	1.3836	0.0033	0.0415	337	0.0114	
	750	0.2080	0.9868	2.2918	0.0055	0.0679	544	0.0188	
	9999	0.5230	2.0948	7.5356	0.0105	0.1778	1,049	0.0472	

Source: SCAQMD CEQA Handbook (SCAQMD, Revised March 2015) Off-Road Model Mobile Source Emission Factors
 (<http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors>)

ROG	0.002656409	lbs/day
NOx	0.024749318	lbs/day
CO	0.02407864	lbs/day
PM ₁₀	0.001107933	lbs/day
PM _{2.5}	0.001107933	lbs/day
ROG	0.002656409	
NOx	0.024749	
CO	0.02407864	
PM ₁₀	0.0011079	
PM _{2.5}	0.0011079	

SCAQMD **Site INDTW**

Assumptions: monthly generator test, each site, one hour duration
assume 14.7 miles for each leg of site visit, all trips retrace to origin point (double trip distances per site)
biannual maintenance, occurs on same day as generator test (e.g. not extra trips)

Maintenance Vehicle Trip Emissions

		# Vehicle	Events per	NR Emissions		Total	Run	Total	Metric	Annual
	Non-Running ¹	Month ²	(lbs/month)	Running ³	Running ⁴	Monthly Vehicle Miles	Emissions (lbs/month)	Emissions (lbs/day) ⁴	Tons/day	Metric Tons
CO ₂	0	2	0	230.9936	2134.835	29.4	139.388327	4.5825797	0.002079	0.5425207

1. IDLEX, DIURN, RESTL (grams/veh/day)
2. Multiple vehicles single event or single vehicle, multiple events.
3. STREX, HTSK, RUNL (grams/trip)
4. RUNEX (grams/mi)
5. Based on average 30.417 days per month

Generator Testing

SCAB Fleet Average Emission Factors (Diesel)

GHG Emissions

Air Basin	SC
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		(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Equipment	MaxHP	ROG	CO	NOX	SOX	PM	CO2	CH4
Generator Sets	15	0.0123	0.0644	0.0852	0.0002	0.0043	10.2	0.0011
	25	0.0231	0.0788	0.1449	0.0002	0.0070	17.6	0.0021
	50	0.0491	0.2265	0.2357	0.0004	0.0138	30.6	0.0044
	120	0.0642	0.4694	0.5181	0.0009	0.0333	77.9	0.0058
	175	0.0808	0.7324	0.7528	0.0016	0.0337	142	0.0073
	250	0.0857	0.3931	0.9756	0.0024	0.0274	213	0.0077
	500	0.1264	0.6113	1.3836	0.0033	0.0415	337	0.0114
	750	0.2080	0.9868	2.2918	0.0055	0.0679	544	0.0188
	9999	0.5230	2.0948	7.5356	0.0105	0.1778	1,049	0.0472

125 kW = 162.6278 BHP

Source: SCAQMD CEQA Handbook (SCAQMD, Revised March 2015) Off-Road Model Mobile Source Emission Factors
(<http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors>)

CO ₂	4.66844199 lbs/day					https://climatechangeconnection.org/emissions/co2-equivalents/
CH ₄	0.000239997 lbs/day		0.006 CO ₂ e			(25 times CO ₂ emissions per unit CH ₄ emissions)
	Total		4.674 lbs/day			
	Metric Tons/day		0.002120291			
	Annual Metric Tons		0.55339604			

SCAQMD Representative LMR Site

Construction

CO ₂ e ¹	762.3317 lbs/day
	0.345787865 Metric Tons/Day
	3.0083544 Annual Metric Tons ²

1. CalEEMod Emissions for Representative LMR Site
2. Amortized over 30 year life of facility

SCAQMD Representative LMR Site

Operational

Indirect (Electricity Generation)

Elec Consumption	12,500 watts
CO ₂	1227.89 lb/MWh ¹
	63% fossil fuel power generation for LADWP ²
	9.66963375 lb/site
	84705.99165 lbs/year
	38.42199405 Annual Metric Tons

1. CO₂ intensity for LA Department of Water and Power (CalEEMod)
2. LADWP, <http://www.greentechmedia.com/articles/read/ladwp-looks-at-33-percent-renewables-by-2020> (accessed 4/5/15)

TOTAL Emissions: **42.53** Construction and Operational GHG emissions

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**MITIGATION MONITORING PLAN
FOR THE
LOS ANGELES REGIONAL INTEROPERABLE
COMMUNICATIONS SYSTEM (LA-RICS)
LAND MOBILE RADIO (LMR) SYSTEM
SITE INDUSTRY WATER TANKS (INDWT)**



Prepared for:

LA-RICS Joint Powers Authority
2525 Corporate Place, Suite 100
Monterey Park, CA 91754

JULY 2018

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Pursuant to Public Resources Code Section 21081.6 and Section 15074 of the California Environmental Quality Act (CEQA) Guidelines, when adopting a mitigated negative declaration, the agency must adopt a program for monitoring or reporting on the changes which it has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects. The Mitigated Negative Declaration (MND) prepared for the Los Angeles Regional Interoperable Communications System (LA-RICS) Land Mobile Radio (LMR) Site Industry Water Tanks (INDWT) Project identifies mitigation measures to reduce the significant environmental effects of the proposed Project. This Mitigation Monitoring Plan (MMP) is prepared in compliance with CEQA and is designed to aid the LA-RICS Joint Powers Authority (Authority) in their implementation and monitoring of the adopted mitigation measures. The LA-RICS Authority is the designated lead agency for purposes of CEQA compliance and is responsible for implementation of the MMP. The MMP will be used by Authority staff responsible for ensuring compliance with mitigation measures associated with the Site INDWT Project. Monitoring will consist of review of appropriate documentation, such as plans and reports prepared by the Contractor, or field observation of the mitigation measures during implementation. The MMP will be in place throughout all phases of development of the Site INDWT Project. The MMP is presented in table format and describes the actions that must take place to implement each mitigation measure, the entities responsible for implementing the actions, the timing of those actions, and the entities responsible for monitoring compliance.

As background, the text of these measures was originally developed in connection with the Environmental Impact Report (EIR) certified by the Authority for the LA-RICS LMR System in April 2016, and the measures are currently being implemented for those sites. Therefore, the text of these measures, in some cases, was originally drafted to be applicable to more than one site. For consistency in ensuring compliance with the mitigation measures, the naming and wording of the mitigation measures from the LMR EIR has generally been retained. Additionally, the mitigation measure numbers in the table below are not all continuous. However, the Authority has determined that the following mitigation measures are applicable and would be implemented for the proposed Site INDWT Project.

Resource Area	Mitigation Measure	Responsible Implementation Party	Phase and Frequency (frequency is once unless otherwise noted)	Monitoring Agency
Biological Resources	BIO MM 1 Mitigation Monitoring and Reporting Plan: Prior to construction, the Authority shall develop and implement or require the system contractor to develop and implement a mitigation monitoring and reporting plan (MMRP) for the proposed Project. The MMRP would serve to organize environmental compliance requirements identified in best management practices, mitigation measures, permit requirements, real property agreement conditions, and other applicable sources. The MMRP shall contain an organization chart and communication plan for environmental compliance as it relates to the proposed Project.	Authority	Prior to construction	Authority
Biological Resources	BIO MM 2 Worker Environmental Awareness Program: Prior to construction, the Authority shall develop and implement or require the system contractor to develop and implement a Worker Environmental Awareness Program (WEAP) for the proposed Project. This mitigation measure would serve to institute and formalize an education program to increase awareness of environmental resources and measures and rules that are in place to help minimize impacts to those resources. a) A WEAP shall be developed and shall be required for all construction employees prior to placement of Project equipment, construction, or any ground-disturbing activities at the proposed Project site. Training of additional workers, contractors, and visitors shall be provided, as needed. b) The WEAP is to inform on-site workers of the possible presence of special status species, the measures to be taken to protect these species, and the importance of minimizing impacts to the natural environment through the protection of native vegetation, adhering to required buffers and protection zones, staying on existing roads, and implementing best management practices, that include containment of any spills, disposal of trash, and management of runoff and sediment transport. c) To assure long-term implementation of mitigation measures, an information sheet listing potential sensitive species and what to do if any are encountered shall be prepared, distributed to workers, and posted on site.	Authority	a) Prior to construction b) Prior to construction c) Prior to construction	Authority
Biological Resources	BIO MM 3 Biological Compliance Reporting: A biological monitor shall visit all active construction sites at least once weekly to document compliance and provide reports to the Project administrator on a weekly basis.	Contractor	Weekly during construction	Authority
Biological Resources	BIO MM 4 Site Sanitation: a) The contractor shall keep a regulated work area free of litter and trash. Trash and discarded food items shall be contained within an appropriate receptacle and removed daily to avoid attracting wildlife to the construction site, contribute to habituation of wildlife to the presence of humans, or to attract avian or mammalian predators to the area. b) All construction debris (including nuts, bolts, small pieces of wire, etc.) shall be cleaned up (e.g., trash removed, scrap materials picked up) each day that work is conducted to minimize the likelihood of wildlife visiting the site and consuming microtrash, discarded food, or other substances.	Contractor	a) Daily during construction b) Daily during construction	Authority
Biological Resources	BIO MM 5 Hazardous Materials Management: a) A toxic substance management and spill response plan shall be prepared by the contractor for review and approval by the Authority. b) Hazardous materials shall be contained; spills shall be prevented; and any spills at the Project site or along access roads shall be contained and cleaned up immediately. c) All construction vehicles are required to carry at least one spill response kit. d) Any spills shall be accounted for in reports prepared by the biological/environmental monitor.	Contractor	a) Prior to construction b) Daily during construction c) Daily during construction d) During construction, upon occurrence	Authority
Biological Resources	BIO MM 8 Biological Monitoring: A qualified biological monitor shall be present at the site during construction activities that result in ground disturbance or removal of vegetation to ensure all mitigation measures are met. Duties of the biological monitor include checking for the presence of wildlife on the construction site, inspecting trenches or holes	Contractor	Daily during construction	Authority

Resource Area	Mitigation Measure	Responsible Implementation Party	Phase and Frequency (frequency is once unless otherwise noted)	Monitoring Agency
	for trapped wildlife, surveying for the presence of nesting birds and adherence to nesting bird protection buffers, monitoring construction site boundaries, and checking that vegetation flagged for protection is not disturbed.			
Biological Resources	BIO MM 9 Protect Native Vegetation and Common Wildlife: a) Minimize disturbance to native perennial plants; new ground disturbance shall be the minimum necessary and established and delineated prior to any earth-moving activities. b) If native perennial vegetation cannot be avoided and would be impacted or destroyed, the disturbance area is to be surveyed for the presence of special status plants and to remove common species of wildlife prior to destruction of the vegetation. c) At no time shall protected species be handled or moved. If a protected species is found within the construction area, all work that may impact that animal shall cease and the appropriate agency(s) shall be contacted (e.g., USFWS, CDFW, land management agency). The animal shall be allowed to leave the site on its own accord. d) Prior to construction or any ground-disturbance activities, mark the construction disturbance limits and monitor for adherence to these boundaries. e) Stay on existing roads. f) Do not remove native trees; construction limits shall be established to avoid walnuts, oaks, and any other sensitive species habitat and the limits shall be flagged by a biological monitor. g) Protect tree root systems by precluding paving, trenching, or other ground disturbing activities; and preclude heavy equipment from driving, parking, or staging within the tree’s dripline. h) Any loss of native perennial vegetation, whether planned or unintentional, is to be accounted for in reports prepared by the biological monitor.	Contractor	a) Daily during construction b) Prior to construction c) Continuous during construction d) Prior to construction e) Continuous during construction and operation f) Prior to construction g) Continuous during construction h) Continuous during construction	Authority
Biological Resources	BIO MM 10 No Pets: Construction and maintenance workers shall be prohibited from bringing pets (especially dogs) to non-urban Project sites, as the domestic animal may harass or kill native wildlife present at the site.	Contractor	Continuous during construction	Authority
Biological Resources	BIO MM 11 Site Access: a) On access roads operate all vehicles within the posted speed limits. b) If access road speed limits are not posted, do not exceed 15 miles per hour (mph). c) Adjust vehicle speed as appropriate to road conditions; avoid causing ruts and gullies; and minimize dust. d) Watch for wildlife on roads (including amphibians, snakes, rodents, and tortoises), especially during rainy periods, and avoid running them over. e) Look under parked vehicles for the presence of wildlife (especially desert tortoise) before pulling away to avoid running over wildlife. f) Do not park on or drive over native perennial vegetation. g) Avoid cutting corners on access roads and impacting vegetation when large equipment and trailers are brought to the Project site. h) Do not drive off the designated roadway or make any modifications to the road or road shoulders.	Contractor	Continuous during construction and operation	Authority
Biological Resources	BIO MM 12 Coastal California Gnatcatcher Protection: a) As part of BIO MM 2 WEAP, construction crews shall be informed of the possible presence of coastal California gnatcatchers in the area and the importance of maintaining coastal sage scrub vegetation. b) As part of BIO MM 9 Protect Native Vegetation and Common Wildlife, disturbance to native perennial vegetation, especially coastal sage scrub vegetation (e.g., California sagebrush, sage, laurel sumac, and California buckwheat), would be minimized. Surveys shall be conducted by a qualified biologist for the presence of coastal sage scrub perennial vegetation, and plants not identified for removal within or near the construction zone shall be marked for protection.	Contractor	a) Prior to construction b) Prior to construction c) Weekly during construction	Authority

Resource Area	Mitigation Measure	Responsible Implementation Party	Phase and Frequency (frequency is once unless otherwise noted)	Monitoring Agency
	c) As part of BIO MM 3 Biological Compliance Reporting, the environmental monitor shall verify at least once a week during active construction and upon completion of construction activities that habitat protection measures have been followed.			
Biological Resources	BIO MM 17 Raptor Protection: a) If construction activities occur during the American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl breeding period, January 1 through July 31, preconstruction surveys would be conducted in all suitable habitats within 500 feet of the Project site as well as within a species-appropriate distance beyond the 500-foot buffer based on line of sight between potential nesting habitat and the construction site. b) If construction takes place during the breeding period, the biological monitor shall contact appropriate land management and resource agencies to ascertain if they have any current information on raptor nesting activities in the general vicinity of the proposed Project sites. c) If an active American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl nest is discovered within 500 feet of the construction site, work shall not be undertaken at that site until the nest is no longer active, with an additional five days to allow the fledging birds to disperse. An active nest is defined as one that is attended, built, maintained, or used by a pair of birds during a given breeding season, whether or not eggs are laid; a nest is considered inactive if not attended to for a period of 10 days or longer. d) If an active American peregrine falcon, bald eagle, golden eagle, long-eared owl, or burrowing owl nest is discovered between 500 feet and 0.5 mile of the construction site, the potential for disturbance of the nesting birds would be evaluated based on line-of-sight, degree of potentially disturbing activities, and other site-specific factors. If the CDFW and land management agency concur, the protection buffer distance may be reduced.	Contractor	a) Prior to construction during breeding season (January 1 through July 31) b) Prior to construction c) Continuous during construction d) Continuous during construction	Authority
Biological Resources	BIO MM 18 Nesting Bird Protection: a) It is preferred that removal of trees or large tree limbs and other vegetation removal activities such as grubbing or shrub clearing avoid the typical bird nesting season of January 1 through September 15. b) If construction activities occur during the bird nesting season, and to prevent disturbance to or destruction of nests of protected native bird species that could occur as a result of vegetation removal, disturbance, or other on-site construction activities, preconstruction surveys for nesting birds shall be conducted by a qualified biological monitor within 10 calendar days prior to on-site construction-related disturbance activities from March 1 through September 15 for non-raptors, and January 1 through July 31 for raptors. c) If nesting protected non-raptor species are detected, a 300-foot avoidance buffer shall be implemented; a 500-foot avoidance buffer would be applied to any active nest of a raptor or other species of special status bird. d) Appropriate site-specific buffers may be established with the approval of a project designated avian expert, based in part on the species of nesting bird present, location of nest, nesting phenology, magnitude of potential disturbance, and other site conditions (e.g., levels of ambient noise; line-of-sight). e) If construction activities would occur within the general buffer distances for active nests (300 feet for non-raptors, 500 feet for raptors, and up to 1.5 miles for condors and eagles), a Biological Monitor must be present during those activities. f) No active nests may be destroyed; inactive bird nests may be destroyed as part of vegetation removal but may not be reduced to possession. g) Between September 16 and December 30, grubbing, shrub clearing, and tree/limb removal activities are not subject to restrictions based on the protection of migratory birds. h) Comply with the USFWS Office of Migratory Birds voluntary guidelines (USFWS 2013a) for communications tower placement, construction, and operation. i) For any towers that must exceed 199 feet in height, lighting requirements would be designed in cooperation with FAA and USFWS Office of Migratory Birds to minimize attraction and resulting mortality of migratory birds.	Contractor	a) Continuous, prior to and during construction b) Prior to construction c) Prior to construction d) Prior to construction e) Prior to construction f) Prior to construction g) During construction (Sept. 16 – Dec. 31) h) Continuous, prior to and during construction i) Prior to construction	Authority
Biological Resources	Bio MM 19 Trenches and Holes Management: a) The contractor shall cover or backfill all trenches the same calendar day they are opened, where practicable. b) If trenches or holes cannot be closed the same day they are made, covers shall be firmly secured at ground level in such a way that small wildlife cannot slip beneath. At sites that require the presence of a biological monitor, trench covers shall be approved by the monitor. c) Open trenches shall be inspected regularly throughout the day and prior to filling to remove any trapped common wildlife (e.g., small mammals, reptiles, amphibians) and to check for the presence of protected wildlife species (e.g., arroyo toad) at Project sites that require the presence of a biological monitor.	Contractor	Continuous during construction	Authority

Resource Area	Mitigation Measure	Responsible Implementation Party	Phase and Frequency (frequency is once unless otherwise noted)	Monitoring Agency
	<p>d) If a protected wildlife species is present in the trench, the on-site Biological Monitor shall contact USFWS immediately, ensure the protected species is not in immediate danger, and wait for instruction by USFWS.</p> <p>e) Covered trenches and holes at sites where biological monitors are present are to be inspected by the monitor at the end of the work day and prior to initiating construction activities the next day.</p> <p>f) In locating trenches or holes, disturbance to natural vegetation, including plant root systems shall be minimized.</p> <p>g) Prior to trenching, the construction disturbance limits and monitor for adherence to these boundaries shall be marked.</p>			
Biological Resources	<p>BIO MM 24 Special Status Plants Surveys and Protection:</p> <p>a) As part of BIO MM 2 WEAP, construction crews shall be informed prior to the onset of construction activities of the possible presence of special status plants in the area and the importance of maintaining native vegetation.</p> <p>b) At identified sites, surveys for special status plants shall be conducted by a qualified botanist prior to ground-disturbing activities, in the proper season and in suitable habitat surrounding the proposed Project site or any area subject to ground disturbance, including access roads.</p> <p>c) If a special status plant is found to be present or if surveys are determined to be inconclusive, the areas requiring special protection would be marked prior to construction to provide a buffer to maintain the ecological context of the location at which the plant was found.</p> <p>d) Mitigation measure BIO MM 8 Biological Monitoring shall apply at proposed Project sites where special status plants or their habitat are present, and protection buffers would be monitored for compliance.</p>	Contractor	<p>a) Prior to construction within the proper season</p> <p>b) Prior to construction</p> <p>c) Prior to construction</p> <p>d) Continuous during construction</p>	Authority
Cultural Resources	<p>CUL MM 3: Unexpected Discovery of Archaeological Materials</p> <p>In the event that previously unidentified prehistoric or historic-age archaeological resources are uncovered, the following actions shall be taken:</p> <p>1) All ground-disturbing work within 165 feet (50 meters) of the discovery shall be halted. The qualified archaeological monitor will mark the immediate area with highly visible flagging and immediately notify the Project Archaeologist.</p> <p>2) The Project Archaeologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, the resource shall be documented on California State Department of Parks and Recreation cultural resource record forms, and no further effort shall be required.</p> <p>3) If the resource cannot be avoided and may be subject to further impact, the Project Archaeologist shall evaluate the resource and determine whether it is (1) eligible for inclusion in the NRHP and is thus a historic property for the purposes of the NHPA and NEPA; (2) eligible for the CRHR and thus a historical resource for the purposes of CEQA; (3) a “unique” archaeological resource as defined by CEQA; (4) a Tribal resource as defined by AB 52. If the resource is determined not to be significant under any of these four categories, work may commence in the area following collection (as appropriate) and recording, including mapping and photography, of the archaeological materials or features.</p> <p>4) If the resource meets the criteria for any or all of the categories described in CUL MM3 (3), work shall remain halted, and the Project Archaeologist shall consult with LA-RICS Authority staff regarding methods to ensure that no substantial adverse changes occur. Preservation in place (i.e., avoidance) is the preferred method of ensuring no substantial adverse impacts occur on historic properties/historical resources and shall be required unless other equally effective methods are agreed upon among the Project Archaeologist, the Authority, and any other stakeholders. If the archaeological material appears to represent a site – defined as three or more artifacts and/or features in an intact deposit – an archaeological test program (Phase II) may be necessary. Associated mitigation measures include, but are not limited to, collection of the archaeological materials, recordation (e.g., DPR Primary Record and Site Forms), and analysis of any significant cultural materials in accordance with a Data Recovery Plan, and curation of artifacts at an approved curation facility. A curation agreement for this Project is already in place with the University of California, Los Angeles, Archaeological Collections Facility at the Fowler Museum. At the completion of the appropriate mitigation measures, a professional-level technical report shall be filed with the appropriate California Historical Resources Information System (CHRIS) Information Center (IC).</p> <p>5) Work at the project location may commence upon completion of the appropriate mitigation treatment(s).</p>	Contractor	Continuous during construction	Authority

Resource Area	Mitigation Measure	Responsible Implementation Party	Phase and Frequency (frequency is once unless otherwise noted)	Monitoring Agency
Cultural Resources	<p>CUL MM 4: Unexpected Discovery of Human Remains</p> <p>In the event that human remains are unexpectedly encountered, the following procedures shall immediately be followed. This guidance is also provided on the NAHC's website at http://nahc.ca.gov/resources/discovery-of-native-american-human-remains-what-to-do/.</p> <ol style="list-style-type: none">1) All construction activity shall stop immediately, and the Project Archaeologist shall be notified. The Project Archaeologist will contact the Los Angeles (or applicable) County Coroner. The list of California Coroners can be found on the Native American Heritage Commission's website at http://nahc.ca.gov/2015/06/implementation-of-ab52-sample-letters-request-for-formal-notification-and-request-for-consultation/.2) The Coroner has two working days to examine human remains after being notified by the responsible person. If the remains are Native American, the Coroner has 24 hours to notify the Native American Heritage Commission.3) The Native American Heritage Commission will immediately notify the person it believes to be the most likely descendent of the deceased Native American.4) The most likely descendent has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.5) If the descendent does not make recommendations within 48 hours the owner shall reinter the remains in an area of the property secure from further disturbance, or;6) If the owner does not accept the descendant's recommendations, the owner or the descendent may request mediation by the Native American Heritage Commission.	Contractor	Continuous during construction	Authority
Cultural Resources	<p>CUL MM 6: Potential Paleontological Resources Plan</p> <p>A Paleontological Resources Monitoring Plan shall be developed and approved prior to construction to guide the activities of monitors during ground-disturbing activities. The plan would include, but not be limited to, a description of the Project location, the regulatory framework, site-specific impact mitigation requirements designed to reduce impacts to less than significant, specific locations and construction activities requiring monitoring and/or spot checking, and procedures to follow for construction monitoring and fossil discovery and recovery, and a repository agreement with the Natural History Museum of Los Angeles County or other accredited repository. Mitigation measures that may be implemented to ensure that impacts to paleontological resources would be reduced to less than significant may include but are not limited to the following:</p> <ol style="list-style-type: none">a) Worker awareness training on paleontological resources presented to construction personnel prior to the start of construction. The training should include at minimum, the following:<ul style="list-style-type: none">• The types of fossils that could occur at the Project site• The procedures that should be taken in the event of a fossil discovery• Laws protecting paleontological resources• Penalties for destroying or removing paleontological resources.b) Paleontological monitoring during ground disturbance at all sites with moderate/unknown or high paleontological potentialc) Salvage of significant fossil resourcesd) Screen washing of matrix samples for microfossilse) Laboratory preparation of recovered fossils to the point of identification and curationf) Identification of recovered fossils to the lowest possible taxonomic orderg) Curation of significant fossils at the Natural History Museum of Los Angeles County or other accredited repository	Contractor	Prior to construction and continuous during construction	Authority

Resource Area	Mitigation Measure	Responsible Implementation Party	Phase and Frequency (frequency is once unless otherwise noted)	Monitoring Agency
	<p>h) Preparation of a final monitoring report that includes at a minimum the dates of field work, results of monitoring, fossil analyses, significance evaluation, conclusions, locality forms, and an itemized list of specimens.</p> <p>The Plan shall be submitted to the Authority for review and approval and finalized at least 14 days prior to the start of construction.</p>			
Cultural Resources	<p>CUL MM 7: Paleontological Resources Monitoring</p> <p>Paleontological monitoring shall be conducted by a qualified paleontological monitor who has demonstrated experience in the collection and salvage of fossil materials. An undergraduate degree in geology or paleontology is preferable but is less important than documented experience performing paleontological monitoring and mitigation. The monitor will work under the supervision of a Principal Paleontologist.</p> <p>The qualified professional paleontological monitor shall be present during ground disturbance at all sites with moderate/unknown or high paleontological potential, and as specified in the Paleontological Resources Monitoring Plan prepared in accordance with CUL MM 6. The monitor shall be present during all subsurface excavation for tower or monopole foundations and during grading for access roads and structure foundations. Based on the specific site conditions observed during monitoring (type of sediment impacted, previous disturbances, nature of site conditions), the Principal Paleontologist may reduce or increase monitoring efforts in consultation with the Agency.</p> <p>In the event that a previously unidentified paleontological resource is uncovered, the following actions shall be taken:</p> <ol style="list-style-type: none">1) All ground-disturbing work within 50 feet of the discovery shall be halted. A qualified paleontologist shall divert or direct construction activities in the area of an exposed fossil in order to facilitate evaluation and, if necessary, salvage of the exposed fossil. Work shall not resume in the discovery area until authorized by the qualified paleontologist.2) The paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required.3) If the resource cannot be avoided and may be subject to further impact, the paleontologist shall evaluate the resource and determine whether it is “unique” under CEQA, Appendix G, Part V. If the resource is determined not to be unique, work may commence in the area.4) If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with LA-RICS Authority staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource. Preservation in place (i.e., avoidance) is the preferred method of ensuring that no substantial adverse impacts occur to the resource and shall be required unless other equally effective methods are available. Other methods include ensuring that the fossils are scientifically recovered, prepared, identified, catalogued, and analyzed according to current professional standards.5) Due to the small nature of some fossils, a fine mesh screen may be used at the discretion of the paleontologist to screen matrix test samples on site during monitoring. Additionally, bulk matrix samples may be collected and transported to a laboratory facility for processing.6) Provisions for preparation and identification of any fossils collected shall be made before donation to a suitable repository.7) All recovered fossils shall be curated at the Natural History Museum of Los Angeles County, or a local accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines standards. Work may commence upon completion of the appropriate treatment and the approval from the Authority.	Contractor	During construction	Authority
Hazards and Hazardous Materials	<p>HAZ MM 3:</p> <p>Fire Management Plan. Prior to construction activity, the Authority shall work with the agency responsible for fire protection in the jurisdiction where the site is located to develop and implement a fire management plan for use during construction activity. The plan will identify project locations, project descriptions, anticipated construction activities, limitation of activities during periods of elevated fire risk (e.g., “red flag” days), level of suppression equipment required on site, training requirements, and points of contact.</p>	Authority	Prior to construction	Authority

AMDENDMENT NUMBER THIRTY-FOUR
TO AGREEMENT NO. LA-RICS 007
FOR
LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM –
LAND MOBILE RADIO SYSTEM

Recitals

This Amendment Number Thirty-Four (together with all exhibits, attachments, and schedules hereto, "Amendment No. 34") is entered into by and between the Los Angeles Regional Interoperable Communications System Authority ("Authority") and Motorola Solutions, Inc. ("Contractor"), effective as of August _____, 2018, based on the following recitals:

Authority and Contractor have entered into that certain Agreement No. LA-RICS 007 for Los Angeles Regional Interoperable Communications System ("LA-RICS") – Land Mobile Radio System, dated as of August 15, 2013 (together with all exhibits, attachments, and schedules thereto, all as amended prior to the date hereof, the "Agreement").

The Agreement has been previously amended by Amendment Number One, effective as of September 5, 2013, to exercise the Unilateral Option for all Work pertaining to Phase 1 (System Design), without the Additive Alternates; with no change to the Maximum Contract Sum.

The Agreement has been previously amended by Amendment Number Two, effective as of October 29, 2013, to exercise the Unilateral Option for all Work pertaining to Project Descriptions in Phase 1 (System Design) for the Bounded Area Coverage Additive Alternate; with no change to the Maximum Contract Sum.

The Agreement has been previously amended by Amendment Number Three, effective as of December 19, 2013, to, among other things, exercise the Unilateral Option for all Work pertaining to Contractor's provision and implementation of Specified Equipment (as defined in Amendment No. 3) increasing the Maximum Contract Sum by \$1,285,230, from \$280,354,954 to \$281,640,184.

The Agreement has been previously amended by Amendment Number Four, effective as of December 19, 2013, to, among other things, provide and implement under Phase 1 (System Design) certain additional equipment referred to as "Station B Equipment" increasing the Maximum Contract Sum by \$1,169,047, from \$281,640,184 to \$282,809,231.

The Agreement has been previously amended by Amendment Number Five, effective as of March 27, 2014, to, among other things; include license coordination fees, increasing the Maximum Contract Sum by \$20,240, from \$282,809,231 to \$282,829,472.

The Agreement has been previously amended by Amendment Number Six, effective as of April 17, 2014, to, among other things, upgrade to the Los Angeles Police Department's Valley Dispatch Center's ("LAPDVDC") Uninterruptible Power Supply ("UPS") to accommodate the installation and deployment of Core 2 at this facility, increasing the Maximum Contract Sum by \$68,146, from \$282,829,472 to \$282,897,618.

The Agreement has been previously amended by Amendment Number Seven, effective as of May 8, 2014, to, among other things, purchase portable radios, radio accessories, consolettes, and consoles; and to add a provision to address potential joint obligations of Authority and Contractor under the Antennae Lease Agreement dated April 17, 2014, between the City of Los Angeles, the Authority, and Contractor; increasing the Maximum Contract Sum by \$5,177,051, from \$282,897,618 to \$288,074,669.

The Agreement has been previously amended by Amendment Number Eight, effective as of August 28, 2014, to purchase additional portable radios and radio accessories; increasing the Maximum Contract Sum by \$3,671,006, from \$288,074,669 to \$291,745,675.

The Agreement has been previously amended by Amendment Number Nine, effective November 19, 2014, to (a) make changes necessary to reflect the removal of one (1) LMR System Site and all the Work and equipment associated with the removal of this site; (b) make the necessary changes to reflect Phase 1 (System Design) Project Description Work only for twenty-six (26) potential replacement sites; (c) exercise the Unilateral Options for all Work pertaining to Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) for twenty-six (26) existing LMR System Sites; with no increase to the Maximum Contract Sum.

The Agreement has been previously amended by Amendment Number Ten, effective February 17, 2015, to (a) make the necessary changes to reflect Phase 1 (System Design) Description Work for one (1) potential replacement site; (b) make changes necessary to reflect the removal of four (4) LMR System Sites and all the Work and equipment associated with these sites; (c) make changes necessary to reflect the inclusion of four (4) LMR System Sites and all the Work and equipment associated with these sites and exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) for these four (4) LMR System Sites; (d) exercise the Unilateral Options for all Work pertaining to Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) for eight (8) LMR System Sites currently contemplated in the Design; (e) allow for two power load studies to be conducted; and (f) make other certain changes as reflected in Amendment No. 10, increasing the Maximum Contract Sum by \$1,101,138, from \$291,745,675 to \$292,846,813.

The Agreement has been previously amended by Amendment Number Eleven, effective April 28, 2015, to (a) make the necessary changes to reflect Phase 1 (System Design) Description Work for two (2) potential replacement sites; (b) make changes

necessary to reflect an existing credit from Amendment No. 3 in the amount of \$547,158 in Phase 3 (Supply LMR System Components) for one (1) LMR System Site, (c) make changes necessary to add project management costs that were inadvertently omitted in Amendment No. 10 in the amount of \$64,282 in Phase 4 (LMR System Implementation) for one (1) LMR System Site, and (d) make other certain changes as reflected in Amendment No. 11, all of which reduced the Maximum Contract Sum by \$459,529, from \$292,846,813 to \$292,387,284.

The Agreement has been previously amended in Amendment Number Twelve, effective August 27, 2015, to (a) make the necessary changes to reflect the shifting of FCC Licensing Work and costs from Phase 3 (Supply LMR System Components) to Phase 1 (System Design) in the amount of \$284,041; (b) make certain changes to reflect the increase of FCC Licensing Work to contemplate the licensing of all UHF T-Band frequencies as referenced in Attachment B, at each of the applicable subsystem sites in order to achieve compliance with the performance criteria set forth in the Agreement, all in the amount of \$139,076; (c) make the necessary changes to reflect the inclusion of a bridge warranty for the Specified Equipment (Core 1, Core 2, repeater sites, Site on Wheels, and Station B Equipment) previously purchased under Amendment No. 3 and Amendment No. 4, to bridge the gap in warranty for this equipment until such time as Final LMR System Acceptance is achieved in the amount of \$647,533; and (d) to purchase portable radios, radio accessories, consolettes, and a control station for the Los Angeles Sheriff's Department Aero Bureau for purposes of mutual aid in the amount of \$386,234; increasing the Maximum Contract Sum by \$1,172,843 from \$292,387,284 to \$293,560,127.

The Agreement has been previously amended to Amendment Number Thirteen effective October 30, 2015 to make the necessary changes to reflect Phase 1 (System Design) Work to add lease exhibits to twenty-nine (29) LMR System Sites; increasing the Maximum Contract Sum by \$14,888 from \$293,560,127 to \$293,575,015.

The Agreement has been previously amended in Amendment Number Fourteen, effective November 17, 2015, to reflect the Work to reprogram UHF frequencies in accordance with Attachment A and purchase upgraded equipment for the County of Los Angeles Sheriff's Department's (LASD) Station B, as well as the Authority's System on Wheels to prepare for use at certain scheduled events in the amount of \$64,256, increasing the Maximum Contract Sum from \$293,575,015 to \$293,639,271.

The Agreement has been previously amended in Amendment Number Fifteen, effective December 17, 2015, to reflect the inclusion of Phase 1 (System Design) Project Description Work for eleven (11) potential replacement sites in the amount of \$128,414, increasing the Maximum Contract Sum from \$293,639,271 to \$293,767,685.

The Agreement has been previously amended in Amendment Number Sixteen, effective December 23, 2015, to (a) reflect the removal of thirty-one (31) LMR System Sites from the scope of Phase 1 (System Design) Work only for a cost reduction in the amount of \$1,132,374; (b) reflect the inclusion of seventeen (17) LMR System Sites into the scope of Phase 1 (System Design) only which includes all Work associated with the

addition of these sites into Phase 1 (System Design) for a cost increase in the amount of \$635,537; (c) exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design) for seventeen (17) LMR System Sites; (d) include Phase 1 (System Design) Project Description Work only for one (1) potential replacement site (LACF134) for a cost increase in the amount of \$11,674; (e) account for a comprehensive redesign of the LMR System and all associated Work for a cost increase in the amount of \$1,054,440; (f) reflect the removal, relocation, and deployment of the LMR System Core 2 equipment from Los Angeles Police Department Valley Dispatch Center (LAPDVDC) to Palmdale Sheriff Station (PLM) and necessary Work associated with this relocation and for a cost increase in the amount of \$499,912; increasing the Maximum Contract Sum by \$1,069,189 (\$635,537 + \$11,674 + \$1,054,440 + \$499,912 - \$1,132,374 when taking the above cost increases and decreases into consideration) from \$293,767,685 to \$294,836,874.

The Agreement has been previously amended in Amendment Number Seventeen, effective April 25, 2016, as follows:

- (a) Make changes necessary to reflect the removal of thirty-four (34) LMR System Sites from the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same for a cost reduction in the amount of \$45,143,083.
- (b) Make the changes necessary to reflect the inclusion of nineteen (19) LMR System Sites into the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same for a cost increase in the amount of \$23,677,589.
- (c) Re-baselining of the project management overhead expenses, attributable in the Agreement to each phase of the work that contemplates project management fees, to more accurately reflect the current project scope, and to establish a formula to more accurately price the net impact on project management overhead expenses of any subsequent addition or removal of sites. The re-baseline removes costs on a per site basis to a new per phase deliverable as contemplated in Amendment No. 17 in the amount of \$8,207,108. This re-baselining does however result in a net cost reduction in the amount of \$572,826 which is contemplated in the re-baseline.
- (d) Reconcile equipment necessary for certain LMR System Sites as well as the logging recorder as a result of redesign for a cost increase in the amount of \$3,171,159.
- (e) Exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation)

respectively, for those LMR System Sites contained in the LMR System reflecting the reconciliation of sites contemplated in Amendment No. 17.

- (e) Decreasing the Maximum Contract Sum by \$10,087,227 ($-\$45,143,083 + \$23,677,589 + \$8,207,108 + \$3,171,159$) when taking the above cost increases and decreases into consideration) from \$294,836,874 to \$284,749,647.
- (f) Make other certain changes as set forth in Amendment No. 17.

The Agreement has been previously amended in Amendment Number Eighteen, effective May 4, 2016, to (a) reflect the inclusion of eight (8) LMR System Sites into the scope of Phase 1 (System Design) Work only which includes all Work associated with the addition of these sites into Phase 1 (System Design) for a cost increase in the amount of \$76,136; (b) exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design) for eight (8) LMR System Sites; (c) reflect the inclusion of Phase 1 (System Design) Project Description Work for four (4) LMR System Sites for a cost increase in the amount of \$46,696; and (d) increasing the Maximum Contract Sum by \$122,832 ($\$76,136 + \$46,696$), when taking the cost increases into consideration from \$284,749,647 to \$284,872,479.

The Agreement has been previously amended in Amendment Number Nineteen, effective May 5, 2016, to make changes necessary to (a) reflect the removal of one (1) LMR System Site from the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) for a cost reduction in the amount of \$1,192,712, which includes a reduction in the amount of \$20,322 for project management costs for this site; (b) reconcile equipment necessary for certain LMR System Sites as a result of redesign for a cost increase in the amount of \$1,197,256; increasing the Maximum Contract Sum by \$4,544 ($\$1,197,256 - \$1,192,712$), when taking the cost increases and decreases into consideration, from \$284,872,479 to \$284,877,023; and (c) make other certain changes as set forth in Amendment No. 19.

The Agreement has been previously amended in Amendment Number Twenty, effective September 28, 2016, to make changes necessary to (a) reconcile nine (9) LMR System Sites to reflect the updated LMR System Design for a cost increase in the amount of \$367,144, (b) include 3D Modeling Work for certain LMR System Sites for a cost increase in the amount of \$6,534; (c) remove Site Lease Exhibit Work for certain LMR System Sites for a cost decrease in the amount of \$14,884; (d) increasing the Maximum Contract Sum by \$358,794 ($\$367,144 + \$6,534 - \$14,884$) from \$284,877,023 to \$285,235,817 when taking the cost increases and decreases into consideration and (e) make other certain changes as set forth in Amendment No. 20.

The Agreement has been previously amended in Amendment Number Twenty-One, effective October 27, 2016, to make changes necessary to reflect (a) the replacement of one (1) LMR System Site Johnstone Peak (JPK) with site Johnstone Peak 2 (JPK2) by (1) removing site JPK from the scope of Phase 1 (System Design), Phase 2

(Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same; and (2) include the JPK2 site into the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same, with the equivalent scope and cost for all Phases as JPK resulting in a cost neutral replacement; (b) exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design) only for the replacement site Johnstone Peak 2; (c) reconcile ten (10) LMR System Sites to reflect the updated LMR System Design for a cost increase in the amount of \$804,944; (d) remove five (5) Project Descriptions from the scope of Phase 1 Work for a cost decrease in the amount of \$58,370; (e) make changes necessary to reflect an administrative revisions for a cost decrease in the amount of \$32,001; (f) increasing the Maximum Contract Sum by \$714,573 (\$804,944 - \$58,370 - \$32,001) from \$285,235,817 to \$285,950,390, when taking the cost increases and decreases into consideration; and (g) make other certain changes as set forth in Amendment No. 21.

The Agreement has been previously amended in Amendment Number Twenty-Two, effective November 17, 2016, to make changes necessary to reflect (a) the reconciliation of three (3) LMR System Sites to reflect the updated LMR System Design for a cost increase in the amount of \$476,676; (b) increasing the Maximum Contract Sum by \$476,676 from \$285,950,390 to \$286,427,066, when taking the cost increase into consideration; and (c) make other certain changes as set forth in Amendment No. 22.

The Agreement has been previously amended in Amendment Number Twenty-Three, effective December 21, 2016, to make changes necessary to (a) include four (4) LMR System Sites and all Work and equipment associated with these sites into Phase 1 (System Design) to be contemplated in the LMR System for a cost increase in the amount of \$36,068; (b) exercise the respective Unilateral Options all Phase 1 (System Design) Work pertaining to the four (4) LMR System Sites; (c) purchase certain Radio Equipment to be used with Authority's User Equipment for a cost increase in the amount of \$948; (d) increase the Maximum Contract Sum by \$39,016 from \$286,427,066 to \$286,466,082, when taking the cost increases into consideration; and (d) make other certain changes as set forth in Amendment No. 23.

The Agreement has been previously amended in Amendment Number Twenty-Four effective January 25, 2017, to make changes necessary to reflect (a) the reconciliation of six (6) LMR System Sites to align with the updated LMR System Design for a cost increase in the amount of \$2,379,232; (b) increase the Maximum Contract Sum by \$2,379,232 from \$286,466,082 to \$288,845,314, when taking the cost increase into consideration; and (c) make other certain changes as set forth in Amendment No. 24.

The Agreement has been previously amended in Amendment Number Twenty-Five effective March 20, 2017, to make changes necessary to reflect (a) the reconciliation of five (5) LMR System Sites to align with the updated LMR System Design for a cost decrease in the amount of \$330,670; (b) the inclusion of three (3) LMR System Sites into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercising the Unilateral

Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$4,684,205 (c) increase the Maximum Contract Sum by \$4,353,535 from \$288,845,314 to \$293,198,849, when taking the cost increase and decrease into consideration; and (d) make other certain changes as set forth in Amendment No. 25.

The Agreement has been previously amended in Amendment Number Twenty-Six, effective April 13, 2017, to make changes necessary to reflect (a) the reconciliation of seven (7) LMR System Sites to align with the updated LMR System Design for a cost increase in the amount of \$2,336,048; (b) the inclusion of one (1) LMR System Site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercising the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$64,744 (c) increase the Maximum Contract Sum by \$2,400,792 from \$293,198,849 to \$295,599,641, when taking the cost increase into consideration; and (d) make other certain changes as set forth in Amendment No. 26.

The Agreement has been previously amended in Amendment Number Twenty-Seven, effective June 1, 2017, to make changes necessary to reflect (a) the reconciliation of two (2) LMR System Sites to align with the updated LMR System Design for a cost decrease in the amount of \$355,410 (b) the inclusion of two (2) LMR System Sites into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercising the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,439,627 (c) make changes necessary to reflect an administrative reconciliation, a reconciliation related to dropped sites, and a reconciliation related to services performed in Phase 1 for a cost decrease in the amount of \$3,434,574; (d) increase the scope to include all Work necessary to implement an environmental Mitigation Monitoring and Reporting Plan into the LMR program to assess and ensure mitigation measures are met for a cost increase in the amount of \$2,912,356, (e) increase the Maximum Contract Sum by \$561,999 from \$295,599,641 to \$296,161,640 when taking the cost increases and decreases into consideration; and (f) make other certain changes as set forth in Amendment No. 27.

The Agreement has been previously amended in Amendment Number Twenty-Eight, effective August 21, 2017, to make changes necessary to reflect (a) the reconciliation of one (1) LMR System Site to align with the updated LMR System Design for a cost increase of \$868,771 (b) make changes necessary to reflect LMR Change Order Modifications for a cost increase in the amount of \$31,487; (c) increase the Maximum Contract Sum by \$900,258 from \$296,161,640 to \$297,061,898 when taking the cost increases into consideration; and (d) make other certain changes as set forth in Amendment No. 28.

The Agreement has been previously amended in Amendment Number Twenty-Nine, effective September 07, 2017, to make changes necessary to reflect (a) the inclusion of one (1) LMR System Site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercise the Unilateral Options of the same, to align with the

updated LMR System Design for a cost increase in the amount of \$1,170,471 (b) make changes necessary to reflect LMR Change Order Modifications for a cost increase in the amount of \$31,922; (c) increase the Maximum Contract Sum by \$1,202,393 from \$297,061,898 to \$298,264,291 when taking the cost increases into consideration; and (d) make other certain changes as set forth in Amendment No. 29.

The Agreement has been previously amended in Amendment Number Thirty, effective November 09, 2017, to make changes necessary to reflect (a) the reconciliation of seven (7) LMR System Site to align with the updated LMR System Design for a cost decrease of \$1,664,767 (b) the inclusion of one (1) LMR System Site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercise the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,228,018 (c) make changes necessary to reflect LMR Change Order Modifications for a cost increase in the amount of \$4,195; (d) upgrade equipment for the Multiprotocol Label Switching (MPLS) Mobile Backhaul which will provide the backhaul capacity necessary for network performance reliability and functionality for a cost increase in the amount of \$2,200,000; (e) increase the Maximum Contract Sum by \$1,767,446 from \$298,264,291 to \$300,031,737 when taking the cost increases and decreases into consideration; and (f) make other certain changes as set forth in Amendment No. 30.

The Agreement has been previously amended in Amendment Number Thirty-One, effective February 28, 2018, to make changes necessary to reflect (a) certain LMR Change Order Modifications, in particular the installation of tower lighting at Mira Loma (MLM) LMR System Site, for a cost increase in the amount of \$19,573; (d) increase the Maximum Contract Sum by \$19,573 from \$300,031,737 to \$300,051,310 when taking the cost increases into consideration; and (b) make other certain changes as set forth in Amendment No. 31.

The Agreement has been previously amended in Amendment Number Thirty-Two, effective March 1, 2018, to make changes necessary to reflect (a) the reconciliation of three (3) LMR System Sites to align with the updated LMR System Design for a cost decrease in the amount of \$4,131,931; (b) a cost neutral administrative reconciliation in connection with the Narrowband Mobile Data Network (NMDN) Subsystem to align all corresponding per site NMDN costs to a single line item cost, impacting thirty-three (33) LMR System Sites; (c) decrease the Maximum Contract Sum by \$4,131,931 from \$300,051,310 to \$295,919,379 when taking the cost decrease into consideration; and (d) make other certain changes as set forth in Amendment No. 32.

The Agreement has been previously amended in Amendment Number Thirty-Three, effective May 30, 2018, to make changes necessary to reflect (a) certain LMR Change Order Modifications for a cost increase in the amount of \$17,490 (b) increase the Maximum Contract Sum by \$17,490 from \$295,919,379 to \$295,936,869 when taking the cost increase into consideration; and (c) make other certain changes as set forth in Amendment No. 33.

The Authority and Contractor desire to further amend the Agreement to make changes necessary to reflect (a) the inclusion of one (1) LMR System Site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercise the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,016,780; (b) certain LMR Change Order Modifications for a cost increase in the amount of \$90,744; (c) the removal of certain Authority equipment, in particular an Uninterruptible Power Supply (UPS), from the Los Angeles Police Department's Valley Dispatch Center (LAPDVDC) for a cost increase in the amount of \$6,010; (d) an extension of a bridge warranty for the certain Early Deployment/Specified Equipment purchased and deployed under previously approved Amendments to bridge the warranty gap for this equipment until December 31, 2019, for a cost increase in the amount of \$430,800; (e) increase the Maximum Contract Sum by \$1,544,334 from \$295,936,869 to \$297,481,203 when taking the cost increase into consideration; and (e) make other certain changes as set forth in this Amendment No. 34.

This Amendment No. 34 is authorized under Section 2 (Changes to Agreement) of the Agreement.

NOW THEREFORE, in consideration of the foregoing recitals, all of which are incorporated as part of this Amendment No. 34, and for other valuable consideration, the receipt and sufficiency of which are acknowledged, Authority and Contractor hereby agree as follows:

1. Capitalized Terms; Section References. Capitalized terms used herein without definition (including in the recitals hereto), have the meanings given to such terms in the Base Document. Unless otherwise noted, section references in this Amendment No. 34 refer to sections of the Base Document, as amended by this Amendment No. 34.
2. LMR System Site Inclusion. The parties agree and acknowledge to include one (1) LMR System Sites into the scope of Phases 2, 3, and 4 to align with the updated LMR System Design. The costs associated with the inclusion of this one (1) LMR System Site is included in the relevant portions of Exhibit C (Schedule of Payments). Additionally, pursuant to Section 6.6 of this Amendment No. 34, the detailed costs associated with the inclusion of these sites are contained in Exhibit C.13.1 (LMR System Detailed Cost Summary).

RECONCILIATION OF AN LMR SYSTEM SITE – AMENDMENT 34		
Item No.	Site ID	Site Description
2.1	INDWT	Industry Water Tank

3. Exercise of Unilateral Options. As provided in Section 4.1.2.2(c) of the Base Document, Authority has determined in its sole and unilateral discretion to exercise the Unilateral Options for all Work as it relates to one (1) LMR System Site currently

contemplated in the Design and reflected in this Amendment No. 34 and Exhibit C (Schedule of Payments) for all Work pertaining to Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), to construct, purchase, and implement this one (1) LMR System Site. Subject to Section 4.1.2.3 (Notices to Proceed) of the Base Document, the Contractor agrees that it shall, on a timely basis and in accordance with the Agreement, fully perform, provide, complete, and deliver all Work encompassed in such Unilateral Options for Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) Work of the one (1) LMR System Site contemplated in this Amendment No. 34, in exchange for the amounts set forth in Exhibit C (Schedule of Payments) for such Work.

4. Removal of Authority UPS Equipment. The parties agree and acknowledge that the Contractor shall remove certain LA-RICS UPS equipment located at the LAPDVDC site to an Authority approved location.

5. Amendments to the Base Document.

- 5.1 Section 8.1.1 of the Base Document is deleted in its entirety and replaced with the following:

- 8.1.1. The "Maximum Contract Sum" under this Agreement is Two Hundred Ninety-Seven Million, Four Hundred Eighty-One Thousand, Two Hundred Three Dollars (\$297,481,203), which includes the Contract Sum and all Unilateral Option Sums, as set forth in Exhibit C (Schedule of Payments).

- 5.2 Section 24.4.1 of the Base Document is deleted in its entirety and replaced with the following:

- 24.4.1 Except for liability resulting from personal injury, harm to tangible property, or wrongful death, Contractor's total liability to the Authority, whether for breach of contract, warranty, negligence, or strict liability in tort, will be limited in the aggregate to direct damages no greater than Two Hundred Ninety-Five Million, Eight Hundred Twenty-Nine Thousand, Two Hundred Eighty-Six Dollars (\$295,829,286). Notwithstanding the foregoing, Contractor shall not be liable to the Authority for any special, incidental, indirect, or consequential damages.

6. Amendments to Agreement Exhibits.

- 6.1 Exhibit C.1 (LMR System Payment Summary) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.1 (LMR

System Payment Summary) to Exhibit C (Schedule of Payments) attached to this Amendment No. 34, which is incorporated herein by this reference.

- 6.2 Exhibit C.2 (Phase 1 – System Design) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.2 (Phase 1 – System Design) to Exhibit C (Schedule of Payments) attached to this Amendment No. 20, which is incorporated by this reference.
- 6.3 Exhibit C.3 (Phase 2 – Site Construction and Site Modification) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.3 (Phase 2 – Site Construction and Site Modification) to Exhibit C (Schedule of Payments) attached to this Amendment No. 34, which is incorporated herein by this reference.
- 6.4 Exhibit C.4 (Phase 3 – Supply LMR System Components) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.4 (Phase 3 – Supply LMR System Components) to Exhibit C (Schedule of Payments) attached to this Amendment No. 34, which is incorporated herein by this reference.
- 6.5 Exhibit C.5 (Phase 4 – LMR System Implementation) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.5 (Phase 4 – LMR System Implementation) to Exhibit C (Schedule of Payments) attached to this Amendment No. 34, which is incorporated herein by this reference.
- 6.6 Exhibit C.13.1 (LMR System Detailed Cost Summary), dated February 2018, is deleted in its entirety and replaced with Exhibit C.13.1 (LMR System Detailed Cost Summary), dated July 2018, and shall be added to Exhibit C.13 (Contractor's Response to Appendix H (Pricing Requirements) to RFP No. LA-RICS 007) to Exhibit C (Schedule of Payments), which is incorporated herein by this reference.
- 6.7 Exhibit C.17 (LMR Change Order Modifications) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.17 (LMR Change Order Modifications), attached to this Amendment No. 34, which is incorporated herein by this reference.
- 6.8 Exhibit D (LMR System Maintenance and Warranty), Section 9 (Bridge Warranty for Specified Equipment), is deleted in its entirety and replaced with the following:

9. Bridge Warranty for Specified Equipment

With respect to Specified Equipment (Core 1, Core 2, repeater sites, Site on Wheels, and Station B Equipment) pursuant to Amendment No. 12 and Amendment No. 34, Contractor will provide a built-in warranty that will meet the minimum requirements set forth in Exhibit

D.2 (Statement of Work) or the most current version of the SOW, as determined by the Authority. This warranty period shall be renewed and shall commence on August 1, 2018 and continue until December, 31 2019, as set forth in Exhibit D.2.1 (Motorola Customer Support Plan). The Specified Equipment, including the equipment listed in Exhibit D.2.1 (Motorola Customer Support Plan) and Exhibit D.2.2 (Equipment Lists for FCCF and PLM) will be covered by the Warranty provisions of the Agreement, including this Exhibit D (LMR System Maintenance and Warranty). Contractor will perform service requests during the bridge warranty period as requested by the Authority, unless otherwise directed by the Authority. The price for this bridge warranty is set forth in Exhibit C.2 (Schedule of Payments – Phase 1 – System Design).

- 6.9 Exhibit D (LMR System Maintenance and Warranty) is further revised to include Exhibit D.2.1 (Motorola Customer Support Plan) and Exhibit D.2.2 (Equipment Lists for FCCF and PLM).
7. This Amendment No. 34 shall become effective as of the date identified in the recitals, which is the date upon which:
 - 7.1 An authorized agent of Contractor has executed this Amendment No. 34;
 - 7.2 Los Angeles County Counsel has approved this Amendment No. 34 as to form;
 - 7.3 The Board of Directors of the Authority has authorized the Executive Director of the Authority, if required, to execute this Amendment No. 34; and
 - 7.4 The Executive Director of the Authority has executed this Amendment No. 34.
8. Except as expressly provided in this Amendment No. 34, all other terms and conditions of the Agreement shall remain the same and in full force and effect.
9. Contractor and the person executing this Amendment No. 34 on behalf of Contractor represent and warrant that the person executing this Amendment No. 34 for Contractor is an authorized agent who has actual authority to bind Contractor to each and every term and condition of this Amendment No. 34, and that all requirements of Contractor to provide such actual authority have been fulfilled.
10. This Amendment No. 34 may be executed in one or more original or facsimile counterparts, all of which when taken together shall constitute one in the same instrument.

* * *

AMENDMENT NUMBER THIRTY-FOUR
TO AGREEMENT NO. LA-RICS 007
FOR
LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM –
LAND MOBILE RADIO SYSTEM

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 34 to be executed on their behalf by their duly authorized representatives, effective as of the date first set forth above.

LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS
SYSTEM AUTHORITY

MOTOROLA SOLUTIONS, INC.

By: _____

Scott Edson
Executive Director

By: _____

Howard Chercoe
MSSSI Vice President

APPROVED AS TO FORM FOR THE
LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS
SYSTEM AUTHORITY:

MARY C. WICKHAM
County Counsel

By: _____

Truc L. Moore
Principal Deputy County Counsel

EXHIBIT C.1*Agreement No. LA-RICS 007 - Amended and Restated under Amendment No. 34*

EXHIBIT C.1 - SCHEDULE OF PAYMENTS				
LMR SYSTEM PAYMENT SUMMARY				
Summary	Unilateral Option Sum	Contract Sum - Full Payable Amount	10% Holdback Amount	Payment Minus 10% Holdback Amount
Phase 1 ^(Note 1)	\$ -	\$ 43,409,278	\$ 3,125,622	\$ 40,283,656
Phase 2	\$ -	\$ 44,574,143	\$ 4,348,024	\$ 40,226,119
Phase 3	\$ -	\$ 62,358,244	\$ 4,832,227	\$ 57,526,017
Phase 4	\$ -	\$ 28,285,598	\$ 2,765,188	\$ 25,520,410
SUBTOTAL (Phases 1 to 4):	\$ -	\$ 178,627,263	\$ 15,071,061	\$ 163,556,201
Phase 5 (15 Years)	\$ 55,898,518	\$ -	\$ -	\$ 55,898,518
TOTAL (Phases 1 to 5):	\$ 55,898,518	\$ 178,627,263	\$ 15,071,061	\$ 219,454,720
Bounded Area Coverage Additive Alternate ^(Note 1)	\$ 19,109,375	\$ -	\$ 1,910,937	\$ 17,198,437
Mandatory Building Coverage Additive Alternate	\$ 29,828,448	\$ -	\$ 2,982,845	\$ 26,845,603
Metrorail Coverage Additive Alternate	\$ 4,792,260	\$ -	\$ 479,226	\$ 4,313,034
LMR System Maintenance for Additive Alternates	\$ 19,620,355	\$ -	\$ 1,962,036	\$ 17,658,320
Source Code Software Escrow	\$ 1,304,000	\$ -	\$ 130,400	\$ 1,173,600
LMR Mitigation Monitoring and Reporting Plan		\$ 2,912,356	\$ -	\$ 2,912,356
LMR Change Order Modifications		\$ 195,411	\$ 19,541	\$ 175,870
Multiprotocol Label Switching Mobile Backhaul		\$ 2,200,000	\$ 220,000	\$ 1,980,000
SUBTOTAL	\$ 130,552,956	\$ 183,935,030	\$ 22,776,046	\$ 291,711,939
TOTAL CONTRACT SUM:	\$183,935,030			
LMR Discounts ^(Note 2)	-\$17,006,782			
MAXIMUM CONTRACT SUM(Total Unilateral Option Sum plus Total Contract Sum):	\$297,481,203			
Note 1: The cost for the Project Descriptions for the Bounded Area Coverage <u>only</u> are reflected in Exhibit C.2 (Phase 1 - System Design) as amended and restated in Amendment No. 2., and included (\$173, 110) in Phase 1 Contract Sum - Full Payable Amount. The balance of the remaining Unilateral Option Sum for Bounded Area Coverage Additive Alternate Work is reflected in Exhibit C.7 (Bounded Area Coverage Additive Alternate).				
Note 2: The total remaining balance of the LMR Discounts applied to the Max Contract Sum will be utilized at the discretion of the Authority.				

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. (Exhibit A, Exhibit B, or Base Document)	Site ID	Deliverable	Unilateral Option Sum (Notes 3, 5, 6, 7, 8, 9)	Credits (Note 11)	Contract Sum - Payable Amount for Phase 1 (Notes 3-22)	10% Holdback Amount	Payable Amount Less 10% Holdback
A.1.1		Project Management Staffing Plan Delivered	-	-	Included	\$ -	\$ -
A.1.2		Overview and Scope Delivered	-	-	Included	\$ -	\$ -
A.1.3		Communications Plan Delivered	-	-	\$ 67,233	\$ 6,723	\$ 60,510
A.1.4		Initial Integrated Master Schedule Delivered	-	-	\$ 89,644	\$ 8,964	\$ 80,680
A.1.5		Documentation Plan Delivered	-	-	Included	\$ -	\$ -
A.1.6		Quality Control Plan Delivered	-	-	\$ 67,233	\$ 6,723	\$ 60,510
A.1.7		Change Order/Change Management Plan Delivered	-	-	Included	\$ -	\$ -
A.1.8		Initial Risk Management Plan Delivered	-	-	\$ 89,644	\$ 8,964	\$ 80,680
A.1		Project Management Plan - Final	-	-	\$ 112,055	\$ 11,206	\$ 100,850
B.1.6		FCC License and Application Forms	-	-	Included	\$ -	\$ -
B.1.12		Coverage Modeling Tool and Training	-	-	Included	\$ -	\$ -
B.1.14.1		Detailed Project Description - 50% of sites	-	-	\$ 1,368,583	\$ 136,858	\$ 1,231,725
B.1.14.1		Detailed Project Description - Final 50% of Sites	-	-	\$ 1,368,583	\$ 136,858	\$ 1,231,725
B.1.14.2		RF Emission Safety Report Delivered	-	-	Included	\$ -	\$ -
B.1.14.3.3.29.1		DTVRS Design – Digital Trunked Voice Radio Subsystem:	-	-	\$ -	-	-
B.1.14.3.3.29.1		80% DTVRS Design – Digital Trunked Voice Radio Subsystem	-	-	\$ 1,965,745	-	\$ 1,965,745
B.1.14.3.3.29.1		20% DTVRS Design – Digital Trunked Voice Radio Subsystem	-	-	\$ 491,436	\$ 245,718	\$ 245,718
B.1.14.3.3.29.2		ACVRS Design – Analog Conventional Voice Radio Subsystem:	-	-	\$ -	-	-
B.1.14.3.3.29.2		80% ACVRS Design – Analog Conventional Voice Radio Subsystem	-	-	\$ 446,491	-	\$ 446,491
B.1.14.3.3.29.2		20% ACVRS Design – Analog Conventional Voice Radio Subsystem	-	-	\$ 111,623	\$ 55,811	\$ 55,812
B.1.14.3.3.29.3		LARTCS Design – Los Angeles Regional Tactical Communications Subsystem:	-	-	\$ -	-	-
B.1.14.3.3.29.3		80% LARTCS Design – Los Angeles Regional Tactical Communications Subsystem	-	-	\$ 486,144	-	\$ 486,144
B.1.14.3.3.29.3		20% LARTCS Design – Los Angeles Regional Tactical Communications Subsystem	-	-	\$ 121,535	\$ 60,768	\$ 60,767
B.1.14.3.3.29.4		NMDN Design – Narrowband Mobile Data Network	-	-	\$ -	-	-
B.1.14.3.3.29.4		80% NMDN Design – Narrowband Mobile Data Network	-	-	\$ 113,646	-	\$ 113,646
B.1.14.3.3.29.4		20% NMDN Design – Narrowband Mobile Data Network	-	-	\$ 28,412	\$ 14,206	\$ 14,206
B.1.14.3.3.29.5		Consoles Design	-	-	Included	-	-
B.1.14.3.3.29.6		Logging Recorder Description	-	-	Included	-	-
B.1.14.3.3.29.7		Site Interconnection/Backhaul Subsystem Description:	-	-	\$ -	-	-
B.1.14.3.3.29.7		80% Site Interconnection/Backhaul Subsystem Description:	-	-	\$ 170,323	-	\$ 170,323
B.1.14.3.3.29.7		20% Site Interconnection/Backhaul Subsystem Description:	-	-	\$ 42,581	\$ 21,290	\$ 21,291
B.1.14.3.3.29.8		System Management and Monitoring Subsystem Description	-	-	Included	-	-
B.1.14.3.3.29.9		Inventory and Maintenance Tracking Subsystem Description	-	-	Included	-	-
B.1.14.3		LMR Final System Design Approval ^(Note 1)	-	-	\$ 757,702	\$ 75,770	\$ 681,932
B.1.15		Inventory and Maintenance Tracking Subsystem	-	-	\$ 974,026	\$ 97,403	\$ 876,623
		Project Management for Phase 1 – System Design Monthly Reports	-	-	Included	\$ -	\$ -
Base.22.3.2		Performance Bond for Phase 1 – System Design	-	-	\$ 29,774	\$ -	\$ 29,774
		Total Lease Costs for Phase 1 – System Design	-	-	\$ -	\$ -	\$ -
Base.22.2.1		Liability Insurance (General and Professional)	-	-	\$ 527,500	\$ -	\$ 527,500
LMR SYSTEM SITES							
B.1.14.5		Site Design Review Packages 75% Zoning Submittal by Site ^(Note 2)	-	-	\$ -	\$ -	\$ -
B.1.14.5	BAH	Baldwin Hills	-	-	\$ (3)	\$ (0)	\$ (3)
B.1.14.5	BJM	Black Jack Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	BMT	Bald Mountain	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	BRK	Blue Rock	-	-	\$ -	\$ -	\$ -
B.1.14.5	BUR	Burnt Peak	-	-	\$ -	\$ -	\$ -
B.1.14.5	BVG	Beverly Glen	-	-	\$ -	\$ -	\$ -
B.1.14.5	CCB	Compton Court Building	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	CEP	Century Plaza	-	-	\$ -	\$ -	\$ -
B.1.14.5	CLM	Claremont	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	CPK	Castro Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	DPK	Dakin Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	ELSGDPD	El Segundo PD	-	-	\$ -	\$ -	\$ -
B.1.14.5	ENC1	Encinal 1 (Fire Camp)	-	-	\$ -	\$ -	\$ -
B.1.14.5	GRM	Green Mountain	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	HPK	Hauser Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	IPK	Johnstone Peak	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF028	FS 28	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF056	FS 56	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF071	FS 71	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF072	FS 72	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LACF077	FS 77	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF084	FS 84	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF091	FS 91	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF099	FS 99	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF119	FS 119	-	-	\$ -	\$ -	\$ -

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Unilateral Option Sum <small>(Notes 3, 5, 6, 7, 8,9)</small>	Credits <small>(Note 11)</small>	Contract Sum - Payable Amount for Phase 1 <small>(Notes 3-22)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.1.14.5	LACF144	FS 144	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF149	FS 149	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF157	FS 157	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACF196	FS 169	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACFCP09	CP 9	-	-	\$ -	\$ -	\$ -
B.1.14.5	LACFDEL	Los Angeles County Fire Departmental Del Valle Training Camp	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LAH	LA City Hall	-	-	\$ -	\$ -	\$ -
B.1.14.5	LBR	Lower Blue Ridge	-	-	\$ -	\$ -	\$ -
B.1.14.5	LDWP243	DWP Sylmar Water Ladder	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	MAM	Magie Mountain	-	-	\$ -	\$ -	\$ -
B.1.14.5	MDI	Mount Disappointment	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	MLE	Mount Lee	-	-	\$ -	\$ -	\$ -
B.1.14.5	MLM	Mira Loma Facility	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	MMC	Mount McDill	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	MTL	Mount Lukens	-	-	\$ -	\$ -	\$ -
B.1.14.5	MTT	Mount Thom	-	-	\$ -	\$ -	\$ -
B.1.14.5	MTW	Mount Washington	-	-	\$ -	\$ -	\$ -
B.1.14.5	MVS	Monte Vista (Star Center)	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	OMC	Oat Mountain	-	-	\$ -	\$ -	\$ -
B.1.14.5	OAT	Oat Mountain	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	ONK	Oat Mountain Nike	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	PHN	Puente Hills	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	PRG	Portal Ridge	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	PSH	Pomona 1620 Hillcrest	-	-	\$ -	\$ -	\$ -
B.1.14.5	RDNBPD	Redondo Beach PD	-	\$ -	\$ -	\$ -	\$ -
B.1.14.5	RHT	Rolling Hills Transmit	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	RIH	Rio Hondo	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	RPVE001	Rancho Palos Verdes City Hall	-	-	\$ -	\$ -	\$ -
B.1.14.5	SAG	San Augustine	-	-	\$ -	\$ -	\$ -
B.1.14.5	SDW	San Dimas	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	SGH	Signal Hill	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	SPC	San Pedro Hill	-	-	\$ -	\$ -	\$ -
B.1.14.5	SPN	Saddle Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	SUN	Sunset Ridge	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	SVP	San Vicente Peak	-	-	\$ -	\$ -	\$ -
B.1.14.5	SWP	Southwest Area Station	-	-	\$ -	\$ -	\$ -
B.1.14.5	TOP	Topanga Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	TPK	Tejon Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	TWR	Tower Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	VPC	Verdugo Peak	-	-	\$ -	\$ -	\$ -
B.1.14.5	WAD	Walker Drive	-	-	\$ -	\$ -	\$ -
B.1.14.5	WMP	Whitaker Middle Peak	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	WS1	100 Wilshire	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	WTR	Whittaker Ridge	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LAPD077	77TH Street Area Complex	-	-	\$ -	\$ -	\$ -
B.1.14.5	LAPDDVN	Devonshire Area station	-	-	\$ -	\$ -	\$ -
B.1.14.5	FCCF	L.A. County Fire Command	-	-	\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LAPDVDC	Valley Dispatch Center	-	-	\$ -	\$ -	\$ -
B.1.14.6		Permit Approval by Site <small>(Note 2)</small>	-	-	\$ -	\$ -	\$ -
B.1.14.6	BAH	Baldwin Hills	-	-	\$ -	\$ -	\$ -
B.1.14.6	BJM	Black Jack Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	BMT	Bald Mountain	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	BUR	Blue Rock	-	-	\$ -	\$ -	\$ -
B.1.14.6	BRK	Burnt Peak	-	-	\$ -	\$ -	\$ -
B.1.14.6	BVG	Beverly Glen	-	-	\$ -	\$ -	\$ -
B.1.14.6	CCB	Compton Court Building	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	CEP	Century Plaza	-	-	\$ -	\$ -	\$ -
B.1.14.6	CLM	Claremont	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	CPK	Castro Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	DPK	Dakin Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	ELSGDPD	El Segundo PD	-	-	\$ -	\$ -	\$ -
B.1.14.6	ENC1	Encinal 1 (Fire Camp)	-	-	\$ -	\$ -	\$ -
B.1.14.6	GRM	Green Mountain	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	HPK	Hauser Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	JPK	Johnstone Peak	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF028	FS 28	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF056	FS 56	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF071	FS 71	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF072	FS 72	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LACF077	FS 77	-	-	\$ -	\$ -	\$ -

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Unilateral Option Sum <small>(Notes 3, 5, 6, 7, 8, 9)</small>	Credits <small>(Note 11)</small>	Contract Sum - Payable Amount for Phase 1 <small>(Notes 3-22)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.1.14.6	LACF084	FS 84-	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF091	FS 91-	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF099	FS 99-	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF0119	FS 119-	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF144	FS 144-	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF149	FS 149-	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF157	FS 157-	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACF169	FS 169-	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACFCP09	CP 9	-	-	\$ -	\$ -	\$ -
B.1.14.6	LACFDEL	Los Angeles County Fire Departmental Del Valle Training Camp	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LAHE	LA City Hall	-	-	\$ -	\$ -	\$ -
B.1.14.6	LBR	Lower Blue Ridge	-	-	\$ -	\$ -	\$ -
B.1.14.6	LDWP243	DWP Sylmar Water Ladder	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	MAM	Magie Mountain	-	-	\$ -	\$ -	\$ -
B.1.14.6	MDI	Mount Disappointment	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	MLE	Mount Lee	-	-	\$ -	\$ -	\$ -
B.1.14.6	MLM	Mira Loma Facility	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	MMC	Mount McDill	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	MTL	Mount Lukens	-	-	\$ -	\$ -	\$ -
B.1.14.6	MTT	Mount Thom	-	-	\$ -	\$ -	\$ -
B.1.14.6	MTW	Mount Washington	-	-	\$ -	\$ -	\$ -
B.1.14.6	MVS	Monte Vista (Star Center)	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	OMC	Oat Mountain	-	-	\$ -	\$ -	\$ -
B.1.14.6	OAT	Oat Mountain	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	ONK	Oat Mountain Nike	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	PHN	Puente Hills	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	PRG	Portal Ridge	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	PSH	Pomona 1620 Hillcrest	-	-	\$ -	\$ -	\$ -
B.1.14.6	RDNBPD	Redondo Beach PD	-	\$ -	\$ -	\$ -	\$ -
B.1.14.6	RHT	Rolling Hills Transmit	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	RIH	Rio Hondo	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	RPVE001	Rancho Palos Verdes City Hall	-	-	\$ -	\$ -	\$ -
B.1.14.6	SAG	San Augustine	-	-	\$ -	\$ -	\$ -
B.1.14.6	SDW	San Dimas	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	SGH	Signal Hill	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	SPC	San Pedro Hill	-	-	\$ -	\$ -	\$ -
B.1.14.6	SPN	Saddle Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	SUN	Sunset Ridge	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	SVP	San Vicente Peak	-	-	\$ -	\$ -	\$ -
B.1.14.6	SWP	Southwest Area Station	-	-	\$ -	\$ -	\$ -
B.1.14.6	TOP	Topanga Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	TPK	Tejon Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	TWR	Tower Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	VPC	Verdugo Peak	-	-	\$ -	\$ -	\$ -
B.1.14.6	WAD	Walker Drive	-	-	\$ -	\$ -	\$ -
B.1.14.6	WMP	Whittaker Middle Peak	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	WS1	100 Wilshire	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	WTR	Whittaker Ridge	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LAPD077	77TH Street Area Complex	-	-	\$ -	\$ -	\$ -
B.1.14.6	LAPDDVN	Devonshire Area station	-	-	\$ -	\$ -	\$ -
B.1.14.6	FCCF	L.A. County Fire Command	-	-	\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LAPDVDC	Valley Dispatch Center	-	-	\$ -	\$ -	\$ -
Subtotal for Phase 1:			\$ -	\$ -	\$ 9,734,454	\$ 917,718	\$ 8,816,736
LMR SYSTEM ADDITIONAL SITES (AMENDMENT NO. 10)							
B.1.14.5		Site Design Review Packages 75% Zoning Submittal by Site					
B.1.14.5	APC	Airport Courthouse			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	BHCCPRK	Beverly Hills' Coldwater Canyon Park			\$ -	\$ -	\$ -
B.1.14.5	LACF136	FS 136			\$ -	\$ -	\$ -
B.1.14.5	LAHE	LA City Hall East			\$ -	\$ -	\$ -
B.1.14.5	OLI	Olinda			\$ 7,138	\$ 714	\$ 6,424
B.1.14.6		Permit Approval by Site					
B.1.14.6	APC	Airport Courthouse			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	BCHCPRK	Beverly Hills' Coldwater Canyon Park			\$ -	\$ -	\$ -
B.1.14.6	LACF136	FS 136			\$ -	\$ -	\$ -
B.1.14.6	LAHE	LA City Hall East			\$ -	\$ -	\$ -
B.1.14.6	OLI	Olinda			\$ 2,379	\$ 238	\$ 2,141
Subtotal for Additional Sites (Amendment No. 10)			\$ -	\$ -	\$ 19,034	\$ 1,903	\$ 17,131
LMR SYSTEM ADDITIONAL SITES (AMENDMENT NO. 16)							
B.1.14.5		Site Design Review Packages 75% Zoning Submittal by Site					
B.1.14.5	AGH	Agoura Hills			\$ 7,138	\$ 714	\$ 6,424

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Unilateral Option Sum <small>(Notes 3, 5, 6, 7, 8,9)</small>	Credits <small>(Note 11)</small>	Contract Sum - Payable Amount for Phase 1 <small>(Notes 3-22)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.1.14.5	CCT	Criminal Court (Foltz)			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	CRN	Cerro Negro			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	FRP	Frost Peak (Upper Blue Ridge)			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	GMT	Grass Mountain			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	H17A	H-17 Helipad			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LASDTEM	Los Angeles County Sheriff Temple Station			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LPC	Loop Canyon			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LEPS	Lower Encinal Pump Station			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	MIR	Mirador			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	MML	Magic Mountain Link			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	MTL2	Mount Lukens 2			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	PDC	Pacific Design Center			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	PLM	Los Angeles County Palmdale Sheriff Station			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	PMT	Pine Mountain			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	PWT	Porthead Tank			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	VPK	Verdugo Peak County			\$ 7,138	\$ 714	\$ 6,424
B.1.14.6 Permit Approval by Site							
B.1.14.6	AGH	Agoura Hills			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	CCT	Criminal Court (Foltz)			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	CRN	Cerro Negro			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	FRP	Frost Peak (Upper Blue Ridge)			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	GMT	Grass Mountain			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	H17A	H-17 Helipad			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LASDTEM	Los Angeles County Sheriff Temple Station			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LPC	Loop Canyon			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LEPS	Lower Encinal Pump Station			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	MIR	Mirador			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	MML	Magic Mountain Link			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	MTL2	Mount Lukens 2			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	PDC	Pacific Design Center			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	PLM	Los Angeles County Palmdale Sheriff Station			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	PMT	Pine Mountain			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	PWT	Porthead Tank			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	VPK	Verdugo Peak County			\$ 2,379	\$ 238	\$ 2,141
Subtotal for Additional Sites (Amendment No. 16)			\$ -	\$ -	\$ 161,789	\$ 16,179	\$ 145,610
LMR SYSTEM ADDITIONAL SITES (AMENDMENT NO. 17)							
B.1.14.5	Site Design Review Packages 75% Zoning Submittal by Site						
B.1.14.5	BUR1	Burnt Peak 1			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LARICSHQ	LA-RICS Headquarters			\$ 7,138	\$ 714	\$ 6,424
B.1.14.6 Permit Approval by Site							
B.1.14.6	BUR1	Burnt Peak 1			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LARICSHQ	LA-RICS Headquarters			\$ 2,379	\$ 238	\$ 2,141
Subtotal for Additional Sites (Amendment No. 17)			\$ -	\$ -	\$ 19,034	\$ 1,903	\$ 17,131
LMR SYSTEM ADDITIONAL SITES (AMENDMENT NO. 18)							
B.1.14.5	Site Design Review Packages 75% Zoning Submittal by Site						
B.1.14.5	BHS	Baldwin Hills County			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	BKK	BKK Landfill			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	DPW38	Los Angeles County Department of Public Works Pump Station 38			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	POM	Pomona Courthouse			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	RPV1	Rancho Palos Verdes			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	SMMC	Santa Monica/UCLA Medical Center			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	UCLA	UCLA (Factor Building)			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	WWY	Winding Way			\$ 7,138	\$ 714	\$ 6,424
B.1.14.6 Permit Approval by Site							
B.1.14.6	BHS	Baldwin Hills County			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	BKK	BKK Landfill			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	DPW38	Los Angeles County DPW Water Tank			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	POM	Pomona Courthouse			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	RPV1	Rancho Palos Verdes			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	SMMC	Santa Monica/UCLA Medical Center			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	UCLA	UCLA (Factor Building)			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	WWY	Winding Way			\$ 2,379	\$ 238	\$ 2,141
Subtotal for Additional Sites (Amendment No. 18)			\$ -	\$ -	\$ 76,136	\$ 7,614	\$ 68,522
LMR SYSTEM ADDITIONAL SITE (AMENDMENT NO. 21)							
B.1.14.5	Site Design Review Packages 75% Zoning Submittal by Site						
B.1.14.5	JPK2	Johnstone Peak - 2			\$ 7,138	\$ 714	\$ 6,424
B.1.14.6 Permit Approval by Site							
B.1.14.6	JPK2	Johnstone Peak - 2			\$ 2,379	\$ 238	\$ 2,141
Subtotal for Additional Site (Amendment No. 21)			\$ -	\$ -	\$ 9,517	\$ 952	\$ 8,565
LMR SYSTEM ADDITIONAL SITE (AMENDMENT NO. 23)							

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. (Exhibit A, Exhibit B, or Base Document)	Site ID	Deliverable	Unilateral Option Sum (Notes 3, 5, 6, 7, 8, 9)	Credits (Note 11)	Contract Sum - Payable Amount for Phase 1 (Notes 3-22)	10% Holdback Amount	Payable Amount Less 10% Holdback
B.1.14.5	Site Design Review Packages 75% Zoning Submittal by Site						
B.1.14.5	IND	Industry Water Tank			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	SPH	San Pedro Hill			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	UNIV	Universal Studios			\$ 7,138	\$ 714	\$ 6,424
B.1.14.5	LAN	Lancaster			\$ 7,138	\$ 714	\$ 6,424
B.1.14.6	Permit Approval by Site						
B.1.14.6	IND	Industry Water Tank			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	SPH	San Pedro Hill			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	UNIV	Universal Studios			\$ 2,379	\$ 238	\$ 2,141
B.1.14.6	LAN	Lancaster			\$ 2,379	\$ 238	\$ 2,141
Subtotal for Additional Site (Amendment No. 21)			\$ -	\$ -	\$ 38,068	\$ 3,807	\$ 34,261
CORE 1 AND REPEATER SITES (AMENDMENT NO. 3)							
B.1.14.6		Core 1 Hardware and Software	-	-	\$ 11,645,162	\$ 1,164,516	\$ 10,480,646
		Core T1 Interface Equipment	-	-	\$ 49,878	\$ 4,988	\$ 44,890
		NMS AC Power	-	-	\$ 1,308	\$ 131	\$ 1,177
		FCC License Application Preparation	-	-	\$ 7,500	\$ 750	\$ 6,750
		Remote Site AC Power	-	-	\$ 7,848	\$ 785	\$ 7,063
B.3.2 to B.3.6		Five DTVRS UHF 11 Channel ASTRO 25 Sites	-	-	\$ 1,144,758	\$ 114,476	\$ 1,030,282
B.3.2 to B.3.6		Three DTVRS 700 MHz 6 Channel ASTRO 25 Sites	-	-	\$ 404,440	\$ 40,444	\$ 363,996
B.3.2 to B.3.6		Three MCC 7500 Consoles for DTVRS	-	-	\$ 197,074	\$ 19,707	\$ 177,367
C.14		Portable Radio Upgrade Kits (2009 UASI Funds)	-	-	\$ 65,800	\$ 6,580	\$ 59,220
C.14		Portable Radio Upgrade Kits (2010 UASI Funds)	-	-	\$ 296,100	\$ 29,610	\$ 266,490
B.4.2.3		Installation, Optimization, Staging and Testing for Core 1 and Repeater Sites	-	-	\$ 463,818	\$ 46,382	\$ 417,436
Base.22.3.2		Performance Bond for Core 1 and Repeater Sites	-	-	\$ 89,801	\$ -	\$ 89,801
Subtotal for Core 1 and Repeater Sites:			\$ -	\$ -	\$ 14,373,487	\$ 1,428,369	\$ 12,945,118
CORE 2 (AMENDMENT NO. 3)							
B.3.2 to B.3.6		Core 2 Hardware	-	-	\$ 3,650,360	\$ 365,036	\$ 3,285,324
B.4.2.3		Installation, Optimization, Staging and Testing for Core 2	-	-	\$ 301,757	\$ 30,176	\$ 271,581
Base.22.3.2		Performance Bond for Core 2	-	-	\$ 24,663	\$ -	\$ 24,663
LAPDVDC Uninterruptible Power Supply (UPS)							
		Eaton 9130 2000 Rackmount; 120V, 50/60Hz; 2000VA/1800W	-	-	\$ 27,101	\$ 2,710	\$ 24,391
		Eaton 9130 2000/30000 EBM Rack	-	-	\$ 12,152	\$ 1,215	\$ 10,937
		Two-Post Rack Mounting Rail Kit	-	-	\$ 3,052	\$ 305	\$ 2,747
		Racks 7.5 Foot	-	-	\$ 863	\$ 86	\$ 777
		MSI Design and Implementation Services	-	-	\$ 24,978	\$ 2,498	\$ 22,480
Subtotal for Core 2 and LAPDVDC UPS:			\$ -	\$ -	\$ 4,044,926	\$ 402,026	\$ 3,642,900
CORE 2 RELOCATION (AMENDMENT NO. 16)							
		Removal and Relocation of Core 2 from LAPDVDC to PLM			\$ -	\$ -	\$ -
Subtotal for Core 2 Relocation:					\$ -	\$ -	\$ -
SYSTEM ON WHEELS (AMENDMENT NO. 3)							
		System on Wheels (SOW)	-	-	\$ -	\$ -	\$ -
		SOW - 95' MAST, 8' X 16' WALK-IN SHELTER	-	-	\$ 468,439	\$ 46,844	\$ 421,595
		DTVRS - ASTRO Site Repeaters (ASR)	-	-	\$ 408,816	\$ 40,882	\$ 367,934
		Core Licenses for 700/UHF ASR Sites	-	-	\$ 127,748	\$ 12,775	\$ 114,973
		Mobile Meshed VSAT Satellite System & Installation	-	-	\$ 126,233	\$ 12,623	\$ 113,610
		MSI Design and Implementation Services	-	-	\$ 81,116	\$ 8,112	\$ 73,004
Base.22.3.2		Performance Bond for SOW	-	-	\$ 6,345	\$ -	\$ 6,345
Subtotal for System on Wheels:			\$ -	\$ -	\$ 1,218,697	\$ 121,235	\$ 1,097,462
STATION B EQUIPMENT (AMENDMENT NO. 4)							
		DTVRS - ASTRO Site Repeaters (ASR):	\$ -	-	\$ 585,803	\$ 58,580	\$ 527,223
		700 MHz ASR - 6 Channel (Phase 1/Phase 2)	\$ -	-	\$ -	\$ -	\$ -
		UHF ASR - 11 Channel (Phase 1/Phase 2)	\$ -	-	\$ -	\$ -	\$ -
		Core License Upgrades for ASR Sites	\$ -	-	\$ 149,548	\$ 14,955	\$ 134,593
		MOTOBRIDGE GX Communication Gateway	\$ -	-	\$ 174,329	\$ 17,433	\$ 156,896
		Point-To-Point 4.9 GHz Backhaul	\$ -	-	\$ 26,748	\$ 2,675	\$ 24,073
		Mobile Meshed VSAT Satellite System & Installation	\$ -	-	\$ 126,233	\$ 12,623	\$ 113,610
		MSI Design and Implementation Services	\$ -	-	\$ 99,820	\$ 9,982	\$ 89,838
Base.22.3.2		Performance Bond for Station B Equipment	\$ -	-	\$ 6,566	\$ -	\$ 6,566
Subtotal for Station B Equipment:			\$ -	\$ -	\$ 1,169,047	\$ 116,248	\$ 1,052,799
PROJECT DESCRIPTIONS FOR BOUNDED AREA COVERAGE IN PHASE 1 (AMENDMENT NO. 2)							
B.1.14.1		Detailed Project Description for Bounded Area Coverage at the following Sites: (Note 4)					
		Century Plaza	-	-	\$ 9,674	\$ 967	\$ 8,707
		LAC/HARBOR+UCLA MEDICAL CENTER	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS30	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS 51	-	-	\$ 11,674	\$ 1,167	\$ 10,507

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Unilateral Option Sum <small>(Notes 3, 5, 6, 7, 8, 9)</small>	Credits <small>(Note 11)</small>	Contract Sum - Payable Amount for Phase 1 <small>(Notes 3-22)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
		FS 151	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS 164	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS 173	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS 005	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS 079	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS 084	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS 088	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		FS 095	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Carson	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		San Pedro City Hall	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		West Hollywood Sheriff Station	-	-	\$ 11,674	\$ 1,167	\$ 10,507
Total for Bounded Area Coverage Project Descriptions:			\$ -	\$ -	\$ 173,110	\$ 17,311	\$ 155,799
PROJECT DESCRIPTIONS FOR POTENTIAL REPLACEMENT SITES (AMENDMENT NO. 9)							
B.1.14.1		Detailed Project Description for Potential Replacement Sites as follows:					
		Airport Courthouse (APC)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Beverly Hills' Coldwater Canyon Park (BHCCPRK)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Beverly Glen, Alternate Location (BVG-A)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Cerro Negro (CRN)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		LA City Hall East (LAHE)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Loop Canyon (LPC)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Lower Encinal Pump Station (LAHE)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Mirador (MIR)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Point Vicente (PVC)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Portthead Tank (PWT)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Westlake City Hall (WLK)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Inglewood County Courthouse (ICC)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Pacific Design Center (PDC)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Simpsons' Building (SIM)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Burnt Peak-3 (BUR3)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Frost Peak (Upper Blue Ridge) (FRP)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Grass Mountain (GMT)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Johnstone Peak (JPK-2)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Josephine Peak (JOP)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Magic Mountain (MML)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Mount Lukens-2 (MTL2)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Pine Mountain (PMT)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Sunset Ridge-2 (SUN-2)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Helipad 69 Bravo (BRV)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Philip Water Tank (PWT)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		Nicholas Canyon Water Tower (NCWT)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
Total for Project Descriptions for Potential Replacement Sites:			\$ -	\$ -	\$ 303,524	\$ 30,352	\$ 273,172
PROJECT DESCRIPTIONS FOR POTENTIAL REPLACEMENT SITE(S) (AMENDMENT NO. 10)							
B.1.14.1		Detailed Project Description for Potential Replacement Site(s) as follows:					
		Agoura Hills (AGH)	-	-	\$ 11,674	\$ 1,167	\$ 10,507
Total for Project Descriptions for Potential Replacement Sites:			\$ -	\$ -	\$ 11,674	\$ 1,167	\$ 10,507
PROJECT DESCRIPTIONS FOR POTENTIAL REPLACEMENT SITE(S) (AMENDMENT NO. 11)							
B.1.14.1		Detailed Project Description for Potential Replacement Site(s) as follows:					
		Olinda	-	-	\$ 11,674	\$ 1,167	\$ 10,507
		H-17A	-	-	\$ 11,674	\$ 1,167	\$ 10,507
Total for Project Descriptions for Potential Replacement Sites:			\$ -	\$ -	\$ 23,348	\$ 2,335	\$ 21,013
PROJECT DESCRIPTIONS FOR POTENTIAL REPLACEMENT SITE(S) (AMENDMENT NO. 15)							
B.1.14.1		Detailed Project Description for Potential Replacement Site(s) as follows:					
B.1.14.1	BHS	Baldwin Hills County			\$ 11,674	\$ 1,167	\$ 10,507
B.1.14.1		Baldwin Hills - LA-RICS			\$ -	\$ -	\$ -
B.1.14.1	BKK	BKK Landfill			\$ 11,674	\$ 1,167	\$ 10,507
B.1.14.1	CCT	Criminal Court (Foltz)			\$ 11,674	\$ 1,167	\$ 10,507
B.1.14.1	LASDTEM	Los Angeles County Sheriff Temple Station			\$ -	\$ -	\$ -
B.1.14.1	DPW38	Los Angeles County Department of Public Works Pump Station 38			\$ 11,674	\$ 1,167	\$ 10,507
B.1.14.1	PLM	Los Angeles County Palmdale Sheriff Station			\$ 11,674	\$ 1,167	\$ 10,507
B.1.14.1	POM	Pomona Courthouse			\$ 11,674	\$ 1,167	\$ 10,507
B.1.14.1	SPH	San Pedro Hill County			\$ 11,674	\$ 1,167	\$ 10,507
B.1.14.1	UNIV	University of California Los Angeles			\$ 11,674	\$ 1,167	\$ 10,507
B.1.14.1	VPK	Verdugo Peak			\$ 11,674	\$ 1,167	\$ 10,507
Total for Project Descriptions for Potential Replacement Sites:			\$ -	\$ -	\$ 105,066	\$ 10,507	\$ 94,559
PROJECT DESCRIPTION FOR POTENTIAL REPLACEMENT SITE (AMENDMENT NO. 16)							

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Unilateral Option Sum <small>(Notes 3, 5, 6, 7, 8, 9)</small>	Credits <small>(Note 11)</small>	Contract Sum - Payable Amount for Phase 1 <small>(Notes 3-22)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
		LACFI34			\$ -	\$ -	\$ -
Total for System Redesign:					\$ -	\$ -	\$ -
PROJECT DESCRIPTION WORK (AMENDMENT NO. 18)							
	RPV1	Rancho Palos Verdes			\$ 11,674	\$ 1,167	\$ 10,507
	SMMC	Santa Monica/UCLA Medical Center			\$ -	\$ -	\$ -
	UCLA	UCLA (Factor Building)			\$ -	\$ -	\$ -
	WWY	Winding Way			\$ 11,674	\$ 1,167	\$ 10,507
Total for Project Description Work:					\$ 23,348	\$ 2,335	\$ 21,013
LICENSE COORDINATION FEES FOR REPEATER SITES (AMENDMENT NO. 5)							
		License Coordination Fees	-	-	\$ 20,240	\$ -	\$ 20,240
Total for License Coordination Fees:			\$ -	\$ -	\$ 20,240	\$ -	\$ 20,240
PORTABLE RADIO EQUIPMENT, CONSOLETTES, & CONSOLES (AMENDMENT NO. 7)							
		APX 7000XE Portable Radios (450 Dual Band with UHF and 700 MHz Enabled and 150 Dual Band with UHF and VHF MHz Enabled) (Total Quantity 600) and Radio Accessories - Refer to Amendment 7, Attachment A.1, for specifications and a detailed cost breakdown	-	-	\$ 4,459,044	\$ -	\$ 4,459,044
		Subscriber Maintenance for 600 APX 7000XE Portable Radios Beyond Initial 5 Year Warranty Period (Year 6, Year 7, Year 8 at \$37,800 per year) (Service from the Start - LITE)	-	-	\$ 113,400	\$ -	\$ 113,400
		APX Console/te/te/APX 7500 Control Station - Refer to Amendment 7, Attachment A.2, for specifications and a detailed cost breakdown.	-	-	\$ 216,215	\$ -	\$ 216,215
		Subscriber Maintenance for 20 APX7500 Control Stations Beyond the Initial 5 Year Warranty Period (Year 6, Year 7, Year 8 at \$1,908 per year) (Service from the Start - LITE)	-	-	\$ 5,724	\$ -	\$ 5,724
		Subscriber Maintenance for 10 APX 7500 Consolettes Beyond the Initial 5 Year Warranty Period (Year 6, Year 7, Year 8 at \$954 per year) (Service from the Start - LITE)	-	-	\$ 2,862	\$ -	\$ 2,862
		MC7500 Console - Refer to Amendment 7, Attachment A.3, for specifications and a detailed cost breakdown.	-	-	\$ 354,313	\$ -	\$ 354,313
		Bridge Warranty for NMS & Console Equipment - Refer to Amendment 7, Attachment A.3, for specifications and a detailed cost breakdown.	-	-	\$ 25,493	\$ -	\$ 25,493
Total for Portable Radio Equipment, Consolettes, & Consoles:			\$ -	\$ -	\$ 5,177,051	\$ -	\$ 5,177,051
PORTABLE RADIO EQUIPMENT (AMENDMENT NO. 8)							
		APX 7000XE Portable Radios (400 Dual Band with UHF and 700 MHz Enabled and 54 Dual Band with UHF and VHF MHz Enabled) (Total Quantity 454) and Radio Accessories - Refer to Amendment 8, Attachment A, for specifications and a detailed cost breakdown	-	-	\$ 3,571,755	\$ -	\$ 3,571,755
		5 Year Warranty Period (Year 6, Year 7, Year 8 at \$28,602 per year) (Service Performance Bond for Portable Radio Equipment	-	-	\$ 85,806	\$ -	\$ 85,806
			-	-	\$ 13,445	\$ -	\$ 13,445
Total for Portable Radio Equipment:			\$ -	\$ -	\$ 3,671,006	\$ -	\$ 3,671,006
POWER LOAD STUDY COSTS (AMENDMENT NO. 10)							
2.2.16		Power Load Study Cost(s)					
		Airport Courthouse (APC)			\$ 8,425	\$ -	\$ 8,425
		Inglewood Courthouse (ICC)			\$ 8,425	\$ -	\$ 8,425
Total for Power Load Study Costs:			\$ -	\$ -	\$ 16,850	\$ -	\$ 16,850
FCC LICENSING (AMENDMENT NO. 12)							
B.1.6		FCC Licensing - Frequency Planning	-	-	\$ 284,041	\$ 28,404	\$ 255,637
		Licensing all LMR Subsystem Frequencies at all LMR Subsystem Sites	-	-	\$ 51,348	\$ 5,135	\$ 46,213
		RF Engineering Services	-	-	\$ 73,728	\$ 7,373	\$ 66,355
		Project Management Services for FCC Licensing	-	-	\$ 14,000	\$ 1,400	\$ 12,600
Total for FCC Licensing:			-	-	\$ 423,117	\$ 42,312	\$ 380,805
SPECIFIED EQUIPMENT BRIDGE WARRANTY (AMENDMENT NO. 12)							
		SOW	-	-	\$ 57,720	\$ -	\$ 57,720
		UHF Stations	-	-	\$ -	\$ -	\$ -
		700 MHz Stations	-	-	\$ -	\$ -	\$ -
		Satellite Terminal	-	-	\$ -	\$ -	\$ -
		PTP800 Backhaul	-	-	\$ -	\$ -	\$ -
		Motobridge	-	-	\$ -	\$ -	\$ -
		Station B	-	-	\$ 44,853	\$ -	\$ 44,853
		UHF Stations	-	-	\$ -	\$ -	\$ -
		700 MHz Stations	-	-	\$ -	\$ -	\$ -
		Trailer	-	-	\$ -	\$ -	\$ -
		Satellite Terminal	-	-	\$ -	\$ -	\$ -
		PTP800 Backhaul	-	-	\$ -	\$ -	\$ -
		Motobridge	-	-	\$ -	\$ -	\$ -
		Early Equipment Shipment	-	-	\$ 351,772	\$ -	\$ 351,772

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. (Exhibit A, Exhibit B, or Base Document)	Site ID	Deliverable	Unilateral Option Sum (Notes 3, 5, 6, 7, 8,9)	Credits (Note 11)	Contract Sum - Payable Amount for Phase 1 (Notes 3-22)	10% Holdback Amount	Payable Amount Less 10% Holdback
		Core 1 & Repeater Sites	-	-	\$ -	\$ -	\$ -
		Core 2 Equipment	-	-	\$ 189,992	\$ -	\$ 189,992
Base.22.3.2		Performance Bond for Specified Equipment Bridge Warranty	-	-	\$ 3,196	\$ -	\$ 3,196
Total for Specified Equipment Bridge Warranty:			-	-	\$ 647,533	\$ -	\$ 647,533
PORTABLE RADIO EQUIPMENT (AMENDMENT NO. 12)							
		APX 7000XE Portable Radios (40 Dual Band with UHF and 700 MHz Enabled) (Total Quantity 40) and Radio Accessories - Refer to Amendment 7, Attachment A, for specifications and a detailed cost breakdown	-	-	\$ 333,005	\$ -	\$ 333,005
		Subscriber Maintenance for 40 APX 7000XE Portable Radios Beyond Initial 5 Year Warranty Period (Year 6, Year 7, Year 8 at \$2,520 per year) (Service from the Start - LITE)	-	-	\$ 7,560	\$ -	\$ 7,560
		APX 7500 Console and (Dual Band with UHF and 700 MHz Enabled) (Total Quantity 4) and Remote Control HD/CHIB Replacement - Refer to Amendment 12, Attachment A, for specifications and a detailed cost breakdown	-	-	\$ 36,732	\$ -	\$ 36,732
		APX 7500 Control Station (Dual Band with UHF and 700 MHz Enabled) (Total Quantity 1) - Refer to Amendment 12, Attachment A, for specifications and a detailed cost breakdown	-	-	\$ 7,506	\$ -	\$ 7,506
		Subscriber Maintenance for 4 APX 7500 Consoles and 1 APX 7500 Control Station Beyond the Initial 5 Year Warranty Period (Year 6, Year 7, Year 8 at \$477 per year) (Service from the Start - LITE)	-	-	\$ 1,431	\$ -	\$ 1,431
Total for Portable Radio Equipment					\$ 386,234		\$ 386,234
LEASE EXHIBIT (AMENDMENT NO. 13)							
		Baldwin Hills			\$ -	\$ -	\$ -
		Black Jack Peak			\$ -	\$ -	\$ -
		Bald Mountain			\$ -	\$ -	\$ -
		Compton Court Building			\$ -	\$ -	\$ -
		Claremont			\$ -	\$ -	\$ -
		Castro Peak			\$ -	\$ -	\$ -
		Dakin Peak			\$ -	\$ -	\$ -
		Encinal 1 (Fire Camp)			\$ -	\$ -	\$ -
		L.A. County Fire Command			\$ -	\$ -	\$ -
		Green Mountain			\$ -	\$ -	\$ -
		Hauser Peak			\$ -	\$ -	\$ -
		Mira Loma Facility			\$ -	\$ -	\$ -
		Mount McDill			\$ -	\$ -	\$ -
		Monte Vista (Star Center)			\$ -	\$ -	\$ -
		Oat Mountain			\$ -	\$ -	\$ -
		Oat Mountain Nike			\$ -	\$ -	\$ -
		Puente Hills			\$ -	\$ -	\$ -
		Pomona 1620 Hillcrest			\$ -	\$ -	\$ -
		Rolling Hills Transmit			\$ -	\$ -	\$ -
		Rio Hondo			\$ -	\$ -	\$ -
		San Dimas			\$ -	\$ -	\$ -
		Signal Hill			\$ -	\$ -	\$ -
		Saddle Peak			\$ -	\$ -	\$ -
		Topanga Peak			\$ -	\$ -	\$ -
		Tejon Peak			\$ -	\$ -	\$ -
		Tower Peak			\$ -	\$ -	\$ -
		100 Wilshire			\$ -	\$ -	\$ -
		Airport Courthouse			\$ -	\$ -	\$ -
		Olinda			\$ -	\$ -	\$ -
Total for Lease Exhibit					\$ -	\$ -	\$ -
STATION B & SOW REPROGRAMMING (AMENDMENT NO. 14)							
		Equipment			\$ 15,260		\$ 15,260
		MSI Design and Implementation Services			\$ 43,848		\$ 43,848
		Special Temporary Authority			\$ 5,148		\$ 5,148
Total for Station B & Sow Reprogramming					\$ 64,256	\$ -	\$ 64,256
SYSTEM REDESIGN (AMENDMENT NO. 16)							
		LMR System Redesign			\$ 1,054,440	\$ -	\$ 1,054,440
Total for System Redesign:					\$ 1,054,440	\$ -	\$ 1,054,440
3D MODELING (AMENDMENT NO. 20)							
		3D Modeling			\$ 6,534	\$ 653	\$ 5,881
Total for Phase 3 Credits:					\$ 6,534	\$ 653	\$ 5,881
ADAPTERS FOR DISPATCHER HEADSETS FOR COMPATABILITY WITH CONSOLETES (AMENDMENT NO. 23)							

EXHIBIT C.2 - SCHEDULE OF PAYMENTS

PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. <i>(Exhibit A, Exhibit B, or Base Document)</i>	Site ID	Deliverable	Unilateral Option Sum <i>(Notes 3, 5, 6, 7, 8, 9)</i>	Credits <i>(Note 11)</i>	Contract Sum - Payable Amount for Phase 1 <i>(Notes 3-22)</i>	10% Holdback Amount	Payable Amount Less 10% Holdback
		Adapters for Dispatcher Headsets for Compatability with Console Desk Radios (6 at \$158 Each)			\$ 948	\$ 95	\$ 853
Total for Adapters for Dispatcher Headset for Compatability with Console Desk Radios:					\$ 948	\$ 95	\$ 853
LA-RICS Uninterruptible Power Supply (UPS) EQUIPMENT REMOVAL (AMENDMENT NO. 34)							
		Removal of LA-RICS UPS equipment located at the LAPDVDC site			\$ 6,010	\$ 601	\$ 5,409
Total for LA-RICS Uninterruptible Power Supply (UPS) Equipment Removal:					\$ 6,010	\$ 601	\$ 5,409
Early Deployment/Specified Equipment Bridge Warranty Extension (AMENDMENT NO. 34)							
		Bridge Warranty Extension for the Early Deployment/Specified Equipment			\$ 430,800	\$ -	\$ 430,800
Total for Early Deployment/Specified Equipment Bridge Warranty Extension:					\$ 430,800	\$ -	\$ 430,800
Total for Phase 1 - System Design			\$ -	\$ -	\$ 43,409,278	\$ 3,125,622	\$ 40,283,656

Note 1: Should a Site fall out for permitting reasons, Contractor will redo the Final System Design at no charge to the Authority.

Note 2: 75% will occur at submittal for planning review. The remaining 25% will be paid upon receipt of construction permit.

Note 3: Pursuant to Amendment No. One, effective as of September 5, 2013, the Authority exercised the Unilateral Option for all work pertaining to Phase 1. In connection therewith, the Unilateral Option Sum for Phase 1 of \$29,266,721 was converted into a Contract Sum.

Note 4: Pursuant to Amendment No. Two, effective as of October 29, 2013, the Authority exercised the Unilateral Option for all work pertaining to Bounded Area Coverage Project Descriptions for Phase 1. In connection therewith, the Unilateral Option Sum for Bounded Area Coverage Project Descriptions for Phase 1 in the amount of \$173,110 was converted into a Contract Sum. The cost for the Project Descriptions for the Bounded Area Coverage only are reflected in Exhibit C.2 (Phase 1 - System Design) as amended and restated in Amendment No. 2. The balance of the remaining Unilateral Option Sum for Bounded Area Coverage Additive Alternate is reflected in Exhibit C.7 (Bounded Area Coverage Additive Alternate).

Note 5: Pursuant to Amendment No. Three, effective as of December 19, 2013, (a) Contractor's provision and implementation of certain equipment reflected in Exhibit C.2 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, was moved from Phases 3 and 4 to Phase 1; and (b) Contractor was engaged to provide and implement under Phase 1, certain additional equipment reflected in Exhibit C.2 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, (the equipment described in clauses (a) and (b) is collectively referred to as the "Specified Equipment").

Implementation to Exhibit C (Schedule of Payments) to Schedule C.2 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, and thereafter such Unilateral Option Sum was converted to a Contract Sum; and (ii) a Unilateral Option Sum in the amount of \$1,285,230 was added to Schedule C.2 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, and thereafter such Unilateral Option Sum was converted to a Contract Sum.

Note 6: Pursuant to Amendment No. Four, effective as of December 19, 2013, Contractor was engaged to provide and implement under Phase 1, certain additional equipment and related services reflected in Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Four. In connection therewith, a Unilateral Option Sum in the amount of \$1,169,047 was added to Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Four, and thereafter such Unilateral Option Sum was converted to a Contract Sum.

Note 7: Pursuant to Amendment No. Five, effective as of March 27, 2014, license coordination fees for the Repeater Sites were reflected in Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Five. In connection therewith, a Unilateral Option Sum in the amount of \$20,240 was added to Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Five, and thereafter such Unilateral Option Sum was converted to a Contract Sum.

Note 8: Pursuant to Amendment No. Six, effective as of April 17, 2014, the enhancement of LAPDVDC's UPS to accommodate the installation and deployment of Core 2 was reflected in Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Six. In connection therewith, a Unilateral Option Sum in the amount of \$68,146 was added to Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Six, and thereafter such Unilateral Option Sum was converted to a Contract Sum.

Note 9: Pursuant to Amendment No. Seven, effective as of May 8, 2014, Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments) was revised to reflect the costs for the purchase of portable radios, radio accessories, consolelets, and consoles. In connection therewith, a Unilateral Option Sum in the amount of \$5,177,051 was added to Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Seven, and thereafter such Unilateral Option Sum was converted to a Contract Sum.

Note 10: Pursuant to Amendment No. Eight, effective as of August 28, 2014, Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments) was revised to reflect the costs for the purchase of portable radios and radio accessories. In connection therewith, a Unilateral Option Sum in the amount of \$3,671,006 was added to Exhibit C.1 (Schedule of Payments Phase 1 - System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Eight, and thereafter such Unilateral Option Sum was converted to a Contract Sum.

Note 11: Pursuant to Amendment No. Nine, effective November 19, 2014, the Authority removed 1 LMR System Site for Phases 1 through 4. As such, Credits were realized in the amount of \$646,001. However, the cost for preparing Project Descriptions for 26 potential replacement sites in the amount of \$303,524 was utilized in Phase 1. As such, the remaining Credit balance of \$342,477 is reserved for use for a future replacement site.

Note 12: Pursuant to Amendment No. Ten, effective February 17, 2015, Exhibit C.1 (Schedule of Prices - System Design) was amended by Amendment No. 10 to reflect the conversion of Unilateral Option Sum to Contract Sum for (a) the addition of five (5) LMR System Sites; (b) the removal of four (4) sites; (c) Project Description Work for one (1) potential sites; and (d) the cost of power load studies for two (2) sites.

Note 13: Pursuant to Amendment No. Eleven, effective April 28, 2015, Exhibit C.1 (Schedule of Prices - System Design) was amended by Amendment No. 11 to reflect Project Description Work for two (2) potential sites.

Note 14: Pursuant to Amendment No. Twelve, effective August 27, 2015, Exhibit C.1 (Schedule of Prices - System Design) was amended by Amendment No. 12 to reflect the shifting of FCC Licensing costs from Phase 3 in the amount of \$284,041; increasing the FCC Licensing costs for enhanced scope by \$139,076; including costs for a bridge warranty for Specified Equipment in the amount of \$647,533; and purchasing portable radio equipment in the amount of \$386,234.

Note 15: Pursuant to Amendment No. Thirteen, effective October 30, 2015, Exhibit C.2 (Schedule of Prices - System Design) was amended by Amendment No. 13 to reflect the addition of lease exhibits to twenty-nine (29) LMR System Sites for a total cost of \$14,888.

Note 16: Pursuant to Amendment No. Fourteen, effective November 17, 2015, Exhibit C.2 (Schedule of Prices - System Design) was amended by Amendment No. 14 to reflect the work related to reprogramming of UHF frequencies for the County of Los Angeles Sheriff's Department Station B and the Authority's System On Wheels for a total of \$64,256.

Note 17: Pursuant to Amendment No. Fifteen effective December 22, 2015, Exhibit C.1 (Schedule of Prices - System Design) was amended by Amendment No. 15 to reflect Project Description Work for eleven (11) potential sites, for a total cost of \$128,414.

Note 18: Pursuant to Amendment No. Sixteen effective December 23, 2015, Exhibit C.1 (Schedule of Prices - System Design) was amended by Amendment No. 16 to reflect (a) removal of thirty-one (31) LMR System Sites resulting in credits in the amount of \$1,132,374 for Phase 1 only; (2) addition of seventeen (17) LMR System Sites in the amount of \$635,537 which will be taken from the credited amount of \$1,132,374, bringing the total amount of credits down to \$363,599 (inclusive of Phase 1 Work performed for 75% drawings and building permits in the amount of \$133,238) and shall be reflected in the Whitaker Middle Peak site in Phase 3; (c) account for a comprehensive redesign of the LMR System and all associated Work for an increase in the amount of \$1,054,440; and (d) reflect the removal, relocation, and deployment of the LMR System Core 2 equipment from Los Angeles Police Department Valley Dispatch Center (LAPDVDC) to Palmdale Sheriff Station (PLM) and necessary associated Work in the amount of \$499,912.

Note 19: Pursuant to Amendment No. Seventeen, four (4) LMR System Sites were removed from further consideration and two (2) LMR System Sites were included as part of the LMR System. In connection therewith, Unilateral Option Sums were converted into Contract Sums.

Note 20: Pursuant to Amendment No. Eighteen, eight (8) LMR System Sites were added and included as part of the LMR System. In connection therewith, Unilateral Option Sums for the eight (8) LMR System Sites were converted into Contract Sums. Also, Project Description Work was performed on four (4) of the eight (8) LMR System Sites added to Amendment No. Eighteen.

EXHIBIT C.2 - SCHEDULE OF PAYMENTS
PHASE 1 - SYSTEM DESIGN

Deliverable/Task/ Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Unilateral Option Sum <small>(Notes 3, 5, 6, 7, 8,9)</small>	Credits <small>(Note 11)</small>	Contract Sum - Payable Amount for Phase 1 <small>(Notes 3-22)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
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Note 21: Pursuant to Amendment No. Nineteen, one (1) LMR System Site was removed from further consideration in Phases 1-4. Also, two (2) LMR System Sites were reconciled in Phases 2-4.
Note 22: Pursuant to Amendment No. Thirty-Two, two (2) LMR System Site was removed from further consideration in Phases 1-4.

EXHIBIT C.3 - SCHEDULE OF PAYMENTS

PHASE 2 - SITE CONSTRUCTION AND SITE MODIFICATION

Deliverable/ Task/ Section No. <i>(Exhibit A, Exhibit B, or Base Document)</i>	Site ID	Deliverable <i>(Refer to Site Development Matrix in Exhibit B for further details on the capacity and sizes of site components)</i>	Phase 2 Total							
			Qty.	Unilateral Option Sum for Site Construction Only	Unilateral Option Sum Including Project Management	Credits <i>(Note 1)</i>	Contract Sum - Payable Amount for Phase 2 <i>(Note 1,2,3,4,5)</i>	10% Holdback Amount	Payable Amount Less 10% Holdback	
B.2.2		Site Construction								
B.2.2	BAH	Baldwin Hills		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
B.2.2	BJM	Black Jack Peak		\$ -	\$ -	\$ -	\$ -	\$ 1,146,012	\$ 114,601	\$ 1,031,411
B.2.2	BMT	Bald Mountain		\$ -	\$ -	\$ -	\$ -	\$ 453,781	\$ 45,378	\$ 408,403
B.2.2	BRK	Blue Rock		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	BUR	Burnt Peak		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	BVG	Beverly Glen		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	CCB	Compton Court Building		\$ -	\$ -	\$ -	\$ -	\$ 451,517	\$ 45,152	\$ 406,365
B.2.2	CEP	Century Plaza		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	CLM	Claremont		\$ -	\$ -	\$ -	\$ -	\$ 7,780	\$ 778	\$ 7,002
B.2.2	CPK	Castro Peak		\$ -	\$ -	\$ -	\$ -	\$ 641,071	\$ 64,107	\$ 576,964
B.2.2	DPK	Dakin Peak		\$ -	\$ -	\$ -	\$ -	\$ 620,065	\$ 62,006	\$ 558,058
B.2.2	ELSGDPD	El Segundo PD		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	ENC1	Encinal Fire Camp		\$ -	\$ -	\$ -	\$ -	\$ (0)	\$ (0)	\$ (0)
B.2.2	GRM	Green Mountain		\$ -	\$ -	\$ -	\$ -	\$ 625,114	\$ 62,511	\$ 562,603
B.2.2	HPK	Hauser Peak		\$ -	\$ -	\$ -	\$ -	\$ 599,484	\$ 59,948	\$ 539,536
B.2.2	JPK	Johnstone Peak		\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 0	\$ 0
B.2.2	LACF028	FS 28		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF056	FS 56		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF071	FS 71		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF072	FS 72		\$ -	\$ -	\$ -	\$ -	\$ 524,184	\$ 52,418	\$ 471,766
B.2.2	LACF077	FS 77		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF084	LACF84		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF091	FS 91		\$ -	\$ -	\$ -	\$ -	\$ 358,453	\$ 35,845	\$ 322,608
B.2.2	LACF099	FS 99		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF119	FS 119		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF144	FS 144		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF149	FS 149		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF157	FS 157		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF196	FS 169		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACFCP09	LACFCP09		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACFDEL	Los Angeles County Fire Departmental Del		\$ -	\$ -	\$ -	\$ -	\$ 536,490	\$ 53,649	\$ 482,841
B.2.2	LAH	LA City Hall		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LBR	Lower Blue Ridge		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LDWP243	DWP Sylmar Water Ladder		\$ -	\$ -	\$ -	\$ -	\$ 213,691	\$ 21,369	\$ 192,322
B.2.2	MAM	Magie Mountain		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	MDI	Mount Disappointment		\$ -	\$ -	\$ -	\$ -	\$ 770,946	\$ 77,095	\$ 693,851
B.2.2	MLE	Mount Lee		\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 0	\$ 0
B.2.2	MLM	Mira Loma Facility		\$ -	\$ -	\$ -	\$ -	\$ 574,787	\$ 57,479	\$ 517,308
B.2.2	MMC	Mount McDill		\$ -	\$ -	\$ -	\$ -	\$ 735,075	\$ 73,507	\$ 661,567
B.2.2	MTL	Mount Lukens		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	MTT	Mt Thom		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	MTW	Mount Washington		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	MVS	Monte Vista (Star Center)		\$ -	\$ -	\$ -	\$ -	\$ 312,077	\$ 31,208	\$ 280,870
B.2.2	OAT	Oat Mountain OAT		\$ -	\$ -	\$ -	\$ -	\$ 507,627	\$ 50,763	\$ 456,864
B.2.2	OMC	Oat Mountain-OMC		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	ONK	Oat Mountain Nike		\$ -	\$ -	\$ -	\$ -	\$ 544,369	\$ 54,437	\$ 489,932
B.2.2	PHN	Puente Hills		\$ -	\$ -	\$ -	\$ -	\$ 205,959	\$ 20,596	\$ 185,363
B.2.2	PRG	Portal Ridge		\$ -	\$ -	\$ -	\$ -	\$ 739,261	\$ 73,926	\$ 665,335
B.2.2	PSH	Pomona 1620 Hillcrest		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	RDNBPD	Redondo Beach PD		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	RHT	Rolling Hills Transmit		\$ -	\$ -	\$ -	\$ -	\$ 735,910	\$ 73,591	\$ 662,319
B.2.2	RIH	Rio Hondo		\$ -	\$ -	\$ -	\$ -	\$ 755,872	\$ 75,587	\$ 680,285
B.2.2	RPVE001	Rancho Palos Verde City Hall		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	SAG	San Augustine		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	SDW	San Dimas		\$ -	\$ -	\$ -	\$ -	\$ 679,371	\$ 67,937	\$ 611,434
B.2.2	SGH	Signal Hill		\$ -	\$ -	\$ -	\$ -	\$ 350,623	\$ 35,062	\$ 315,561
B.2.2	SPC	San Pedro Hill		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	SPN	Saddle Peak		\$ -	\$ -	\$ -	\$ -	\$ 438,967	\$ 43,897	\$ 395,071
B.2.2	SUN	Sunset Ridge		\$ -	\$ -	\$ -	\$ -	\$ 433,020	\$ 43,302	\$ 389,718
B.2.2	SVP	San Vicente Peak		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	SWP	Southwest Area Station		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	TOP	Topanga Peak		\$ -	\$ -	\$ -	\$ -	\$ 559,263	\$ 55,926	\$ 503,337
B.2.2	TPK	Tejon Peak		\$ -	\$ -	\$ -	\$ -	\$ 590,720	\$ 59,072	\$ 531,648
B.2.2	TWR	Tower Peak		\$ -	\$ -	\$ -	\$ -	\$ 623,539	\$ 62,354	\$ 561,185
B.2.2	VPC	Verdugo Peak (city)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	WAD	Walker Drive		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	WMP	Whitaker Middle Peak		\$ -	\$ -	\$ -	\$ -	\$ 591,434	\$ 59,143	\$ 532,291
B.2.2	WS1	100 Wilshire		\$ -	\$ -	\$ -	\$ -	\$ 185,718	\$ 18,572	\$ 167,146
B.2.2	WTR	Whitaker Ridge		\$ -	\$ -	\$ -	\$ -	\$ 629,583	\$ 62,958	\$ 566,625
B.2.2	LAPD077	77TH Street Area Complex		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LAPDDVN	Devonshire Area station		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	FCCF	L A County Fire Command		\$ -	\$ -	\$ -	\$ -	\$ 186,715	\$ 18,671	\$ 168,043
B.2.2	LAPDVDC	Valley Dispatch Center		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Site Construction and Modifications Site Detail				\$ -	\$ -	\$ -	\$ -	\$ 17,328,478	\$ 1,732,848	\$ 15,595,630
ADDITIONAL SITES (AMENDMENT NO. 10)										

EXHIBIT C.3 - SCHEDULE OF PAYMENTS

PHASE 2 - SITE CONSTRUCTION AND SITE MODIFICATION

Deliverable/ Task/ Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable <small>(Refer to Site Development Matrix in Exhibit B for further details on the capacity and sizes of site components)</small>	Phase 2 Total						
			Qty.	Unilateral Option Sum for Site Construction Only	Unilateral Option Sum Including Project Management	Credits <small>(Note 1)</small>	Contract Sum - Payable Amount for Phase 2 <small>(Note 1,2,3,4,5)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.2.2		Site Construction							
B.2.2	APC	Airport Courthouse		\$ -	\$ -	\$ -	\$ 152,578	\$ 15,258	\$ 137,320
B.2.2	BCHCPRK	Beverly Hills' Coldwater Canyon Park		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LACF136	FS 136		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	LAHE	LA City Hall East		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2.2	OLI	Olinda		\$ -	\$ -	\$ -	\$ 187,439	\$ 18,744	\$ 168,695
Subtotal for Additional Sites (Amendment No. 10)				\$ -	\$ -	\$ -	\$ 340,017	\$ 34,002	\$ 306,015
ADDITIONAL SITES (AMENDMENT NO. 17)									
B.2.2		Site Construction							
B.2.2	AGH	Agoura Hills		\$ -	\$ -	\$ -	\$ 532,096	\$ 53,210	\$ 478,886
B.2.2	BUR1	Burnt Peak 1		\$ -	\$ -	\$ -	\$ 720,568	\$ 72,057	\$ 648,511
B.2.2	CCT	Criminal Court (Foltz)		\$ -	\$ -	\$ -	\$ 555,734	\$ 55,573	\$ 500,161
B.2.2	CRN	Cerro Negro		\$ -	\$ -	\$ -	\$ 557,562	\$ 55,756	\$ 501,806
B.2.2	FRP	Frost Peak (Upper Blue Ridge)		\$ -	\$ -	\$ -	\$ 760,736	\$ 76,074	\$ 684,662
B.2.2	GMT	Grass Mountain		\$ -	\$ -	\$ -	\$ 2,021,991	\$ 202,199	\$ 1,819,792
B.2.2	H-17A	H-17 Helipad		\$ -	\$ -	\$ -	\$ 358,453	\$ 35,845	\$ 322,608
B.2.2	LARICSHQ	LA-RICS Headquarters		\$ -	\$ -	\$ -	\$ 27,508	\$ 2,751	\$ 24,757
B.2.2	LASDTEM	Los Angeles County Sheriff's Department Temple Station		\$ -	\$ -	\$ -	\$ 297,580	\$ 29,758	\$ 267,822
B.2.2	LPC	Loop Canyon		\$ -	\$ -	\$ -	\$ 475,498	\$ 47,550	\$ 427,948
B.2.2	LEPS	Lower Encinal Pump Station		\$ -	\$ -	\$ -	\$ 451,070	\$ 45,107	\$ 405,963
B.2.2	MIR	Mirador		\$ -	\$ -	\$ -	\$ 412,858	\$ 41,286	\$ 371,572
B.2.2	MML	Magic Mountain Link		\$ -	\$ -	\$ -	\$ 758,650	\$ 75,865	\$ 682,785
B.2.2	MTL2	Mount Lukens 2		\$ -	\$ -	\$ -	\$ 818,220	\$ 81,822	\$ 736,398
B.2.2	PDC	Pacific Design Center		\$ -	\$ -	\$ -	\$ 241,099	\$ 24,110	\$ 216,989
B.2.2	PLM	Los Angeles County Sheriff's Department Palmdale Station		\$ -	\$ -	\$ -	\$ 212,651	\$ 21,265	\$ 191,386
B.2.2	PMT	Pine Mountain		\$ -	\$ -	\$ -	\$ 2,027,826	\$ 202,783	\$ 1,825,043
B.2.2	PWT	Porthead Tank		\$ -	\$ -	\$ -	\$ 402,033	\$ 40,203	\$ 361,830
B.2.2	VPK	Verdugo Peak County)		\$ -	\$ -	\$ -	\$ 682,724	\$ 68,272	\$ 614,452
Subtotal for Additional Sites (Amendment No. 17)				\$ -	\$ -	\$ -	\$ 12,314,857	\$ 1,231,486	\$ 11,083,371
		Project Management	Included	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Base.22.3.2		Performance Bond	1	\$ -	\$ -	\$ -	\$ 193,803	\$ -	\$ 193,803
		Materials and Labor Bond	Included	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Total Lease Costs		\$ -	N/A	\$ -	\$ -	\$ -	\$ -
Base.22.2.2		Builder's Insurance	1	\$ -	\$ -	\$ -	\$ 372,599	\$ -	\$ 372,599
Base.22.2.1		Liability Insurance (General and Professional)	1	\$ -	\$ -	\$ -	\$ 527,500	\$ -	\$ 527,500
B.2.2		Phase 2 Completion Acceptance					\$ 8,963,268	\$ 896,327	\$ 8,066,941
ADDITIONAL SITE (AMENDMENT NO. 21)									
B.2.2		Site Construction							
B.2.2	JPK2	Johnstone Peak - 2		\$ -	\$ -	\$ -	\$ 661,912	\$ 66,191	\$ 595,721
Subtotal for Additional Site (Amendment No. 21)				\$ -	\$ -	\$ -	\$ 661,912	\$ 66,191	\$ 595,721
ADDITIONAL SITES (AMENDMENT NO. 25)									
B.2.2		Site Construction							
B.2.2	BHS	Baldwin Hills County					\$ 744,255	\$ 74,426	\$ 669,830
B.2.2	DPW38	Los Angeles County Department of Public Works Pump Station 38					\$ 746,949	\$ 74,695	\$ 672,254
B.2.2	RPV1	Rancho Palos Verde					\$ 344,492	\$ 34,449	\$ 310,043
Subtotal for Additional Site (Amendment No. 25)				\$ -	\$ -	\$ -	\$ 1,835,696	\$ 183,570	\$ 1,652,126
ADDITIONAL SITE (AMENDMENT NO. 26)									
B.2.2		Site Construction							
B.2.2	LAN	Lancaster		\$ -	\$ -	\$ -	\$ 8,430	\$ 843	\$ 7,587
Subtotal for Additional Site (Amendment No. 26)				\$ -	\$ -	\$ -	\$ 8,430	\$ 843	\$ 7,587
ADDITIONAL SITES (AMENDMENT NO. 27)									
B.2.2		Site Construction							
B.2.2	BKK	BKK Landfill					\$ 313,118	\$ 31,312	\$ 281,806
B.2.2	UCLA	UCLA (Factor Building)					\$ 420,011	\$ 42,001	\$ 378,010
Subtotal for Additional Sites (Amendment No. 27)				\$ -	\$ -	\$ -	\$ 733,129	\$ 73,313	\$ 659,816
ADDITIONAL SITES (AMENDMENT NO. 29)									
B.2.2		Site Construction							
B.2.2	POM	Pomona Courthouse					\$ 308,134	\$ 30,813	\$ 277,321
Subtotal for Additional Sites (Amendment No. 29)							\$ 308,134	\$ 30,813	\$ 277,321
ADDITIONAL SITES (AMENDMENT NO. 30)									
B.2.2		Site Construction							
B.2.2	UNIV	Universal Studios					\$ 483,007	\$ 48,301	\$ 434,706
Subtotal for Additional Sites (Amendment No. 30)							\$ 483,007	\$ 48,301	\$ 434,706
ADDITIONAL SITE (AMENDMENT NO. 34)									
B.2.2		Site Construction							
B.2.2	INDWT	Industry Water Tank					\$ 503,314	\$ 50,331	\$ 452,983
Subtotal for Additional Sites (Amendment No. 34)							\$ 503,314	\$ 50,331	\$ 452,983
Total for Phase 2 - Site Construction and Modifications (including Subtotals for Site Detail)				\$ -	\$ -	\$ -	\$ 44,574,143	\$ 4,348,024	\$ 40,226,119

EXHIBIT C.3 - SCHEDULE OF PAYMENTS

PHASE 2 - SITE CONSTRUCTION AND SITE MODIFICATION

Deliverable/ Task/ Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable <small>(Refer to Site Development Matrix in Exhibit B for further details on the capacity and sizes of site components)</small>	Phase 2 Total					
			Qty.	Unilateral Option Sum for Site Construction Only	Unilateral Option Sum Incuding Project Management	Credits <small>(Note 1)</small>	Contract Sum - Payable Amount for Phase 2 <small>(Note 1,2,3,4,5)</small>	10% Holdback Amount

Note 1: Pursuant to Amendment No. Nine, effective November 19, 2014, the Authority removed 1 LMR System Site for Phases 1 through 4. As such, Credits were realized in the amount of \$646,001. However, the cost for preparing Project Descriptions for 26 potential replacement sites in the amount of \$303,524 was utilized in Phase 1. As such, the remaining Credit balance of \$342,477 is reserved for use for a future replacement site.

Note 2: Pursuant to Amendment No. Ten, effective February 17, 2015, Exhibit C.2 (Schedule of Prices - Site Construction and Site Modification) was amended by Amendment No. 10 to reflect (a) the conversion of Unilateral Option Sum to Contract Sum for for eight (8) LMR System Site currently contemplated in the Design and the addition of five (5) LMR System Sites; and (b) the removal of four (4) sites.

Note 3: Pursuant to Amendment No. Seventeen, thirty-four (34) LMR System Sites were removed from further consideration; nineteen (19) LMR System Sites were included as part of the LMR System; and Phase 2 Completion Acceptance was included. In connection therewith, and in addition to all activities contemplated in this Phase 2, Unilateral Option Sums, not previously exercised, were converted into Contract Sums.

Note 4: Pursuant to Amendment No. Nineteen, one (1) LMR System Site was removed from further consideration in Phases 1-4. Also, two (2) LMR System Sites were reconciled in Phases 2-4.

Note 5: Pursuant to Amendment No. Thirty-Two, two (2) LMR System Site were removed from further consideration in Phases 1-4.

EXHIBIT C.4 - SCHEDULE OF PAYMENTS

PHASE 3 - SUPPLY LMR SYSTEM COMPONENTS

Deliverable/ Task/ Section No. <i>(Exhibit A, Exhibit B, or Base Document)</i>	Site ID	Deliverable		Equipment Purchase in Phase 1 Credit per Site <i>(Note 1,11,12,13, 14,15)</i>	DTVRS	ACVRS	LARTCS	NMDN <i>(Note 17)</i>	Microwave	Credits <i>(Note 2)</i>	Total Contract Sum Total Payable Amount for Phase 3 <i>(Note 1, 3, 8, 16)</i>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	BAH	Baldwin Hills	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	BJM	Black Jack Peak	\$ -	\$ -	\$ 917,609	\$ 198,138	\$ 515,961	\$ -	\$ 28,058	\$ -	\$ 1,659,766	\$ 165,977	\$ 1,493,790
B.3.2 to B.3.6	BMT	Bald Mountain	\$ -	\$ -	\$ 1,351,696	\$ -	\$ 171,631	\$ -	\$ 36,032	\$ -	\$ 1,559,359	\$ -	\$ 1,559,359
B.3.2 to B.3.6	BRK	Blue Rock	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	BUR	Burnt Peak	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	BVG	Beverly Glen	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	CCB	Compton Court Building	\$ -	\$ -	\$ 482,398	\$ 171,692	\$ -	\$ -	\$ 36,176	\$ -	\$ 690,266	\$ -	\$ 690,266
B.3.2 to B.3.6	CEP	Century Plaza	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	CLM	Claremont	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,252	\$ -	\$ 30,252	\$ 3,025	\$ 27,227
B.3.2 to B.3.6	CPK	Castro Peak	\$ -	\$ -	\$ 548,134	\$ 318,690	\$ 381,450	\$ -	\$ 51,596	\$ -	\$ 1,299,870	\$ 129,987	\$ 1,169,883
B.3.2 to B.3.6	DPK	Dakin Peak	\$ -	\$ -	\$ 483,519	\$ 198,375	\$ 427,810	\$ -	\$ 39,604	\$ -	\$ 1,149,308	\$ 114,931	\$ 1,034,377
B.3.2 to B.3.6	ELSGDPD	El Segundo PD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	ENC1	Encinal 1 (Fire Camp)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	GRM	Green Mountain	\$ -	\$ -	\$ 548,134	\$ 231,585	\$ 302,182	\$ -	\$ 64,130	\$ -	\$ 1,146,032	\$ 114,603	\$ 1,031,429
B.3.2 to B.3.6	HPK	Hauser Peak	\$ -	\$ -	\$ 917,311	\$ 145,772	\$ 296,409	\$ -	\$ 46,753	\$ -	\$ 1,406,245	\$ -	\$ 1,406,245
B.3.2 to B.3.6	JPK	Johnstone Peak	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF028	FS 28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF056	FS 56	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF071	FS 71	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF072	FS 72	\$ -	\$ -	\$ 546,319	\$ 83,252	\$ 210,233	\$ -	\$ 26,897	\$ -	\$ 866,701	\$ 86,670	\$ 780,031
B.3.2 to B.3.6	LACF077	FS 77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF084	FS 84	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF091	FS 91	\$ -	\$ -	\$ 176,055	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 176,055	\$ 17,606	\$ 158,450
B.3.2 to B.3.6	LACF099	FS 99	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF119	FS 119	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF144	FS 144	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF149	FS 149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF157	FS 157	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACF196	FS 169	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACFCP09	CP-9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LACFDEL	Los Angeles County Fire Departmental Del Valle Training Camp	\$ -	\$ -	\$ 372,867	\$ 74,338	\$ 85,268	\$ -	\$ 32,590	\$ -	\$ 565,063	\$ 56,506	\$ 508,557
B.3.2 to B.3.6	LAH	LA City Hall <i>(Note 4)</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LBR	Lower Blue Ridge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LDWP243	DWP Sylmar Water Ladder	\$ -	\$ -	\$ 431,751	\$ 74,185	\$ 79,467	\$ -	\$ 27,849	\$ -	\$ 613,252	\$ -	\$ 613,252
B.3.2 to B.3.6	MAM	Magie Mountain	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	MDI	Mount Disappointment	\$ -	\$ -	\$ 548,133	\$ 271,717	\$ 381,450	\$ -	\$ 30,684	\$ -	\$ 1,231,986	\$ 123,199	\$ 1,108,787
B.3.2 to B.3.6	MLE	Mount Lee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	MLM	Mira Loma Facility	\$ -	\$ -	\$ 917,609	\$ 121,774	\$ 39,740	\$ -	\$ 31,324	\$ -	\$ 1,110,448	\$ 111,045	\$ 999,403
B.3.2 to B.3.6	MMC	Mount McDill	\$ -	\$ -	\$ 483,224	\$ 146,308	\$ 376,943	\$ -	\$ 60,498	\$ -	\$ 1,066,973	\$ 106,697	\$ 960,276
B.3.2 to B.3.6	MTL	Mount Lukens	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	MTT	Mount Thom	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	MTW	Mount Washington	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	MVS	Monte Vista (Star Center)	\$ -	\$ -	\$ 524,294	\$ 95,096	\$ -	\$ -	\$ 30,352	\$ -	\$ 649,741	\$ 0	\$ 649,741

EXHIBIT C.4 - SCHEDULE OF PAYMENTS

PHASE 3 - SUPPLY LMR SYSTEM COMPONENTS

Deliverable/ Task/ Section No. <i>(Exhibit A, Exhibit B, or Base Document)</i>	Site ID	Deliverable		Equipment Purchase in Phase 1 Credit per Site <i>(Note 1,11,12,13, 14,15)</i>	DTVRS	ACVRS	LARTCS	NMDN <i>(Note 17)</i>	Microwave	Credits <i>(Note 2)</i>	Total Contract Sum Total Payable Amount for Phase 3 <i>(Note 1, 3, 8, 16)</i>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.3.2 to B.3.6	OAT	Oat Mountain OAT	\$ -	\$ -	\$ 176,493	\$ 162,062	\$ -	\$ -	\$ 80,168	\$ -	\$ 418,724	\$ 41,872	\$ 376,852
B.3.2 to B.3.6	OMC	Oat Mountain OMC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	ONK	Oat Mountain Nike	\$ -	\$ -	\$ 432,751	\$ 146,308	\$ 376,943	\$ -	\$ 27,470	\$ -	\$ 983,472	\$ 26,127	\$ 957,345
B.3.2 to B.3.6	PHN	Puente Hills	\$ -	\$ -	\$ 524,774	\$ 365,910	\$ 297,006	\$ -	\$ 32,899	\$ -	\$ 1,220,589	\$ -	\$ 1,220,589
B.3.2 to B.3.6	PRG	Portal Ridge	\$ -	\$ -	\$ 483,223	\$ 144,298	\$ 299,795	\$ -	\$ 54,116	\$ -	\$ 981,434	\$ 98,143	\$ 883,291
B.3.2 to B.3.6	PSH	Pomona-1620 Hillcrest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	RDNBPD	Redondo Beach PD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	RHT	Rolling Hills Transmit	\$ -	\$ -	\$ 917,609	\$ 172,269	\$ 127,115	\$ -	\$ 28,417	\$ -	\$ 1,245,411	\$ 124,541	\$ 1,120,870
B.3.2 to B.3.6	RIH	Rio Hondo	\$ -	\$ -	\$ 969,351	\$ 365,666	\$ 79,785	\$ -	\$ 32,596	\$ -	\$ 1,447,396	\$ 144,740	\$ 1,302,656
B.3.2 to B.3.6	RPVE001	Rancho Palos Verde City Hall	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	SAG	San Augustine	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	SDW	San Dimas	\$ -	\$ -	\$ 525,073	\$ 232,167	\$ -	\$ -	\$ 45,368	\$ -	\$ 802,608	\$ 80,261	\$ 722,347
B.3.2 to B.3.6	SGH	Signal Hill ^(Note 9)	\$ -	\$ -	\$ 483,224	\$ -	\$ -	\$ -	\$ 42,926	\$ -	\$ 526,150	\$ 52,615	\$ 473,535
B.3.2 to B.3.6	SPC	San Pedro Hill	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	SPN	Saddle Peak ^(Note 9)	\$ -	\$ -	\$ 548,134	\$ -	\$ 296,341	\$ -	\$ 30,636	\$ -	\$ 875,110	\$ 87,511	\$ 787,599
B.3.2 to B.3.6	SUN	Sunset Ridge	\$ -	\$ -	\$ -	\$ 205,228	\$ 428,999	\$ -	\$ 35,984	\$ -	\$ 670,211	\$ 67,021	\$ 603,190
B.3.2 to B.3.6	SVP	San Vicente Peak	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	SWP	Southwest Area Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	TOP	Topanga Peak ^(Note 9)	\$ -	\$ -	\$ 1,002,900	\$ 231,585	\$ 79,904	\$ -	\$ 39,457	\$ -	\$ 1,353,847	\$ 135,385	\$ 1,218,462
B.3.2 to B.3.6	TPK	Tejon Peak	\$ -	\$ -	\$ 483,224	\$ 144,298	\$ 211,208	\$ -	\$ 43,043	\$ -	\$ 881,773	\$ 47,040	\$ 834,733
B.3.2 to B.3.6	TWR	Tower Peak	\$ -	\$ -	\$ 482,444	\$ 197,515	\$ 423,935	\$ -	\$ 37,676	\$ -	\$ 1,141,571	\$ 114,157	\$ 1,027,414
B.3.2 to B.3.6	VPC	Verdugo Peak (city)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	WAD	Walker Drive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	WMP	Whittaker Middle Peak	\$ -	\$ -	\$ 482,412	\$ 74,451	\$ 85,265	\$ -	\$ 38,076	\$ -	\$ 680,207	\$ 68,021	\$ 612,186
B.3.2 to B.3.6	WS1	100 Wilshire	\$ -	\$ -	\$ -	\$ 197,561	\$ -	\$ -	\$ 75,330	\$ -	\$ 272,892	\$ 27,289	\$ 245,602
B.3.2 to B.3.6	WTR	Whittaker Ridge	\$ -	\$ -	\$ 482,412	\$ 145,877	\$ 297,675	\$ -	\$ 42,956	\$ -	\$ 968,920	\$ 96,892	\$ 872,028
B.3.2 to B.3.6	LAPD077	77TH Street Area Complex	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LAPDDVN	Devonshire Area station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	FCCF	L.A. County Fire Command	\$ -	\$ -	\$ 548,134	\$ 334,775	\$ 136,826	\$ -	\$ 109,185	\$ -	\$ 1,128,920	\$ -	\$ 1,128,920
B.3.2 to B.3.6	LAPDVDC	Valley Dispatch Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6		FCCF Core	\$ -	\$ -	\$ 404,329	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 404,329	\$ -	\$ 404,329
B.3.2 to B.3.6		LAPDVDC Core	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Equipment Subtotal			\$ -	\$ -	\$ 18,195,540	\$ 5,250,892	\$ 6,409,341	\$ -	\$ 1,369,100	\$ -	\$ 31,224,881	\$ 2,241,861	\$ 28,983,020
ADDITIONAL SITES (AMENDMENT NO. 10)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	APC	Airport Courthouse	\$ -	\$ -	\$ 177,033	\$ -	\$ -	\$ -	\$ 36,176	\$ -	\$ 213,209	\$ -	\$ 213,209
B.3.2 to B.3.6	BCHCPRK	Beverly Hills' Coldwater Canyon Park	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LAFC136	FS-136	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	LAHE	LA City Hall East ^(Note 4)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.2 to B.3.6	OLI	Olinda	\$ -	\$ -	\$ 248,275	\$ 164,079	\$ -	\$ -	\$ 31,324	\$ -	\$ 443,678	\$ 44,368	\$ 399,310
Subtotal for Additional Sites (Amendment No. 10)			\$ -	\$ -	\$ 425,308	\$ 164,079	\$ -	\$ -	\$ 67,500	\$ -	\$ 656,887	\$ 44,368	\$ 612,519
ADDITIONAL SITES (AMENDMENT NO. 17)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	AGH	Agoura Hills	\$ -	\$ -	\$ 546,316	\$ 232,589	\$ 88,027	\$ -	\$ 49,600	\$ -	\$ 916,532	\$ 91,653	\$ 824,879
B.3.2 to B.3.6	BUR1	Burnt Peak 1	\$ -	\$ -	\$ 10,714	\$ 144,298	\$ 296,341	\$ -	\$ 33,298	\$ -	\$ 484,651	\$ 48,465	\$ 436,186

EXHIBIT C.4 - SCHEDULE OF PAYMENTS

PHASE 3 - SUPPLY LMR SYSTEM COMPONENTS

Deliverable/ Task/ Section No. <i>(Exhibit A, Exhibit B, or Base Document)</i>	Site ID	Deliverable		Equipment Purchase in Phase 1 Credit per Site <i>(Note 1,11,12,13, 14,15)</i>	DTVRS	ACVRS	LARTCS	NMDN <i>(Note 17)</i>	Microwave	Credits <i>(Note 2)</i>	Total Contract Sum Total Payable Amount for Phase 3 <i>(Note 1, 3, 8, 16)</i>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.3.2 to B.3.6	CCT	Criminal Court (Foltz)	\$ -	\$ -	\$ 547,631	\$ 101,375	\$ -	\$ -	\$ 49,600	\$ -	\$ 698,606	\$ -	\$ 698,606
B.3.2 to B.3.6	CRN	Cerro Negro	\$ -	\$ -	\$ 700,610	\$ 359,241	\$ -	\$ -	\$ 49,600	\$ -	\$ 1,109,451	\$ 110,945	\$ 998,506
B.3.2 to B.3.6	FRP	Frost Peak (Upper Blue Ridge)	\$ -	\$ -	\$ 11,540	\$ 342,483	\$ 382,524	\$ -	\$ 43,713	\$ -	\$ 780,260	\$ 78,026	\$ 702,234
B.3.2 to B.3.6	GMT	Grass Mountain	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 483,223	\$ 48,322	\$ 434,901
B.3.2 to B.3.6	H-17A	H-17 Helipad	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 215,658	\$ 21,566	\$ 194,092
B.3.2 to B.3.6	LARICSHQ	LA-RICS Headquarters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,252	\$ 3,025	\$ 27,227
B.3.2 to B.3.6	LASDTEM	Temple Station	\$ -	\$ -	\$ 218,743	\$ -	\$ -	\$ -	\$ 43,430	\$ -	\$ 262,173	\$ -	\$ 262,173
B.3.2 to B.3.6	LPC	Loop Canyon	\$ -	\$ -	\$ 176,493	\$ 74,451	\$ 83,473	\$ -	\$ 105,885	\$ -	\$ 440,302	\$ 44,030	\$ 396,272
B.3.2 to B.3.6	LEPS	Lower Encinal Pump Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 823,549	\$ 82,355	\$ 741,194
B.3.2 to B.3.6	MIR	Mirador	\$ -	\$ -	\$ 548,134	\$ -	\$ -	\$ -	\$ 27,795	\$ -	\$ 575,929	\$ 57,593	\$ 518,336
B.3.2 to B.3.6	MML	Magic Mountain Link	\$ -	\$ -	\$ 154,395	\$ 144,298	\$ 382,884	\$ -	\$ 89,241	\$ -	\$ 770,818	\$ 77,082	\$ 693,736
B.3.2 to B.3.6	MTL2	Mount Lukens 2	\$ -	\$ -	\$ 547,298	\$ 504,306	\$ 299,795	\$ -	\$ 73,460	\$ -	\$ 1,424,857	\$ 142,486	\$ 1,282,371
B.3.2 to B.3.6	PDC	Pacific Design Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 742,588	\$ 74,259	\$ 668,329
B.3.2 to B.3.6	PLM	Palmdale Station	\$ -	\$ -	\$ 177,192	\$ -	\$ -	\$ -	\$ 91,168	\$ -	\$ 672,689	\$ -	\$ 672,689
B.3.2 to B.3.6	PMT	Pine Mountain	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 483,223	\$ 48,322	\$ 434,901
B.3.2 to B.3.6	PWT	Portshead Tank	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 314,877	\$ 31,488	\$ 283,389
B.3.2 to B.3.6	VPK	Verdugo Peak County ^(Note 9)	\$ -	\$ -	\$ 546,316	\$ 232,589	\$ 163,600	\$ -	\$ 49,600	\$ -	\$ 992,105	\$ 26,703	\$ 965,403
Subtotal for Additional Sites (Amendment No. 17)			\$ -	\$ -	\$ 4,185,382	\$ 2,135,630	\$ 1,696,644	\$ -	\$ 706,390	\$ -	\$ 12,221,743	\$ 986,320	\$ 11,235,424
ADDITIONAL SITE (AMENDMENT NO. 21)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	JPK2	Johnstone Peak - 2			\$ 10,714	\$ 271,717	\$ 299,795	\$ -	\$ 43,712	\$ -	\$ 625,939	\$ 62,594	\$ 563,345
Subtotal for Additional Site (Amendment No. 21)			\$ -	\$ -	\$ 10,714	\$ 271,717	\$ 299,795	\$ -	\$ 43,712	\$ -	\$ 625,939	\$ 62,594	\$ 563,345
ADDITIONAL SITES (AMENDMENT NO. 25)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	BHS	Baldwin Hills County	\$ -	\$ -	\$ 1,002,901	\$ 163,066	\$ -	\$ -	\$ 79,826	\$ -	\$ 1,245,793	\$ 124,579	\$ 1,121,214
B.3.2 to B.3.6	DPW38	Los Angeles County Department of Public Works Pump Station 38	\$ -	\$ -	\$ 153,569	\$ 146,308	\$ 297,675	\$ -	\$ 63,231	\$ -	\$ 660,783	\$ 66,078	\$ 594,705
B.3.2 to B.3.6	RPV1	Rancho Palos Verdes	\$ -	\$ -	\$ 177,192	\$ -	\$ -	\$ -	\$ 28,417	\$ -	\$ 205,609	\$ 20,561	\$ 185,048
Subtotal for Additional Sites (Amendment No. 25)			\$ -	\$ -	\$ 1,333,662	\$ 309,374	\$ 297,675	\$ -	\$ 28,417	\$ -	\$ 2,112,185	\$ 211,219	\$ 1,900,967
ADDITIONAL SITE (AMENDMENT NO. 26)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	LAN	Lancaster							\$ 30,252	\$ -	\$ 30,252	\$ 3,025	\$ 27,227
Subtotal for Additional Site (Amendment No. 26)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,252	\$ -	\$ 30,252	\$ 3,025	\$ 27,227
ADDITIONAL SITES (AMENDMENT NO. 27)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	BKK	BKK Landfill			\$ 218,743	\$ 35,341	\$ -		\$ 44,353		\$ 298,437	\$ 29,844	\$ 268,593
B.3.2 to B.3.6	UCLA	UCLA (Factor Building)			\$ 240,747				\$ 38,076		\$ 278,823	\$ 27,882	\$ 250,941
Subtotal for Additional Sites (Amendment No. 27)			\$ -	\$ -	\$ 459,490	\$ 35,341	\$ -	\$ -	\$ 82,429	\$ -	\$ 577,260	\$ 57,726	\$ 519,534
ADDITIONAL SITES (AMENDMENT NO. 29)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	POM	Pomona Courthouse	\$ -	\$ -	\$ 524,294	\$ 203,198	\$ -	\$ -	\$ 30,252		\$ 757,744	\$ 75,774	\$ 681,970
Subtotal for Additional Sites (Amendment No. 29)			\$ -	\$ -	\$ 524,294	\$ 203,198	\$ -	\$ -	\$ 30,252	\$ -	\$ 757,744	\$ 75,774	\$ 681,970
ADDITIONAL SITES (AMENDMENT NO. 30)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	UNIV	Universal Studios	\$ -	\$ -	\$ 548,134	\$ -	\$ 85,268	\$ -	\$ 38,076		\$ 671,478	\$ 67,148	\$ 604,330

EXHIBIT C.4 - SCHEDULE OF PAYMENTS

PHASE 3 - SUPPLY LMR SYSTEM COMPONENTS

Deliverable/ Task/ Section No. <i>(Exhibit A, Exhibit B, or Base Document)</i>	Site ID	Deliverable		Equipment Purchase in Phase 1 Credit per Site <i>(Note 1,11,12,13, 14,15)</i>	DTVRS	ACVRS	LARTCS	NMDN <i>(Note 17)</i>	Microwave	Credits <i>(Note 2)</i>	Total Contract Sum Total Payable Amount for Phase 3 <i>(Note 1, 3, 8, 16)</i>	10% Holdback Amount	Payable Amount Less 10% Holdback
Subtotal for Additional Sites (Amendment No. 30)			\$ -	\$ -	\$ 548,134	\$ -	\$ 85,268	\$ -	\$ 38,076	\$ -	\$ 671,478	\$ 67,148	\$ 604,330
NMDM (AMENDMENT NO. 32)													
B.3.2 to B.3.6		Equipment Delivery <i>(Note 17)</i>											
B.3.2 to B.3.6		Narrowband Mobile Data Network (NMDN)									\$ 2,764,124	\$ 276,412	\$ 2,487,712
Subtotal for NMDM (Amendment No. 32)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,764,124	\$ 276,412	\$ 2,487,712
ADDITIONAL SITES (AMENDMENT NO. 34)													
B.3.2 to B.3.6		Equipment Delivery											
B.3.2 to B.3.6	INDWT	Industry Water Tank	\$ -	\$ -	\$ 218,743	\$ 202,744	\$ -	\$ -	\$ 31,324		\$ 452,811	\$ 45,281	\$ 407,530
Subtotal for Additional Sites (Amendment No. 34)			\$ -	\$ -	\$ 218,743	\$ 202,744	\$ -	\$ -	\$ 31,324	\$ -	\$ 452,811	\$ 45,281	\$ 407,530
B.3.7		Consoles for LARTCS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 502,275	\$ 50,228	\$ 452,048
B.3.8		Logging Recorder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,743,216	\$ -	\$ 1,743,216
B.3.9		System Management and Monitoring Subsystem	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 445,681	\$ 44,568	\$ 401,113
B.3.10		FCC Licensing <i>(Note 6)</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.10		Pre-Installation Testing Acceptance - Core Staging for SOT Prep	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.3.10.1.DTVRS		Pre-Installation Testing Acceptance - Core Staging for SOT Prep (DTVRS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,344,147	\$ 234,415	\$ 2,109,732
B.3.10.1.ACVRs		Pre-Installation Testing Acceptance - Core Staging for SOT Prep (ACVRs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 746,582	\$ 74,658	\$ 671,924
B.3.10.1.LARTCS		Pre-Installation Testing Acceptance - Core Staging for SOT Prep (LARTCS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 966,294	\$ 96,629	\$ 869,664
B.3.10.1.NMDN		Pre-Installation Testing Acceptance - Core Staging for SOT Prep (NMDN)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 254,660	\$ 25,466	\$ 229,194
B.3.10.1.FINAL		Pre-Installation Testing Acceptance - Core Staging for SOT Prep FINAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,626	\$ 25,063	\$ 225,563
B.3.10.2.BALANCE		Pre-Installation Testing Acceptance - Balance of Sites by Site	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,456,627	\$ 245,663	\$ 2,210,964
		Equipment Shipment: Credit for Portable Radio Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (361,900)	\$ (36,190)	\$ (325,710)
Base.22.3.2		Performance Bond for Phase 3 - Supply LMR System Components	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 474,041		\$ 474,041
		Total Lease Costs for Phase 3 - Supply LMR System Components		N/A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Base.22.2.1		Liability Insurance (General and Professional)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 440,691		\$ 440,691
Total for Phase 3 - Supply LMR System Components:			\$ -	\$ -	\$ 25,134,390	\$ 8,370,231	\$ 8,703,455	\$ -	\$ 2,327,800	\$ -	\$ 62,358,244	\$ 4,832,227	\$ 57,526,017

Note 1: Pursuant to Amendment No. Three, effective as of December 19, 2013, (a) Contractor's provision and implementation of certain equipment reflected in Exhibit C.2 (Schedule of Payments Phase 1 – System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, was moved from Phases 3 and 4 to Phase 1; and (b) Contractor was engaged to provide and implement under Phase 1, certain additional equipment reflected in Exhibit C.2 (Schedule of Payments Phase 1 – System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, (the equipment described in clauses (a) and (b) is collectively referred to as the "Specified Equipment").

EXHIBIT C.4 - SCHEDULE OF PAYMENTS

PHASE 3 - SUPPLY LMR SYSTEM COMPONENTS

Deliverable/ Task/ Section No. <i>(Exhibit A, Exhibit B, or Base Document)</i>	Site ID	Deliverable		Equipment Purchase in Phase 1 Credit per Site <i>(Note 1,11,12,13, 14,15)</i>	DTVRS	ACVRS	LARTCS	NMDN <i>(Note 17)</i>	Microwave	Credits <i>(Note 2)</i>	Total Contract Sum Total Payable Amount for Phase 3 <i>(Note 1, 3, 8, 16)</i>	10% Holdback Amount	Payable Amount Less 10% Holdback
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In connection therewith, (i) a Unilateral Option Sum in the amount of \$4,362,681 was moved from Schedules C.4 (Schedule of Payments Phase 3 – Supply LMR System Components) and C.5 (Schedule of Payments Phase 4 – System Implementation) to Exhibit C (Schedule of Payments) to Schedule C.2 (Schedule of Payments Phase 1 – System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, and thereafter such Unilateral Option Sum was converted to a Contract Sum; and (ii) a Unilateral Option Sum in the amount of \$1,285,230 was added to Schedule C.2 (Schedule of Payments Phase 1 – System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, and thereafter such Unilateral Option Sum was converted to a Contract Sum.

Note 2: Pursuant to Amendment No. Nine, effective November 19, 2014, the Authority removed 1 LMR System Site for Phases 1 through 4. As such, Credits were realized in the amount of \$646,001. However, the cost for preparing Project Descriptions for 26 potential replacement sites in the amount of \$303,524 was utilized in Phase 1. As such, the remaining Credit balance of \$342,477 is reserved for use for a future replacement site.

Note 3: Pursuant to Amendment No. Ten, effective February 17, 2015, Exhibit C.3 (Schedule of Prices - Supply LMR System Components) was amended by Amendment No. 10 to reflect the conversion of Unilateral Option Sum to Contract Sum for (a) the conversion of Unilateral Option Sum to Contract Sum for for eight (8) LMR System Site currently contemplated in the Design and the addition of five (5) LMR System Sites; and (b) the removal of four (4) sites.

Note 4: Credit in the amount of \$547,158 for LAH was moved to LAHE in Amendment No. 10 for recordkeeping purposes.

Note 5: Pursuant to Amendment No. Eleven, effective April 28, 2015, Exhibit C.3 (Schedule of Prices - Supply LMR System Components) was amended by Amendment No. 11 to reflect the a credit in the amount of \$547,158 that was moved from LAH to LAHE in Amendment No. 10.

Note 6: Pursuant to Amendment No. Twelve, effective August 27, 2015, Exhibit C.3 (Schedule of Prices - Supply LMR System Components) was amended by Amendment No. 12 to shift FCC Licensing costs to Phase 1, in the amount of \$284,041.

\$635,537 will be taken from the credited amount of \$1,132,374, bringing the total amount of credits down to \$363,599 (inclusive of Phase 1 Work performed for 75% drawings and building permits in the amount of \$133,238) and shall be reflected in the Whitaker Middle Peak site in Phase 3. The remaining Credit balance of \$363,599 is reserved for use for a future replacement site(s).

Note 8: Pursuant to Amendment No. Seventeen, thirty-four (34) LMR System Sites were removed from further consideration; nineteen (19) LMR System Sites were included as part of the LMR System; and Phase 3 Completion Acceptance was included. In connection therewith, and in addition to all activities contemplated in this Phase 3, Unilateral Option Sums, not previously exercised, were converted into Contract Sums.

Note 9: Pursuant to Amendment No. Seventeen, a credit in the amount of \$1,002,901 was transferred from Baldwin Hills (BAH) to Saddle Peak (SPN); a credit in the amount of \$547,298 was transferred from Mount Lukens (MTL) to Signal Hill (SGH); a credit in the amount of \$522,426 was

Note 10: Pursuant to Amendment No. Nineteen, one (1) LMR System Site was removed from further consideration in Phases 1-4. Also, two (2) LMR System Sites were reconciled in Phases 2-4.

Note 11: Pursuant to Amendment No. Twenty-One, credit in the amount of \$563,761 from CPK was moved to BUR1, credit in the amount of \$943,771 from MLM was moved to MTL2, credit in the amount of \$181,525 from OAT was moved to LPC, credit in the amount of \$497,000 from SDW was moved to SUN, credit in the amount of \$547,298 from SGH was moved to MML, credit in the amount of \$547,158 from TOP was moved to FRP, credit in amount of \$497,000 from TPK was moved to MDL.

Note 12: Pursuant to Amendment No. Twenty-Two, credit in the amount of \$248,500 from MMC was moved to BJM and credit in the amount of \$248,000 from MMC was moved to TWR; credit in the amount of \$471,732 from RIH was moved to CPK and credit in the amount of \$471,732 from RIH was moved to DPK; credit in the amount of \$501,450 from SPN was moved to MIR and credit in the amount of \$501,451 from SPN was moved to TPK.

Note 13: Pursuant to Amendment No. Twenty-Four, credit in the amount of \$482,444 from MVS was moved to LEPS and credit in the amount of \$501,451 from TPK was moved to LACDEL.

Note 14: Pursuant to Amendment No. Twenty-Five, credit in the amount of \$501,451 from LACFDEL was moved to DPK; credit in the amount of \$496,165 from WTR was moved to FRP and \$396,000 from WTR was moved to GMT. Credit in the amount of \$496,165 from WMP was

Note 15: Pursuant to Amendment No. Twenty-Six, credit in the amount of \$200,000 from BUR1 was moved to DPK, credit in the amount of \$363,761 from BUR1 was moved to ENC1. Credit in the amount of \$285,000 from JPK2 was moved to SUN, credit in the amount of \$440,000 from

EXHIBIT C.5 - SCHEDULE OF PAYMENTS

PHASE 4 - LMR SYSTEM IMPLEMENTATION

Deliverable/Task /Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Phase 4 Total					
			Qty.	Unilateral Option Sum for Site Installation Only	Unilateral Option Sum for Acceptance Including Project Management <small>(Note 1)</small>	Contract Sum - Payable Amount for Phase 4 <small>(Note 8)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	BAH	Baldwin Hills		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	BJM	Black Jack Peak		\$ -	\$ -	\$ 212,175	\$ 21,217	\$ 190,957
B.4.2.2	BMT	Bald Mountain		\$ -	\$ -	\$ 126,074	\$ 12,607	\$ 113,466
B.4.2.2	BRK	Blue Rock		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	BUR	Burnt Peak		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	BVG	Beverly Glen		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	CCB	Compton Court Building		\$ -	\$ -	\$ 89,559	\$ 8,956	\$ 80,603
B.4.2.2	CEP	Century Plaza		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	CLM	Claremont		\$ -	\$ -	\$ 26,062	\$ 2,606	\$ 23,456
B.4.2.2	CPK	Castro Peak		\$ -	\$ -	\$ 159,211	\$ 15,921	\$ 143,290
B.4.2.2	DPK	Dakin Peak		\$ -	\$ -	\$ 186,016	\$ 18,602	\$ 167,415
B.4.2.2	ELSGDPD	El Segundo PD		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	ENC1	Encinal 1 (Fire Camp)		\$ -	\$ -	\$ 0	\$ 0	\$ 0
B.4.2.2	GRM	Green Mountain		\$ -	\$ -	\$ 149,618	\$ 14,962	\$ 134,656
B.4.2.2	HPK	Hauser Peak		\$ -	\$ -	\$ 158,493	\$ 15,849	\$ 142,644
B.4.2.2	JKP	Johnstone Peak		\$ -	\$ -	\$ 0	\$ 0	\$ 0
B.4.2.2	LACF028	FS 28		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF056	FS 56		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF071	FS 71		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF072	FS 72		\$ -	\$ -	\$ 98,585	\$ 9,858	\$ 88,726
B.4.2.2	LACF077	FS 77		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF084	FS 84		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF091	FS 91		\$ -	\$ -	\$ 42,234	\$ 4,223	\$ 38,010
B.4.2.2	LACF099	FS 99		\$ -	\$ -	\$ 0	\$ -	\$ -
B.4.2.2	LACF119	FS 119		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF144	FS 144		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF149	FS 149		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF157	FS 157		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF196	FS 169		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACFCP09	CP 9		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACFDEL	Los Angeles County Fire Departmental Del Valle Training Camp		\$ -	\$ -	\$ 59,918	\$ 5,992	\$ 53,926
B.4.2.2	LAH	LA City Hall		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LBR	Lower Blue Ridge		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LDWP243	DWP Sylmar Water Ladder		\$ -	\$ -	\$ 70,592	\$ 7,059	\$ 63,532
B.4.2.2	MAM	Magie Mountain		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	MDI	Mount Disappointment		\$ -	\$ -	\$ 195,598	\$ 19,560	\$ 176,038
B.4.2.2	MLE	Mount Lee		\$ -	\$ -	\$ 0	\$ 0	\$ 0
B.4.2.2	MLM	Mira Loma Facility		\$ -	\$ -	\$ 105,662	\$ 10,566	\$ 95,096
B.4.2.2	MMC	Mount McDill		\$ -	\$ -	\$ 164,568	\$ 16,457	\$ 148,111
B.4.2.2	MTL	Mount Lukens		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	MTT	Mount Thom		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	MTW	Mount Washington		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	MVS	Monte Vista (Star Center)		\$ -	\$ -	\$ 62,401	\$ 6,240	\$ 56,161
B.4.2.2	OAT	Oat Mountain OAT		\$ -	\$ -	\$ 31,374	\$ 3,137	\$ 28,236
B.4.2.2	OMC	Oat Mountain OMC		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	ONK	Oat Mountain Nike		\$ -	\$ -	\$ 184,539	\$ 18,454	\$ 166,085
B.4.2.2	PHN	Puente Hills		\$ -	\$ -	\$ 152,044	\$ 15,204	\$ 136,839
B.4.2.2	PRG	Portal Ridge		\$ -	\$ -	\$ 133,631	\$ 13,363	\$ 120,268
B.4.2.2	PSH	Pomona 1620 Hillcrest		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	RDNBPD	Redondo Beach PD		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	RHT	Rolling Hills Transmit		\$ -	\$ -	\$ 139,955	\$ 13,996	\$ 125,960
B.4.2.2	RIH	Rio Hondo		\$ -	\$ -	\$ 134,625	\$ 13,462	\$ 121,162
B.4.2.2	RPVE001	Rancho Palos Verde City Hall		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	SAG	San Augustine		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	SDW	San Dimas		\$ -	\$ -	\$ 103,786	\$ 10,379	\$ 93,407
B.4.2.2	SGH	Signal Hill		\$ -	\$ -	\$ 80,521	\$ 8,052	\$ 72,469
B.4.2.2	SPC	San Pedro Hill		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	SPN	Saddle Peak		\$ -	\$ -	\$ 117,679	\$ 11,768	\$ 105,911
B.4.2.2	SUN	Sunset Ridge		\$ -	\$ -	\$ 130,041	\$ 13,004	\$ 117,037
B.4.2.2	SVP	San Vicente Peak		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	SWP	Southwest Area Station		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	TOP	Topanga Peak		\$ -	\$ -	\$ 126,555	\$ 12,655	\$ 113,899
B.4.2.2	TPK	Tejon Peak		\$ -	\$ -	\$ 136,015	\$ 13,602	\$ 122,414
B.4.2.2	TWR	Tower Peak		\$ -	\$ -	\$ 166,972	\$ 16,697	\$ 150,275
B.4.2.2	VPC	Verdugo Peak (City)		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	WAD	Walker Drive		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	WMP	Whitaker Middle Peak		\$ -	\$ -	\$ 77,769	\$ 7,777	\$ 69,993
B.4.2.2	WSI	100 Wilshire		\$ -	\$ -	\$ 87,459	\$ 8,746	\$ 78,713

EXHIBIT C.5 - SCHEDULE OF PAYMENTS

PHASE 4 - LMR SYSTEM IMPLEMENTATION

Deliverable/Task /Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Phase 4 Total					
			Qty.	Unilateral Option Sum for Site Installation Only	Unilateral Option Sum for Acceptance Including Project Management <small>(Note 1)</small>	Contract Sum - Payable Amount for Phase 4 <small>(Note 8)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.4.2.2	WTR	Whittaker Ridge		\$ -	\$ -	\$ 116,681	\$ 11,668	\$ 105,013
B.4.2.2	LAPD077	77TH Street Area Complex		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LAPDDVN	Devonshire Area station		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	FCCF	L.A. County Fire Command		\$ -	\$ -	\$ 215,429	\$ 21,543	\$ 193,886
B.4.2.2	LAPDVDC	Valley Dispatch Center		\$ -	\$ -	\$ -	\$ -	\$ -
Phase 4 Subtotals Phase 4 - LMR System Implementation Per Site Detail				\$ -	\$ -	\$ 4,041,840	\$ 404,184	\$ 3,637,656
ADDITIONAL SITES (AMENDMENT NO. 10)								
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	APC	Airport Courthouse		\$ -	\$ -	\$ 39,361	\$ 3,936	\$ 35,425
B.4.2.2	BCHCPRK	Beverly Hills' Coldwater Canyon Park		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LACF136	FS 136		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	LAHE	LA City Hall East		\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.2	OLI	Olinda		\$ -	\$ -	\$ 60,600	\$ 6,060	\$ 54,540
Subtotal for Additional Sites (Amendment No. 10)				\$ -	\$ -	\$ 99,961	\$ 9,996	\$ 89,965
ADDITIONAL SITES (AMENDMENT NO. 17)								
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	AGH	Agoura Hills		\$ -	\$ -	\$ 95,136	\$ 9,514	\$ 85,622
B.4.2.2	BUR1	Burnt Peak 1		\$ -	\$ -	\$ 112,840	\$ 11,284	\$ 101,556
B.4.2.2	CCT	Criminal Court (Foltz)		\$ -	\$ -	\$ 88,854	\$ 8,885	\$ 79,969
B.4.2.2	CRN	Cerro Negro		\$ -	\$ -	\$ 89,001	\$ 8,900	\$ 80,101
B.4.2.2	FRP	Frost Peak (Upper Blue Ridge)		\$ -	\$ -	\$ 194,565	\$ 19,457	\$ 175,109
B.4.2.2	GMT	Grass Mountain		\$ -	\$ -	\$ 65,679	\$ 6,568	\$ 59,111
B.4.2.2	H-17A	H-17 Helipad		\$ -	\$ -	\$ 45,737	\$ 4,574	\$ 41,163
B.4.2.2	LARICSHQ	LA-RICS Headquarters		\$ -	\$ -	\$ 26,062	\$ 2,606	\$ 23,456
B.4.2.2	LASDTEM	Los Angeles County Sheriff's Department Temple Station		\$ -	\$ -	\$ 45,805	\$ 4,581	\$ 41,225
B.4.2.2	LPC	Loop Canyon		\$ -	\$ -	\$ 61,062	\$ 6,106	\$ 54,956
B.4.2.2	LEPS	Lower Encinal Pump Station		\$ -	\$ -	\$ 87,347	\$ 8,735	\$ 78,612
B.4.2.2	MIR	Mirador		\$ -	\$ -	\$ 85,601	\$ 8,560	\$ 77,041
B.4.2.2	MLL	Magic Mountain Link		\$ -	\$ -	\$ 205,692	\$ 20,569	\$ 185,123
B.4.2.2	MTL2	Mount Lukens 2		\$ -	\$ -	\$ 147,781	\$ 14,778	\$ 133,003
B.4.2.2	PDC	Pacific Design Center		\$ -	\$ -	\$ 102,627	\$ 10,263	\$ 92,364
B.4.2.2	PLM	Los Angeles County Sheriff's Department Palmdale Station		\$ -	\$ -	\$ 111,498	\$ 11,150	\$ 100,348
B.4.2.2	PMT	Pine Mountain		\$ -	\$ -	\$ 65,679	\$ 6,568	\$ 59,111
B.4.2.2	PWT	Porthead Tank		\$ -	\$ -	\$ 61,450	\$ 6,145	\$ 55,305
B.4.2.2	VPK	Verdugo Peak County		\$ -	\$ -	\$ 117,047	\$ 11,705	\$ 105,342
Subtotal for Additional Sites (Amendment No. 17)				\$ -	\$ -	\$ 1,809,463	\$ 180,946	\$ 1,628,517
ADDITIONAL SITE (AMENDMENT NO. 21)								
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	JPK2	Johnstone Peak - 2		\$ -	\$ -	\$ 131,347	\$ 13,135	\$ 118,212
Subtotal for Additional Site (Amendment No. 21)				\$ -	\$ -	\$ 131,347	\$ 13,135	\$ 118,212
ADDITIONAL SITES (AMENDMENT NO. 25)								
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	BHS	Baldwin Hills County		\$ -	\$ -	\$ 104,318	\$ 10,432	\$ 93,886
B.4.2.2	DPW38	Los Angeles County Department of Public Works Pump Station 38		\$ -	\$ -	\$ 148,928	\$ 14,893	\$ 134,035
B.4.2.2	RPV1	Rancho Palos Verdes		\$ -	\$ -	\$ 43,428	\$ 4,343	\$ 39,085
Subtotal for Additional Site (Amendment No. 25)				\$ -	\$ -	\$ 296,674	\$ 29,667	\$ 267,007
ADDITIONAL SITE (AMENDMENT NO. 26)								
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	LAN	Lancaster		\$ -	\$ -	\$ 26,062	\$ 2,606	\$ 23,456
Subtotal for Additional Site (Amendment No. 26)				\$ -	\$ -	\$ 26,062	\$ 2,606	\$ 23,456
ADDITIONAL SITES (AMENDMENT NO. 27)								
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	BKK	BKK Landfill				\$ 68,467	\$ 6,847	\$ 61,620
B.4.2.2	UCLA	UCLA (Factor Building)				\$ 60,771	\$ 6,077	\$ 54,694
Subtotal for Additional Sites (Amendment No. 27)				\$ -	\$ -	\$ 129,238	\$ 12,924	\$ 116,314
ADDITIONAL SITES (AMENDMENT NO. 29)								
B.4.2.2		Site Installation Test Acceptance						

EXHIBIT C.5 - SCHEDULE OF PAYMENTS

PHASE 4 - LMR SYSTEM IMPLEMENTATION

Deliverable/Task /Section No. <small>(Exhibit A, Exhibit B, or Base Document)</small>	Site ID	Deliverable	Phase 4 Total					
			Qty.	Unilateral Option Sum for Site Installation Only	Unilateral Option Sum for Acceptance Including Project Management <small>(Note 1)</small>	Contract Sum - Payable Amount for Phase 4 <small>(Note 8)</small>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.4.2.2	POM	Pomona Courthouse				\$ 104,593	\$ 10,459	\$ 94,134
Subtotal for Additional Sites (Amendment No. 29)				\$ -	\$ -	\$ 104,593	\$ 10,459	\$ 94,134
ADDITIONAL SITES (AMENDMENT NO. 30)								
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	UNIV	Universal Studios				\$ 73,533	\$ 7,353	\$ 66,180
Subtotal for Additional Sites (Amendment No. 30)				\$ -	\$ -	\$ 73,533	\$ 7,353	\$ 66,180
ADDITIONAL SITES (AMENDMENT NO. 34)								
B.4.2.2		Site Installation Test Acceptance						
B.4.2.2	INDWT	Industry Water Tank				\$ 60,655	\$ 6,066	\$ 54,590
Subtotal for Additional Sites (Amendment No. 34)				\$ -	\$ -	\$ 60,655	\$ 6,066	\$ 54,590
B.4.1.1.1.5		Consoles	9	\$ -	\$ -	\$ -	\$ 5,846	\$ 52,616
B.4.1.1.1.5		Logging Recorder	1	\$ -	\$ -	\$ 6,496	\$ -	\$ 6,496
B.4.1.1.1.7		System Management and Monitoring Subsystem	1	\$ -	\$ -	-	Included in Phase 3	
B.1.15		Inventory and Maintenance Tracking Subsystem		\$ -	\$ -	-	Included in Phase 3	
B.4.3		Training		\$ -	\$ -	-	Included	
B.4.1.2		Spares and Test Equipment	1	\$ -	\$ -	-	Included	
B.4.2		Acceptance Testing	1	\$ -	\$ -	-		
B.4.2.3		Functional Test Acceptance	1	\$ -	\$ -	\$ 423,142	\$ 42,314	\$ 380,828
B.4.2.4		Special Operational Test Acceptance	1	\$ -	\$ -	\$ 1,375,212	\$ 137,521	\$ 1,237,690
B.4.2.5		Voice System Testing Acceptance	1	\$ -	\$ -	\$ 528,928	\$ 52,893	\$ 476,035
B.4.2.6		Stress Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.8		Voice Wide Area Coverage Test Acceptance		\$ -	\$ -	-		
B.4.2.8.Zone 1		Basin Zone Coverage Test Acceptance	1	\$ -	\$ -	\$ 846,284	\$ 84,628	\$ 761,656
B.4.2.8.Zone 2		Northern Desert Coverage Test Acceptance	1	\$ -	\$ -	\$ 740,499	\$ 74,050	\$ 666,449
B.4.2.8.Zone 3		Angeles National Forest Coverage Test Acceptance	1	\$ -	\$ -	\$ 634,713	\$ 63,471	\$ 571,242
B.4.2.8.Zone 4		Santa Monica Mountains Coverage Test Acceptance	1	\$ -	\$ -	\$ 423,142	\$ 42,314	\$ 380,828
B.4.2.8.Zone 5		CA-14 Corridor Coverage Test Acceptance	1	\$ -	\$ -	\$ 423,142	\$ 42,314	\$ 380,828
B.4.2.8.Zone 6		Foothills Coverage Test Acceptance	1	\$ -	\$ -	\$ 423,142	\$ 42,314	\$ 380,828
B.4.2.8.Zone 7		Catalina Island Coverage Test Acceptance	1	\$ -	\$ -	\$ 317,357	\$ 31,736	\$ 285,621
B.4.2.9		Voice Aerial Coverage Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.10		Voice Waterway Coverage Test Acceptance	1	\$ -	\$ -	\$ 211,571	\$ 21,157	\$ 190,414
B.4.2.13		Voice Railway Coverage Test Acceptance	1	\$ -	\$ -	\$ 211,571	\$ 21,157	\$ 190,414
B.4.2.14		Voice Freeway Coverage Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.15		Voice Subscriber Access Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.17		Voice System Burn-in Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.18.1		NMDN Throughput Test Acceptance	1	\$ -	\$ -	\$ 528,928	\$ 52,893	\$ 476,035
B.4.2.18.2		NMDN Wide Area Coverage Test Acceptance		\$ -	\$ -	-		
B.4.2.18.2.Zone 1		Basin Zone Coverage Test Acceptance	1	\$ -	\$ -	\$ 528,928	\$ 52,893	\$ 476,035
B.4.2.18.2.Zone 2		Northern Desert Coverage Test Acceptance	1	\$ -	\$ -	\$ 423,142	\$ 42,314	\$ 380,828
B.4.2.18.2.Zone 3		Angeles National Forest Coverage Test Acceptance	1	\$ -	\$ -	\$ 423,142	\$ 42,314	\$ 380,828
B.4.2.18.2.Zone 4		Santa Monica Mountains Coverage Test Acceptance	1	\$ -	\$ -	\$ 211,571	\$ 21,157	\$ 190,414
B.4.2.18.2.Zone 5		CA-14 Corridor Coverage Test Acceptance	1	\$ -	\$ -	\$ 211,571	\$ 21,157	\$ 190,414
B.4.2.18.2.Zone 6		Foothills Coverage Test Acceptance	1	\$ -	\$ -	\$ 211,571	\$ 21,157	\$ 190,414
B.4.2.18.2.Zone 7		Catalina Island Coverage Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.18.5		NMDN Data Aerial Coverage Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.18.6		NMDN Fire Stn & Parking Coverage Test Acceptance	1	\$ -	\$ -	\$ -	\$ -	\$ -
B.4.2.18.7		NMDN Freeway Coverage Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.18.8		NMDN Waterway Coverage Test Acceptance	1	\$ -	\$ -	\$ 211,571	\$ 21,157	\$ 190,414
B.4.2.18.9		NMDN Projected Load Test Acceptance	1	\$ -	\$ -	\$ 211,571	\$ 21,157	\$ 190,414
B.4.2.18.10		NMDN CAD Baseline System Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207
B.4.2.18.11		NMDN Burn-in Test Acceptance	1	\$ -	\$ -	\$ 105,786	\$ 10,579	\$ 95,207

EXHIBIT C.5 - SCHEDULE OF PAYMENTS

PHASE 4 - LMR SYSTEM IMPLEMENTATION

Deliverable/Task /Section No. <i>(Exhibit A, Exhibit B, or Base Document)</i>	Site ID	Deliverable	Phase 4 Total					
			Qty.	Unilateral Option Sum for Site Installation Only	Unilateral Option Sum for Acceptance Including Project Management <i>(Note 1)</i>	Contract Sum - Payable Amount for Phase 4 <i>(Note 8)</i>	10% Holdback Amount	Payable Amount Less 10% Holdback
B.4.4.1		Final Migration/Cutover Plan Delivered		\$ -	\$ -	Included	\$ -	\$ -
B.4.5		Final System Support Plan Delivered		\$ -	\$ -	Included	\$ -	\$ -
B.4.6		Final Disaster Recovery Plan Delivered		\$ -	\$ -	Included	\$ -	\$ -
B.4.7		Final Special Event Plans Delivered		\$ -	\$ -	Included	\$ -	\$ -
B.4.8/Base.11.2.1		Final LMR System Acceptance		\$ -	\$ -	As provided for in Base.11.2.1	\$ -	\$ -
B.4.9		Final Warranty Plan Delivered		\$ -	\$ -	Included	\$ -	\$ -
		Credit for Services Performed in Phase 1	1	\$ -	\$ -	\$ -	\$ -	\$ -
		Project Management	1	\$ -	\$ -	Included as Reflected	\$ -	\$ -
Base.22.3.2		Performance Bond	1	\$ -	\$ -	\$ 99,722	\$ -	\$ 99,722
		Total Lease Costs		\$ -	\$ -	\$ -	\$ -	\$ -
Base.22.2.1		Liability Insurance (Professional and General)	1	\$ -	\$ -	\$ 527,500		\$ 527,500
B.4.10		Phase 4 Completion Acceptance		\$ -	\$ -	\$ 10,241,502	\$ 1,024,150	\$ 9,217,352
Total for Phase 4 - LMR System Implementation:				\$ -	\$ -	\$ 28,285,598	\$ 2,765,188	\$ 25,520,410

Note 1: Pursuant to Amendment No. Three, effective as of December 19, 2013, (a) Contractor's provision and implementation of certain equipment reflected in Exhibit C.2 (Schedule of Payments Phase 1 – System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, was moved from Phases 3 and 4 to Phase 1; and (b) Contractor was engaged to provide and implement under Phase 1, certain additional equipment reflected in Exhibit C.2 (Schedule of Payments Phase 1 – System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, (the equipment described in clauses (a) and (b) is collectively referred to as the "Specified Equipment"). In connection therewith, (i) a Unilateral Option Sum in the amount of \$4,362,681 was moved from Schedules C.4 (Schedule of Payments Phase 3 – Supply LMR System Components) and C.5 (Schedule of Payments Phase 4 – System Implementation) to Exhibit C (Schedule of Payments) to Schedule C.2 (Schedule of Payments Phase 1 – System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, and thereafter such Unilateral Option Sum was converted to a Contract Sum; and (ii) a Unilateral Option Sum in the amount of \$1,285,230 was added to Schedule C.2 (Schedule of Payments Phase 1 – System Design) to Exhibit C (Schedule of Payments), as amended by Amendment No. Three, and thereafter such Unilateral Option Sum was converted to a Contract Sum.

Note 2: Pursuant to Amendment No. Nine, effective November 19, 2014, the Authority removed 1 LMR System Site for Phases 1 through 4. As such, Credits were realized in the amount of \$646,001. However, the cost for preparing Project Descriptions for 26 potential replacement sites in the amount of \$303,524 was utilized in Phase 1. As such, the remaining Credit balance of \$342,477 is reserved for use for a future replacement site.

Note 3: Pursuant to Amendment No. Ten, effective February 17, 2015, Exhibit C.4 (Schedule of Prices - LMR System Implementation) was amended by Amendment No. 10 to reflect the conversion of Unilateral Option Sum to Contract Sum for (a) the conversion of Unilateral Option Sum to Contract Sum for for eight (8) LMR System Site currently contemplated in the Design and the addition of five (5) LMR System Sites; and (b) the removal of four (4) sites.

Note 4: Pursuant to Amendment No. Eleven, effective April 28, 2015, Exhibit C.4 (Schedule of Prices - LMR System Implementation) was amended by Amendment No. 11 to reflect the project administration costs for one (1) LMR System Site.

Note 5: Pursuant to Amendment No. Seventeen, thirty-four (34) LMR System Sites were removed from further consideration; nineteen (19) LMR System Sites were included as part of the LMR System; and Phase 4 Completion Acceptance was included. In connection therewith, and in addition to all activities contemplated in this Phase 4, Unilateral Option Sums, not previously exercised, were converted into Contract Sums.

Note 6: Pursuant to Amendment No. Eleven, effective April 28, 2015, Exhibit C.4 (Schedule of Prices - LMR System Implementation) was amended by Amendment No. 11 to reflect the project administration costs for one (1) LMR System Site.

Note 7: Pursuant to Amendment No. Nineteen, one (1) LMR System Site was removed from further consideration in Phases 1-4. Also, two (2) LMR System Sites were reconciled in Phases 2-4.

Note 8: Pursuant to Amendment No. Thirty-Two, two (2) LMR System Site were removed from further consideration in Phases 1-4.

Note 9: Pursuant to Amendment No. Thirty-Two, the per site NMDM costs contemplated in Phase 3 and Phase 4, have moved to a single line item in the amount of \$2,764,123. Resulting Discounts in the amount of \$582,086 have been captured in Exhibit C.15 (LMR Discounts), which will be applied at the discretion of the Authority.

SCHEDULE OF PAYMENTS

EXHIBIT C.17 - LMR CHANGE ORDER MODIFICATIONS

Change Order Number	Site ID	Item/Category	Contract Sum - Payable Amount	10% Holdback Amount	Payable Amount Less 10% Holdback Amount
Amendment No. 28					
MSI 003 Revised	OLI	MSI-003 OLI Tower Mapping (Revised)	\$ -	\$ -	\$ -
MSI-007	LDWP243	MSI-007 LDWP243 Additional Structural Analysis for Coverage Enhancement	\$ 2,200	\$ 220	\$ 1,980
MSI-008	LMR	MSI-008 Station B Reprogramming of 700 MHz DTVRS Stations	\$ 9,912	\$ 991	\$ 8,921
MSI-009	AGH	MSI-009 AGH SCE Engineering Fee Reimbursement	\$ 5,634	\$ 563	\$ 5,071
MSI-012	LMR	MSI-012 Site 3D Models per Authority Request BJM, DPK, TWR	\$ -	\$ -	\$ -
MSI-015	BUR1	MSI-015 BUR1 SCE Engineering Fee	\$ 3,308	\$ 331	\$ 2,977
MSI-016	BMT	MSI-016 BMT SCE Engineering Fee	\$ 592	\$ 59	\$ 533
MSI-017	MML	MSI-017 MML SCE Engineering Fee	\$ 3,308	\$ 331	\$ 2,977
Amendment No. 28 Subtotal			\$ 24,953	\$ 2,495	\$ 22,458
Amendment No. 29					
MSI-030	APC	MSI-030 Saturday Labor and Crane Cost	\$ 2,405	\$ 241	\$ 2,165
MSI-020R	BKK	MSI-020R Tower Mapping and Painting	\$ 26,225	\$ 2,623	\$ 23,603
MSI-024	BKK	MSI-024 Dispersive Wave Testing	\$ 5,426	\$ 543	\$ 4,883
MSI-1208	POM	MSI-LMR1208 ACM and LCP Testing Services	\$ 4,400	\$ 440	\$ 3,960
Amendment No. 29 Subtotal			\$ 38,456	\$ 3,846	\$ 34,610
Amendment No. 30					
MSI-1205	MVS	MSI-1205 MVS LCP Testing Services	\$ 4,195	\$ 420	\$ 3,776
Amendment No. 30 Subtotal			\$ 4,195	\$ 420	\$ 3,776
Amendment No. 31					
MSI-1265	ONK	MSI-1265 Environmental Testing ACM and LPC Services	\$ 3,633	\$ 363	\$ 3,270
MSI-1206	CCT	MSI-1206 HVAC Condenser Pad Modification	\$ 9,745	\$ 975	\$ 8,771
MSI-1321	AGH	MSI-1321 Additional Title, Survey, Research	\$ 2,100	\$ 210	\$ 1,890
MSI-1267R	LARICSHQ	MSI-1267R Environmental Testing ACM and LPC Services	\$ 4,095	\$ 410	\$ 3,686
Amendment No. 31 Subtotal			\$ 19,573	\$ 1,957	\$ 17,616
Amendment No. 33					
MSI-1528	MLM	MSI-1528 MLM Tower Light	\$ 17,490	\$ 1,749	\$ 15,741
Amendment No. 33 Subtotal			\$ 17,490	\$ 1,749	\$ 15,741
Amendment No. 34					
MSI-1447	AGH	MSI-1477 AGH Additional Electrical Work	\$ 84,503	\$ 8,450	\$ 76,053
MSI-1435	HPK	MSI-1435 HPK Power Conduit Outside Compound	\$ 6,241	\$ 624	\$ 5,617
Amendment No. 34 Subtotal			\$ 90,744	\$ 9,074	\$ 81,670
TOTAL FOR ALL LMR CHANGE ORDER MODIFICATIONS			\$ 195,411	\$ 19,541	\$ 175,870

Note 1: The above identified Change Order Modifications have been fully negotiated between the Authority and the Contractor, and the above amounts represent a full and final resolution of all changes contained in those identified Change Order Modifications.



MOTOROLA SOLUTIONS

MOTOROLA CUSTOMER SUPPORT PLAN

Prepared For:

LA RICS

**2525 CORPORATE PLACE STE 200
MONTEREY PARK LOS ANGELES CA
91754**

United States

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Internal Use only: SSC SYSTEM Summary

1. Introduction

Your Customer Support Plan contains everything you need to know to take advantage of the services provided in your contract. This support plan was designed to help transition you from the pre-sales, staging, and installation phases to the delivery of life cycle support services for your system. Motorola supports your communication system with several expert service groups, each performing a specific function and working together to provide you with fast response and quick closure to issues.

The Terms and Conditions of customer contract agreement will take precedence over this Customer Support Plan. In case of any contradiction, please contact the Motorola representative(s)

Please take a moment to review this Customer Support Plan. Your Customer Support Manager can answer any further questions you may have.

2. Glossary of Terms and Acronyms

Case Number	The number assigned to a customer's request for service. The Call Centre electronically tracks all Case Numbers to assure customer satisfaction.
CSM	Customer Support Manager
CSP	Customer Support Plan
ETA	Estimated time of arrival is an estimate of when the field technician will arrive at the customer's site.
FRU	A Field Replaceable Unit which is any module or board which can be removed from a piece of fixed equipment and exchanged with an identical module or board.
Local Service Provider	A Customer authorized service provider or a Motorola Field Technical Representative
RA/RMA	Return Authorization/Return Material Authoriation needed by the System Repair Centre prior to sending equipment in for repair.
MSD	Motorola Service Desk
Response	Response times are defined as having an on-site technician, or a remote systems support specialist having taken assignment of the issue and working on the system.
SCC	System Component Centre - Systems Repair Centre
SSC	System Support Centre
IDO	Infrastructure Depot Operations
Severity	Each incoming call is assigned a severity level of Severity One, Two, Three and Four. Severity levels determine the Response Time Commitments.
RSC	Radio Service Centre – Subscriber repair centre

3. Warranty and/or Service Agreement Information

Customer Number: 1036733196

Billing Tag : 0001

Service Agreement Information

Service Agreement number : RENEWAL of USC000005382 **TBD**

Service Agreement start date: 01-AUG-2018

Service Agreement end date: 31-DEC-2019

DRAFT

4. Motorola Solutions and Customer Contacts

Your Motorola Customer Support Manager provides coordination of support resources to enhance the quality of service delivery and to ensure your satisfaction. The Customer Support Manager (CSM) is responsible to oversee the execution of your support contract (maintenance or warranty) by serving in the role of customer advocate. They serve as a point of contact for issue resolution and escalation, monitoring of our contractual performance, providing review and analysis of process metrics and fostering a relationship for continuous improvement with customers.

Any changes to the information in this document should be communicated to your Customer Support Manager as soon as possible.

Your Customer Support Manager is	ALBERT R. SHELTON JR.
Phone:	(213) 435-9053
Email:	AL.SHELTON@MOTOROLASOLUTIONS.COM
Pager:	

Account Manager

Your Account Manager serves as your contact for information on new products and services, expansion of communications to meet growth needs for your organization, and ensure your satisfaction

Your Account Manager is:	NEIL THOMAS
Phone:	(917) 583-7119
Email:	neil@motorolasolutions.com.
Pager:	

Key Customer Contacts

Please contact CSM if any of the information provided below has changed.

Primary Address:

LA RICS

2525 CORPORATE PLACE STE 200

MONTEREY PARK LOS ANGELES CA 91754

United States

Above Contract PO Authorization:

Service Escalations:

Customer Communications Director:

Customer Technician Contacts:

Security Update Service Notifications:

Customer Service Case Notifications:

Customer Service Verification Contacts:

5. Overview of Service Descriptions

This section briefly describes the services **LA RICS** will receive under your contract. For further details, on the terms of your contract or your contracted Statement of Work, please contact your Customer Support Manager or Account Manager.

Infrastructure Repair

MSI Infrastructure Repair

Dispatch Service

MSI Dispatch Service

Technical Support

MSI Technical Support

MSI OnSite Infrastructure Response-Standard

6. How to Obtain Contracted Sold Services

Service Calls will be used for many customer initiated requests. The information provided during the service call will be type of request.

To Place a Service Call...

Step	What you need to do:	Information to Provide
1	Call Motorola Call Center Operations	800-323-9949
2	Provide Your Customer Name	LA RICS
3	Type of Request	"I would like to open a service call" : Incident/Service Request /Technical Question
4	Provide System & Site ID #	See Side 2 of this card
5	Identify the Severity Level	See Severity Table below
6	Your Name and Telephone Number	
7	Description of the Issue	As detailed as possible.
8	Record the Service Case Number provided to you by the Motorola Service Desk for service call tracking purposes.	
	If on site support is required to resolve the service request, the Motorola Service Desk will dispatch the appropriate local field service provider.	
	To inquire on the Status of a Service Call...	
1	Call Motorola Call Center Operations	800-323-9949
2	Provide Your Customer Name	LA RICS
3	Provide Type of Request	"I would like to check on the status of a Issue."
4	The Service Case number assigned at the time the service call was opened.	The number you documented in Step #8

Severity Level Definitions

Severity Level Matrix	
These definitions are different based on technology and geography – Kindly check with local operations team to get the definitive list	
Severity Level	Problem Type (If applicable)
Severity 1	Major System Failure Dispatched 7 x 24 x 365 days. 33% degraded
Severity 2	Significant System Impairment Dispatched 8 x 5 Monday - Friday, standard business days
Severity 3	Technical Question = Upgrades or intermittent problems, System problems presently being monitored Parts Question Technician is not on site, has questions concerning a problem. Work to be performed at a later time. 8 x 5 Monday - Friday, standard business hours
Severity 4	Scheduled Maintenance, Scheduled upgrades

NOTE: The above severity level definitions do NOT apply to the Managed ISSI service. Please refer to the Managed ISSI Statement of Work (SOW) for applicable severity definitions

7. Case Notifications

The following persons at LA RICS will be notified when the following events occur on a Case:

Open, Assigned, Site Arrival, Deferred, and Closure.

Open and Closure only

Pager:

Repair Verification (if required)

Once the issue is resolved, the Motorola Local Service Provider will call the Motorola Service Desk to request verification.

To verify proper system operation, the Customer Support Representative will call:

If cannot be reached immediately, will be tried. If neither contact can be reached, the case will be closed 20 minutes from the initial attempt and the Motorola Local Service Provider will be released from the Site.

Network Preventative Maintenance Schedule

System Name	NPM Date
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DRAFT

System Summary

The following is the System/Site Overview for LA RICS

Site ID	Site Name	Contact Address
A069F1	FCCF REDUNDANT ACTIVE	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US
A069F101	JPk UHF	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US
A069F102	OAT MTN UHF	PALO SOLA TRUCK RD, CHATSWORTH, CA91311 US
A069F103	RHT UHF	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US
A069F104	MCDILL UHF	MARTINDALE RD, PALMDALE, CA93551 US
A069F105	RIO HONDO UHF	NEAR WORKMANMILL RD, WHITTIER, CA90601 US
A069F106	STB UHF	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US
A069F107	SOW UHF	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US
A069F111	JPk 700	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US
A069F112	VERDUGO 700	VERDUGO MOUNTAIN WAY, BURBANK, CA91501 US
A069F113	RHT 700	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US
A069F114	STB 700	1277 N EASTERN AVE, LOS ANGELES, CA90063 US
A069F115	SOW 700	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US
A069F1D1	FCCF DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US
A069F1D2	FCCF DISP 2	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US
A069F1D3	SCC DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US
A069F1D4	LA HQ	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US
A069F1D5	SCC	1277 N EASTERN AVE, LOS ANGELES, CA90063 US
A069F1D6	ISD	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US
A069F1 (DSR)	PLM	CA US
MTRBO069F	STATION B MOTOBRIDGE	1277 N EASTERN AVE, LOS ANGELES, CA90063 US

EXHIBIT D.2.1

SSC Site Summary with Business Process

Site ID	Site Name	Address	On-Site Service Provider	Service Name
A069F1	FCCF REDUNDANT ACTIVE	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F1	FCCF REDUNDANT ACTIVE	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F1	FCCF REDUNDANT ACTIVE	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F1	FCCF REDUNDANT ACTIVE	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F1	FCCF REDUNDANT ACTIVE	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO298-SCHMBG, MSI-SSC NTWK SEC	MSI Security Update Service
A069F101	JPK UHF	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F101	JPK UHF	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F101	JPK UHF	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F101	JPK UHF	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F102	OAT MTN UHF	PALO SOLA TRUCK RD, CHATSWORTH, CA91311 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F102	OAT MTN UHF	PALO SOLA TRUCK RD, CHATSWORTH, CA91311 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F102	OAT MTN UHF	PALO SOLA TRUCK RD, CHATSWORTH, CA91311 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F102	OAT MTN UHF	PALO SOLA TRUCK RD, CHATSWORTH, CA91311 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F103	RHT UHF	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support

EXHIBIT D.2.1

Site ID	Site Name	Address	On-Site Service Provider	Service Name
A069F103	RHT UHF	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F103	RHT UHF	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F103	RHT UHF	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F104	MCDILL UHF	MARTINDALE RD, PALMDALE, CA93551 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F104	MCDILL UHF	MARTINDALE RD, PALMDALE, CA93551 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F104	MCDILL UHF	MARTINDALE RD, PALMDALE, CA93551 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F104	MCDILL UHF	MARTINDALE RD, PALMDALE, CA93551 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F105	RIO HONDO UHF	NEAR WORKMANMILL RD, WHITTIER, CA90601 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F105	RIO HONDO UHF	NEAR WORKMANMILL RD, WHITTIER, CA90601 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F105	RIO HONDO UHF	NEAR WORKMANMILL RD, WHITTIER, CA90601 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F105	RIO HONDO UHF	NEAR WORKMANMILL RD, WHITTIER, CA90601 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F106	STB UHF	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F106	STB UHF	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F106	STB UHF	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F106	STB UHF	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F107	SOW UHF	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F107	SOW UHF	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return

EXHIBIT D.2.1

Site ID	Site Name	Address	On-Site Service Provider	Service Name
A069F107	SOW UHF	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F107	SOW UHF	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F111	JPk 700	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F111	JPk 700	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F111	JPk 700	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F111	JPk 700	2000 N SYCAMORE CANYON RD, SAN DIMAS, CA91773 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F112	VERDUGO 700	VERDUGO MOUNTAIN WAY, BURBANK, CA91501 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F112	VERDUGO 700	VERDUGO MOUNTAIN WAY, BURBANK, CA91501 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F112	VERDUGO 700	VERDUGO MOUNTAIN WAY, BURBANK, CA91501 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F112	VERDUGO 700	VERDUGO MOUNTAIN WAY, BURBANK, CA91501 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F113	RHT 700	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F113	RHT 700	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F113	RHT 700	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F113	RHT 700	5741 W CRESTRIDGE RD, RANCHO PALOS VERDES, CA90275 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F114	STB 700	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F114	STB 700	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return

AGENDA ITEM J - ENCLOSURE 3

EXHIBIT D.2.1

Site ID	Site Name	Address	On-Site Service Provider	Service Name
A069F114	STB 700	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F114	STB 700	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F115	SOW 700	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F115	SOW 700	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F115	SOW 700	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F115	SOW 700	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F1D1	FCCF DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F1D1	FCCF DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F1D1	FCCF DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F1D1	FCCF DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F1D1	FCCF DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO298-SCHMBG, MSI-SSC NTWK SEC	MSI Security Update Service
A069F1D2	FCCF DISP 2	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F1D2	FCCF DISP 2	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F1D2	FCCF DISP 2	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F1D2	FCCF DISP 2	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support

AGENDA ITEM J - ENCLOSURE 3

EXHIBIT D.2.1

Site ID	Site Name	Address	On-Site Service Provider	Service Name
A069F1D2	FCCF DISP 2	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO298-SCHMBG, MSI-SSC NTWK SEC	MSI Security Update Service
A069F1D3	SCC DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F1D3	SCC DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F1D3	SCC DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F1D3	SCC DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F1D3	SCC DISP 1	1320 N EASTERN AVE, 1320 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO298-SCHMBG, MSI-SSC NTWK SEC	MSI Security Update Service
A069F1D4	LA HQ	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F1D4	LA HQ	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F1D4	LA HQ	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F1D4	LA HQ	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F1D4	LA HQ	2525 CORPORATE PLACE STE 200, MONTEREY PARK, CA91754 US	IL-DO298-SCHMBG, MSI-SSC NTWK SEC	MSI Security Update Service
A069F1D5	SCC	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F1D5	SCC	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F1D5	SCC	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F1D5	SCC	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support

EXHIBIT D.2.1

Site ID	Site Name	Address	On-Site Service Provider	Service Name
A069F1D5	SCC	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO298-SCHMBG, MSI-SSC NTWK SEC	MSI Security Update Service
A069F1D6	ISD	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F1D6	ISD	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F1D6	ISD	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F1D6	ISD	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F1D6	ISD	1110 N EASTERN AVE, MONTEREY PARK, CA91754 US	IL-DO298-SCHMBG, MSI-SSC NTWK SEC	MSI Security Update Service
A069F1_(DSR)	PLM REDUNDANT INACTIVE		CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
A069F1_(DSR)	PLM REDUNDANT INACTIVE		IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
A069F1_(DSR)	PLM REDUNDANT INACTIVE		IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
A069F1_(DSR)	PLM REDUNDANT INACTIVE		IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support
A069F1_(DSR)	PLM REDUNDANT INACTIVE		IL-DO298-SCHMBG, MSI-SSC NTWK SEC	MSI Security Update Service
MTRBO069F	STATION B MOTOBRIDGE	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	CA-DO099-TLC LK, MSI-CA REGION	MSI Dispatch MSI Onsite System Support
MTRBO069F	STATION B MOTOBRIDGE	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO002-ELGIN, MSI-INFRA REPR	MSI Repair and Return
MTRBO069F	STATION B MOTOBRIDGE	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO066-SCHMBG, MSI-SSC CALL CTR	MSI Dispatch
MTRBO069F	STATION B MOTOBRIDGE	1277 N EASTERN AVE, LOS ANGELES, CA90063 US	IL-DO068-SCHMBG, MSI-TECH SUP	MSI System Tech Support

EQUIPMENT LISTS FOR FCCF AND PLM EXHIBIT D.2.2

Asset	Phase	Description	Serial Number	Model	Vendor	Funding Source	FY	Position	Deployed Loc	Assigned To
10000	1	2620-24 ETHERNET SWITCH	CN38DDR2V2	CLN1856A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10001	1	2620-24 ETHERNET SWITCH	CN38DDR3QC	CLN1856A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10002	1	CONSOLE TELEPHONY MEDIA GATEWAY - 8 POTS LINES & 5	SFTX1742AJTA	DDN1405A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10003	1	GGM 8000 GATEWAY	147CPV1861	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10004	1	GGM 8000 GATEWAY	147CPV1862	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10005	1	SITE MANAGER BASIC	469SPU015W	F4543A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10006	1	GCP 8000 SITE CONTROLLER	112CPV0799	T7038A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10007	1	GGM 8000 GATEWAY	147CPV1855	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10008	1	APX7500 CONSOLETTT DUAL BAND MODEL	761CPV0308	L30TSS9PW1AN	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10009	1	APX7500 CONSOLETTT DUAL BAND MODEL	761CPV0305	L30TSS9PW1AN	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10010	1	APX7500 CONSOLETTT DUAL BAND MODEL	761CPV0309	L30TSS9PW1AN	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10026	1	22" WIDE FORMAT LCD MONITOR BLACK, NON-TOUCH	2X515254TA	DS22WBLK	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10030	1	DELL WYSE P45 ZERO CLIENT WITH 256 MB FLASH AND 4	9PNRM900150	DQ90910221L	MOTOROLA	UASI	2009	FCCF-EQRM188-CON1	FCCF	
10033	1	2620-24 ETHERNET SWITCH	CN38DDR2XT	CLN1856A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10034	1	2620-24 ETHERNET SWITCH	CN38DDR43F	CLN1856A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10035	1	CONSOLE TELEPHONY MEDIA GATEWAY - 8 POTS LINES & 5	FTX1742AJT8	DDN1405A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10036	1	GGM 8000 GATEWAY	147CPV1852	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10037	1	GGM 8000 GATEWAY	147CPV1868	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10038	1	SITE MANAGER BASIC	469SPU014X	F4543A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10039	1	GCP 8000 SITE CONTROLLER	112CPV0805	T7038A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10040	1	GGM 8000 GATEWAY	147CPV1871	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10041	1	APX7500 CONSOLETTT DUAL BAND MODEL	761CPV0311	L30TSS9PW1AN	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10042	1	APX7500 CONSOLETTT DUAL BAND MODEL	761CPV0304	L30TSS9PW1AN	MOTOROLA	UASI	2009	FCCF-EQRM188-CON2	FCCF	
10043	1	APX7500 CONSOLETTT DUAL BAND MODEL	761CPV0306	L30TSS9PW1AN	MOTOROLA	UASI	2009	FCCF-EQRM188CB2F	FCCF	
10045	1	MOTOROLA VOICE PROCESSOR MODULE	443CPV2540	B1933A	MOTOROLA	UASI	2009	FCCF-DSPATCH-13	FCCF	
10046	1	MOTOROLA VOICE PROCESSOR MODULE	443CPV2541	B1933A	MOTOROLA	UASI	2009	FCCF-DSPATCH-13	FCCF	
10050	1	22" WIDE FORMAT LCD MONITOR BLACK, NON-TOUCH	26510835TA	DS22WBLK	MOTOROLA	UASI	2009	FCCF-DSPATCH-13	FCCF	
10053	1	DELL WYSE P45 ZERO CLIENT WITH 256 MB FLASH AND 4	9PNRM900186	DQ90910221L	MOTOROLA	UASI	2009	FCCF-EQRM188-NMS1	FCCF	
10056	1	MASTER SITE CONFIGURATION - VMS01	USE332BN2X	SQM01SUM0226A	MOTOROLA	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10057	1	MASTER SITE CONFIGURATION - VMS02	USE332BN2K	SQM01SUM0226A	MOTOROLA	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10058	1	MASTER SITE CONFIGURATION - NAS	877CPV1399	T7782A	MOTOROLA	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10059	1	ISSI FIREWALL No.2	COM6L00DRC	TT1932A	JUNIPER	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10060	1	ISGW SERVER USED FOR ISSI / CSSI	NSN	SQM01SUM0227A	MOTOROLA	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10061	1	PRIME/MASTER SITE REDUNDANT MODULAR FREQUENCY TIMI	1332	DSTRAK91008E	TRAK	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10064	1	SRC7500 SWITCHING ROUTING CENTER (7.13 AND BEYOND)	RACKED	SQM01SUM0238A	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10065	1	48 PORT TERMINAL SERVER	00A09C-01D5FE	LX-4048T-102AC	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10066	1	GGSN ROUTER 01	147CPV1352	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10067	1	GGSN ROUTER 02	147CPV1355	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10068	1	GATEWAY ROUTER	147CPV1354	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10069	1	GATEWAY ROUTER	147CPV1350	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10070	1	CORE LAN SWITCH 01	147CPV1340	T7856A	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10071	1	CORE LAN SWITCH 02	147CPV1338	T7856A	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10072	1	CORE LAN SWITCH 03	147CPV1339	T7856A	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10073	1	CORE ROUTER 01	147CPV1344	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10074	1	CORE ROUTER 02	147CPV1345	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10075	1	TA, REALY PANEL RJ-45, WS	147IPQ0249	CLN1772E	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10076	1	BACKHAUL SWITCH 01	147CPV1357	T7854A	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10077	1	BACKHAUL SWITCH 02	147CPV1358	T7854A	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10078	1	CORE ROUTER 03	147CPV1347	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10079	1	CORE ROUTER 04	147CPV1346	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10080	1	CORE ROUTER 05	147CPV1353	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10081	1	CORE ROUTER 06	147CPV1348	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10082	1	EXIT ROUTER 01	147CPV1349	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10083	1	EXIT ROUTER 02	147IMQ0025	ST6000C-S6000	MOTOROLA	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10084	1	LX4000T 8 PORT TERMINAL SERVER, NO DIAL-UP MODEM I	00A00C-10D604	TT2022A	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10085	1	SPARE CABINET ASTRO 7.9 & BEYOND	280CPV0000	CVN6565A	MOTOROLA	UASI	2009	FCCF-EQRM188-SRC	FCCF	
10090	1	2620-24 ETHERNET SWITCH	CN38DDR30Q	CLN1856A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10091	1	2620-24 ETHERNET SWITCH	CN38DDR2XW	CLN1856A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10092	1	2620-24 ETHERNET SWITCH	CN38DDR3G8	CLN1856A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10093	1	2620-24 ETHERNET SWITCH	CN38DDR3MZ	CLN1856A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10094	1	GGM 8000 GATEWAY	147CPV3795	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10095	1	GGM 8000 GATEWAY	147CPV3800	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10096	1	GGM 8000 GATEWAY	147CPV3797	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10097	1	A1 MESSAGING ONLY APPLIANCE	USE331ALR3	SQM01SUM0225A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10098	1	UNIFIED NETWORK SERVICES	232CPV0016	SQM01SUM0257A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	

AGENDA ITEM J - ENCLOSURE 3

EQUIPMENT LISTS FOR FCCF AND PLM EXHIBIT D.2.2

Asset	Phase	Description	Serial Number	Model	Vendor	Funding Source	FY	Position	Deployed Loc	Assigned To
10101	1	UNS-DAS 01	DH51H0U-132519C462	SQM01SUM0221A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10102	1	UNS-DAS 01	DH51H0U-132519C3C1	SQM01SUM0221A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10103	1	KMF CRYPTR	137CPV0003	SQM01SUM0222A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10105	1	ASTRO 25 PDEG ENCRYPTION UNIT	137CPX0028	T7539A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10106	1	ASTRO 25 PDEG ENCRYPTION UNIT	137CPX0027	T7539A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10108	1	SPARE CABINET ASTRO 7.9 & BEYOND	280CPV0001	CVN6565A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10109	1	SSG140 FIREWALL W/ 2 YEARS SUPPORT	0185092013601264	DDN9590A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10110	1	SSG140 FIREWALL W/ 2 YEARS SUPPORT	0185092013601198	DDN9590A	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10111	1	17" LCD DRAWER W/ KEYBOARD & MOUSE, KVM 16 PORTS,	Z8D8-002C6-0008	DDN8325A	NICE	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10113	1	KMF DL380 G8 SERVER WITH WINDOWS SERVER 2008 EMBED	NSN	TT2551B	MOTOROLA	UASI	2009	FCCF-EQRM188-CEN	FCCF	
10125	1	HP LASERJET PRINTER CP3525DN 110V	CNLLFT980PR	DLN6692A	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10155	1	NM Z420 HIGH TIER WIN7-IE9 64BIT	2UA3330H36	TT2565B	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10156	1	NM Z420 HIGH TIER WIN7-IE9 64BIT	2UA3330H4M	TT2565B	MOTOROLA	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10157	1	NM Z420 HIGH TIER WIN7-IE9 64BIT	2UA3330H4D	TT2565B	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10159	1	TECH GLOBAL 19IN LCD NON-TOUCH, BLACK	S38102484NA	DS019BLK	MOTOROLA	UASI	2009	FCCF-EQRM188-NMS1	FCCF	
10163	1	TECH GLOBAL 19IN LCD NON-TOUCH, BLACK	S38102466NA	DS019BLK	MOTOROLA	UASI	2009	FCCF-EQRM188-NMS1	FCCF	
10175	1	NM Z420 HIGH TIER WIN7-IE9 64BIT	2UA3330H3Z	TT2565B	MOTOROLA	UASI	2009	FCCF-EQRM188-NMS1	FCCF	
10177	1	TECH GLOBAL 19IN LCD NON-TOUCH, BLACK	S38102502NA	DS019BLK	MOTOROLA	UASI	2009	FCCF-EQRM188-NMS1	FCCF	
10179	1	Z420 LOW TIER WORKSTATION WINDOWS 7 64BIT	2UA33622Z5	TT2538B	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10183	1	Z420 LOW TIER WORKSTATION WINDOWS 7 64BIT	2UA336230X	TT2538B	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10184	1	Z420 LOW TIER WORKSTATION WINDOWS 7 64BIT	2UA33622ZB	TT2538B	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	LA-RICS to Pick up
10185	1	TECH GLOBAL 19IN LCD NON-TOUCH, BLACK	S38102511NA	DS019BLK	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10186	1	TECH GLOBAL 19IN LCD NON-TOUCH, BLACK	S38102433NA	DS019BLK	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10210	1	TECH GLOBAL 19IN LCD NON-TOUCH, BLACK	S38012516NA	DS019BLK	MOTOROLA	UASI	2009	FCCF-DSPTCH-13	FCCF	
10213	1	SSG140 FIREWALL W/ 2 YEARS SUPPORT	0185092013601258	DDN9590A	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10214	1	SSG140 FIREWALL W/ 2 YEARS SUPPORT	0185092013601026	DDN9590A	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10243	1	ISSI VMS No.7	USE334CPJ5	T7774A	MOTOROLA	UASI	2009	FCCF-EQRM188-CRS	FCCF	
10247	1	GGM 8000 GATEWAY	147CPV1802	SQM01SUM0205A	MOTOROLA	UASI	2009		FCCF	
10248	1	GGM 8000 GATEWAY	147CPV1801	SQM01SUM0205A	MOTOROLA	UASI	2009		FCCF	
10249	1	GGM 8000 GATEWAY	147CPV1800	SQM01SUM0205A	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10250	1	GGM 8000 GATEWAY	147CPV1799	SQM01SUM0205A	MOTOROLA	UASI	2009		FCCF	
10251	1	2620-24 ETHERNET SWITCH	CN38DRR32C	CLN1856A	MOTOROLA	UASI	2009		FCCF	
10252	1	2620-24 ETHERNET SWITCH	CN38DRR3MT	CLN1856A	MOTOROLA	UASI	2009		FCCF	
10253	1	2620-24 ETHERNET SWITCH	CN38DDR3LN	CLN1856A	MOTOROLA	UASI	2009		FCCF	
10329	1	TTA DUAL DIVERSITY TWO PORT CONTROL UNIT, 792-824	157470-E	DS43283H01C48	MOTOROLA	UASI	2009	FCCF-TWR1	FCCF	
10330	1	TTA (TOWER) DUAL DIVERSITY TTA TOWER TOP UNIT, 792	157470-B	DS43283H01T	MOTOROLA	UASI	2009	FCCF-TWR1	FCCF	
10332	1	TTA DUAL DIVERSITY TWO PORT CONTROL UNIT, 792-824	157470-A	DS43283H01C48	MOTOROLA	UASI	2009	FCCF-TWR1	FCCF	
10333	1	TTA (TOWER) DUAL DIVERSITY TTA TOWER TOP UNIT, 792	157470-D	DS43283H01T	MOTOROLA	UASI	2009	FCCF-TWR1	FCCF	
10335	1	TTA DUAL DIVERSITY TWO PORT CONTROL UNIT, 792-824	157470-C	DS43283H01C48	MOTOROLA	UASI	2009	FCCF-TWR1	FCCF	
10336	1	TTA (TOWER) DUAL DIVERSITY TTA TOWER TOP UNIT, 792	157470-F	DS43283H01T	MOTOROLA	UASI	2009	FCCF-TWR1	FCCF	
10474	1	Handheld Scanner	RV1WJB300539PP1A	EP10	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10480	1	Handheld Scanner	RV1ACC320409C3	EP10	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
10481	1	Handheld Scanner	RV1ACC320464C3	EP10	MOTOROLA	UASI	2009	FCCF-EQRM188	FCCF	
11716	1	APX 7000 IMPRES SINGLE UNIT CHARGER	NSN	NNTN7080A	MOTOROLA	SHSGP	2010	LA-RICS--HQ	FCCF	SCOTT ENGLAND
11967	1	APX 7000 IMPRES SINGLE UNIT CHARGER	NSN	NNTN7080A	MOTOROLA	SHSGP	2010		FCCF	HUGO BALLESTEROS
12729	1	BATT IMP STD IP67 LIION 2900M 3100T	NSN	NNTN7038B	MOTOROLA	SHSGP	2010		FCCF	HUGO BALLESTEROS
12765	1	BATT IMP STD IP67 LIION 2900M 3100T	NSN	NNTN7038B	MOTOROLA	SHSGP	2010	LA-RICS--HQ	FCCF	SCOTT ENGLAND
12769	1	BATT IMP STD IP67 LIION 2900M 3100T	NSN	NNTN7038B	MOTOROLA	SHSGP	2010	LA-RICS--HQ	FCCF	SCOTT ENGLAND
12850	1	BATT IMP STD IP67 LIION 2900M 3100T	NSN	NNTN7038B	MOTOROLA	SHSGP	2010	LA-RICS--HQ	FCCF	STEVE WESTON
13161	1	BATT IMP STD IP67 LIION 2900M 3100T	NSN	NNTN7038B	MOTOROLA	SHSGP	2010	LA-RICS--HQ	FCCF	STEVE WESTON
13341	1	IMPRES MULTI UNIT CHARGER with DISP	4092MKL01012F	NNTN7073B	MOTOROLA	SHSGP	2010	FCCF-SHLTR	FCCF	Steve Weston
13360	1	2620-24 ETHERNET SWITCH	CN43DRR0YM	CLN1856	MOTOROLA	SHSGP	2010	FCCF-EQRM133ROW3-CAB2	FCCF	Came from ISD
13425	1	2620-24 ETHERNET SWITCH	CN43DRR0HC	CLN1856	MOTOROLA	SHSGP	2010	FCCF-EQRM133ROW3-CAB2	FCCF	Equipment was assigned to SSC-scc
16464	3	Advanced Power Monitor 380-520	15058216	DSAPM3852K2AC	RFA	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
16616	3	MLC 8000	112ISC0126	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16617	3	MLC 8000	112ISC0125	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16618	3	MLC 8000	112ISC0160	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16619	3	MLC 8000	112ISC0159	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16620	3	GGM 8000 GATEWAY	147CSD0356	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16621	3	GGM 8000 GATEWAY	147CSD0358	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16622	3	2620-24 ETHERNET SWITCH	147CSD0160	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16623	3	2620-24 ETHERNET SWITCH	147CSD0163	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16624	3	GGM 8000 GATEWAY	147CSD0362	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16625	3	GGM 8000 GATEWAY	147CSD0341	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16626	3	GGM 8000 GATEWAY	147CSD0338	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	

AGENDA ITEM J - ENCLOSURE 3

EQUIPMENT LISTS FOR FCCF AND PLM EXHIBIT D.2.2

Asset	Phase	Description	Serial Number	Model	Vendor	Funding Source	FY	Position	Deployed Loc	Assigned To
16627	3	GGM 8000 GATEWAY	147CSD0267	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16629	3	MLC 8000	112ISC0089	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16630	3	MLC 8000	112ISC0088	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16631	3	MLC 8000	112ISC0213	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16632	3	MLC 8000	112ISC0147	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16633	3	MLC 8000	112ISC0165	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16634	3	GGM 8000 GATEWAY	147CSD0282	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16635	3	GGM 8000 GATEWAY	147CSD0275	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16636	3	2620-24 ETHERNET SWITCH	147CSD0159	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16637	3	2620-24 ETHERNET SWITCH	147CSD0157	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16638	3	GGM 8000 GATEWAY	147CSD0280	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16639	3	GGM 8000 GATEWAY	147CSD0261	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16640	3	GGM 8000 GATEWAY	147CSD0265	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16641	3	GGM 8000 GATEWAY	147CSD0305	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16642	3	MLC 8000	112ISC0177	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16643	3	MLC 8000	112ISC0200	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16644	3	MLC 8000	112ISC0190	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16645	3	MLC 8000	112ISC0201	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16646	3	MLC 8000	112ISC0212	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16647	3	GGM 8000 GATEWAY	147CSD0309	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16648	3	GGM 8000 GATEWAY	147CSD0317	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16649	3	2620-24 ETHERNET SWITCH	147CSD0158	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16650	3	2620-24 ETHERNET SWITCH	147CSD0166	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16651	3	GGM 8000 GATEWAY	147CSD0315	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16652	3	GGM 8000 GATEWAY	147CSD0297	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16653	3	GGM 8000 GATEWAY	147CSD0295	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16654	3	GGM 8000 GATEWAY	147CSD0299	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16656	3	MLC 8000	112ISC0202	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16657	3	MLC 8000	112ISC0216	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16658	3	MLC 8000	112ISC0217	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16659	3	MLC 8000	112ISC0178	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16660	3	MLC 8000	112ISC0166	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16661	3	GGM 8000 GATEWAY	147CSD0273	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16662	3	GGM 8000 GATEWAY	147CSD0303	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16663	3	2620-24 ETHERNET SWITCH	147CSD0167	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16664	3	2620-24 ETHERNET SWITCH	147CSD0168	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16665	3	GGM 8000 GATEWAY	147CSD0269	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16666	3	GGM 8000 GATEWAY	147CSD0301	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16667	3	GGM 8000 GATEWAY	147CSD0284	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16668	3	GGM 8000 GATEWAY	147CSD0366	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16669	3	MLC 8000	112ISC0179	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16670	3	MLC 8000	112ISC0180	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16671	3	MLC 8000	112ISC0206	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16672	3	MLC 8000	112ISC0205	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16673	3	MLC 8000	112ISC0153	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16674	3	MLC 8000	112ISC0152	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16675	3	GGM 8000 GATEWAY	147CSD0271	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16676	3	GGM 8000 GATEWAY	147CSD0370	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16677	3	2620-24 ETHERNET SWITCH	147CSD0169	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16678	3	2620-24 ETHERNET SWITCH	147CSD0164	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16679	3	GGM 8000 GATEWAY	147CSD0368	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16680	3	GGM 8000 GATEWAY	147CSD0354	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16681	3	GGM 8000 GATEWAY	147CSD0346	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16682	3	GGM 8000 GATEWAY	147CSD0350	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16684	3	MLC 8000	112ISC0119	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16685	3	MLC 8000	112ISC0301	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16686	3	MLC 8000	112ISC0169	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16687	3	MLC 8000	112ISC0204	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16688	3	MLC 8000	112ISC0151	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16689	3	MLC 8000	112ISC0136	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16690	3	MLC 8000	112ISC0220	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16691	3	MLC 8000	112ISC0221	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16692	3	MLC 8000	112ISC0222	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16693	3	GGM 8000 GATEWAY	147CSD0348	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16694	3	GGM 8000 GATEWAY	147CSD0352	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	

EQUIPMENT LISTS FOR FCCF AND PLM EXHIBIT D.2.2

Asset	Phase	Description	Serial Number	Model	Vendor	Funding Source	FY	Position	Deployed Loc	Assigned To
16695	3	2620-24 ETHERNET SWITCH	147CSD0165	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16696	3	2620-24 ETHERNET SWITCH	147CSD0170	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16697	3	GGM 8000 GATEWAY	147CSD0321	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16698	3	GGM 8000 GATEWAY	147CSD0323	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16699	3	GGM 8000 GATEWAY	147CSD0319	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16700	3	GGM 8000 GATEWAY	147CSD0329	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16701	3	MLC 8000	112ISC0120	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16702	3	MLC 8000	112ISC0138	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16703	3	MLC 8000	112ISC0170	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16704	3	MLC 8000	112ISC0181	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16705	3	MLC 8000	112ISC0207	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16706	3	MLC 8000	112ISC0154	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16707	3	MLC 8000	112ISC0137	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK12	FCCF	
16708	3	MLC 8000	112ISC0139	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16709	3	MLC 8000	112ISC0223	F2979	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16710	3	GGM 8000 GATEWAY	147CSD0327	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16711	3	GGM 8000 GATEWAY	147CSD0325	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16712	3	2620-24 ETHERNET SWITCH	147CSD0178	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16713	3	2620-24 ETHERNET SWITCH	147CSD0174	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK15	FCCF	
16714	3	GGM 8000 GATEWAY	147CSD0311	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16715	3	GGM 8000 GATEWAY	147CSD0313	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16716	3	GGM 8000 GATEWAY	147CSD0307	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16717	3	GGM 8000 GATEWAY	147CSD0375	SQM01SUM0205	MOTOROLA	UASI	2011	FCCF-EQRM188RW3RK14	FCCF	
16730	3	PRIME/MASTER SITE REDUNDANT MODULAR	1471	DSTRAK91008E	TRAK	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16731	3	DISTRIBUTION SHELF FOR 9100 AC	288	DSTRAK93007	TRAK	UASI	2011	FCCF-EQRM188RW3RK13	FCCF	
16743	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201FW	TT2669	NICE	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16744	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201BW	TT2669	NICE	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16747	3	NICE INFORM RESLIENCY BUNDLE WITH SERVER	MXQ602029Z	DDN2106	NICE	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16748	3	NICE STORAGE CENTER SW AND SERVER -	MXQ6020286	TT2693	NICE	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16752	3	NICE STORAGE CENTER SW AND SERVER -	MXQ6020283	TT2693	NICE	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16756	3	17 IN LCD DRAWER WITH KEYBOARD AND	Z8FB-041A4-0024	DDN2092	NICE	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16757	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0047	B1933	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16758	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0048	B1933	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16759	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0050	B1933	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16760	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0051	B1933	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16761	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0049	B1933	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16764	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F8T	TT2833	PCW	UASI	2011	FCCF-EQRM133ROW3-CAB1	FCCF	
16765	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA550189T	TT2833	PCW	UASI	2011	FCCF-EQRM133ROW3-CAB2	FCCF	
16766	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F8P	TT2833	PCW	UASI	2011	FCCF-EQRM133ROW3-CAB1	FCCF	
16767	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA550189K	TT2833	PCW	UASI	2011	FCCF-EQRM133ROW3-CAB1	FCCF	
16768	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201GY	TT2669	NICE	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16769	3	2620-24 ETHERNET SWITCH	147CSD0175	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16770	3	2620-24 ETHERNET SWITCH	147CSD0176	CLN1856	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16772	3	FORTINET FIREWALL APPLIANCE	147CSD0182	T8126	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16773	3	SPARE CABINET ASTRO 7.9 & BEYOND	280CSD0024	CVN6565	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16774	3	SPARE CABINET ASTRO 7.9 & BEYOND	280CSD0025	CVN6565	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16776	3	FORTINET FIREWALL APPLIANCE	147CSD0183	T8126	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16896	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F97	TT2833	PCW	UASI	2011	FCCF-EQRM133ROW3-CAB1	FCCF	
16898	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F9M	TT2833	PCW	UASI	2011	FCCF-EQRM133ROW3-CAB1	FCCF	
16909	1	MASTER SITE CONFIGURATION	877CSD0430	T8095A	MOTOROLA	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16910	3	MASTER SITE CONFUIRATION/HP DL380 GEN 9 CTO SERVER	MXQ54907RN	T8095A	MOTOROLA	UASI	2011	FCCF-EQRM188-CRS	FCCF	
16924	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201GC	TT2669	NICE	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16925	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ54701PQ	TT2669	NICE	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16926	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201GB	TT2669	NICE	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16927	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201CW	TT2669	NICE	UASI	2011	FCCF-EQRM188RW3CB1	FCCF	
16928	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201DK	TT2669	NICE	UASI	2011	FCCF-EQRM188RW3CB2	FCCF	
16931	3	MASTER SITE CONFUIRATION/HP DL380 GEN 9 CTO SERVER	MXQ54907RJ	T8095A	MOTOROLA	UASI	2011	FCCF-EQRM188-CRS	FCCF	
17030	3	GTR 8000 EXPANDABLE SITE SUBSYSTEM	112CSV0780	7054A	MOTOROLA	UASI	2012	FCCF-EQRM188RW3RK12	FCCF	
17031	3	GTR 8000 for Expandable Site Subsystem	112CSV0777	T7613A	MOTOROLA	UASI	2012	FCCF-EQRM133-ROW3RACK12	FCCF	
17032	3	GTR 8000 for Expandable Site Subsystem	112CSV0778	T7613A	MOTOROLA	UASI	2012	FCCF-EQRM133-ROW3RACK12	FCCF	
17033	3	GTR 8000 for Expandable Site Subsystem	112CSV0781	7054A	MOTOROLA	UASI	2012	FCCF-EQRM133-ROW3RACK13	FCCF	
17034	3	CONTROL MONITORING UNIT, 796-824 MHz	163501398	DS43783101C48	TXR	UASI	2012	FCCF-EQRM133-ROW3RACK13	FCCF	
17035	3	TTA, 796-824MHZ, SINGLE / DUAL NETWORK	211184-A	DS43783101T	TXR	UASI	2012	FCCF-TWR	FCCF	
17036	3	Advanced Power Monitor 740-870	16038342	DSAPM7487K2AC	RFA	UASI	2012	FCCF-EQRM133-ROW3RACK13	FCCF	
17037	3	GGM 8000 Gateway	147CSV0682	SQM01SUM0205A	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	

Returned form PLM 5-6-16

AGENDA ITEM J - ENCLOSURE 3

EQUIPMENT LISTS FOR FCCF AND PLM EXHIBIT D.2.2

Asset	Phase	Description	Serial Number	Model	Vendor	Funding Source	FY	Position	Deployed Loc	Assigned To
17038	3	GGM 8000 Gateway	147CSV0685	SQM01SUM0205A	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17039	3	GTR 8000 for Expandable Site Subsystem	112CSV0960	T7054A	MOTOROLA	UASI	2012	FCCF-EQRM133ROW1-RACK9	FCCF	
17040	3	GTR 8000 for Expandable Site Subsystem	112CSV0958	T7054A	MOTOROLA	UASI	2012	FCCF-EQRM133ROW1-RACK10	FCCF	
17041	3	Advanced Power Monitor 380-520 MHz	16038231	DSAPM3852K2AC	RFA	UASI	2014	FCCF-EQRM133ROW1-RACK10	FCCF	
17042	3	GPW 8000 Receiver	112CSV0668	T7540A	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17043	3	GPW 8000 Receiver	112CSV0670	T7540A	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17044	3	GPW 8000 Receiver	112CSV0671	T7540A	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17045	3	2620-24 Ethernet Switch	147CSV0679	CLN1856	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17046	3	2620-24 Ethernet Switch	147CSV0680	CLN1856	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17047	3	GGM 8000 Gateway	147CSV0688	SQM01SUM0205	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17048	3	GGM 8000 Gateway	147CSV0694	SQM01SUM0205	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17049	3	MLC 8000	112ISU0095	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17050	3	MLC 8000	112ISU0090	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17051	3	MLC 8000	112ISU0089	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17052	3	MLC 8000	112ISU0092	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17053	3	MLC 8000	112ISU0096	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17054	3	UHF Dual Band RX Milled Window	d45182001-1	DQNPDI574RU1	DBP	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17055	3	RMC06 8 Channel High Gain AMP Univ.	B45182005-1	DSDSRMC0608BA	DBP	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17056	3	GPW 8000 Receiver	112CSV0672	T7540	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17057	3	GPW 8000 Receiver	112CSV0669	T7540	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17058	3	GPW 8000 Receiver	112CSV0673	T7540	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17059	3	2620-24 Ethernet Switch	147CSV0673	CLN1856	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17060	3	2620-24 Ethernet Switch	147CSV0674	CLN1856	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17061	3	GGM 8000 Gateway	147CSV0690	SQM01SUM0205	MOTOROLA	UASI	2012	FCCF-EQRM133ROW1-RACK10	FCCF	
17062	3	GGM 8000 Gateway	147CSV0692	SQM01SUM0205	MOTOROLA	UASI	2012	FCCF-EQRM133ROW1-RACK10	FCCF	
17063	3	MLC 8000	112ISU0097	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17064	3	MLC 8000	112ISU0094	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17065	3	MLC 8000	112ISU0091	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17066	3	MLC 8000	112ISU0098	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17067	3	MLC 8000	112ISU0093	F2979	MOTOROLA	UASI	2012	FCCF-EQRM133ROW3-RACK6	FCCF	
17068	3	VHF Dual Band RX Milled Window	B45182006-1	DQNPDI574RV1	DBP	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17069	3	RMC06 8 Channel High Gain AMP Univ.	B45182007-1	DSDSRMC0608AA	DBP	UASI	2012	FCCF-EQRM133ROW3-RACK15	FCCF	
17085	3	HD 746-869 MHz 6dBd DT06 Low Pim PIP	CC000083862-2-1	DSSC476HF1D6E5749	SINCLAIR	UASI	2014	FCCF-TWR	FCCF	
17086	3	COLL OMNI 746-869 MHz 9 DB Null Fill DT4	CC000083862-1-1	DSSC479HF1LDFD4NU	SINCLAIR	UASI	2014	FCCF-TWR	FCCF	
17087	3	COLL OMNI 746-869 MHz 9 DB Null Fill DT4	CC000083862-1-2	DSSC479HF1LDFD4NU	SINCLAIR	UASI	2014	FCCF-TWR	FCCF	
17123	3	Omni Corporae Collinear 9DBD 450-520MHz 3DEG DT,Pim Rated	12921028/42669 3	DSCC45009T3	RFA	UASI	2014	FCCF-TWR	FCCF	
17124	3	Omni Corporae Collinear 9DBD 450-520MHz 3DEG DT,Pim Rated	12921028/42669 2	DSCC45009T3	RFA	UASI	2014	FCCF-TWR	FCCF	
17125	3	Offset Exposed Dipole Array 9DBD, 400-520MHz Pim	11526711/42118 3	DSOA4067DIN	RFA	UASI	2014	FCCF-TWR	FCCF	
17126	3	Offset Exposed Dipole Array 5DBD, 400-520MHz Pim Rated	12517297/42530 1	DSOA2067DIN	RFA	UASI	2014	FCCF-TWR	FCCF	
17127	3	Offset Exposed Dipole Array 5DBD, 400-520MHz Pim Rated	12517297/42530 2	DSOA2067DIN	RFA	UASI	2014	FCCF-TWR	FCCF	
17147	3	Offset Exposed Dipole Array 9DBD, 136-174MHz Pim Rated	11078146/41922 5	DSOA4041DIN	RFA	UASI	2014	FCCF-TWR	FCCF	
17194	3	2620-24 Ethernet Switch	147CTB0374	CLN1856	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17195	3	2620-24 Ethernet Switch	147CTB0373	CLN1856	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17196	3	GGM 8000 Gateway	147CTB0763	SQM01SUM0205	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17197	3	GGM 8000 Gateway	147CTB0761	SQM01SUM0205	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17198	3	MLC 8000	112ITA0031	F2979	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17199	3	MLC 8000	112ITA0035	F2979	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17200	3	MLC 8000	112ITA0036	F2979	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17201	3	MLC 8000	112ITA0025	F2979	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17202	3	UHF Single Band RX Milled Win Filter for the AC	B45587009-1	DQNPDI574RU2	DBP	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17203	3	RMC06 8Ch High Gain AMP Univ RMC AC Pwr	B44587016-1	DSDSRMC0608BA	DBP	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17204	3	GTR 8000 Base Radio	112CTB0812	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17205	3	GTR 8000 Base Radio	112CTB0815	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17206	3	GTR 8000 Base Radio	112CTB0814	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17207	3	GTR 8000 Base Radio	112CTB0796	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17209	3	2620-24 Ethernet Switch	147CTB0306	CLN1856	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17210	3	2620-24 Ethernet Switch	147CTB0305	CLN1856	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17211	3	GGM 8000 Gateway	147CTB0777	SQM01SUM0205	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17212	3	GGM 8000 Gateway	147CTB0753	SQM01SUM0205	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17213	3	MLC 8000	112ITA0052	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17214	3	MLC 8000	112ITA0026	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17215	3	MLC 8000	112ITA0033	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17216	3	MLC 8000	112ITA0032	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17217	3	MLC 8000	112ITA0013	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17218	3	5 CHANNEL 480MHZ SINGLE BAND INTEGR	145587001-1 (1 of 3)	DQNPDI57455	DBP	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	

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Asset	Phase	Description	Serial Number	Model	Vendor	Funding Source	FY	Position	Deployed Loc	Assigned To
17219	3	5 CHANNEL 480MHZ SINGLE BAND INTEGR	145587001-1 (2 of 3)	DQNPDI57455	DBP	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17220	3	5 CHANNEL 480MHZ SINGLE BAND INTEGR	145587001-1 (3 of 3)	DQNPDI57455	DBP	UASI	2014	FCCF-EQRM133ROW1-RACK9	FCCF	
17222	3	GTR 8000 Base Radio	112CTB0820	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17223	3	GTR 8000 Base Radio	112CTB0821	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17224	3	GTR 8000 Base Radio	112CTB0804	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17225	3	GTR 8000 Base Radio	112CTB0803	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17226	3	GTR 8000 Base Radio	112CTB0800	T7039	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17227	3	2620-24 Ethernet Switch	147CTB0321	CLN1856	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17228	3	2620-24 Ethernet Switch	147CTB0322	CLN1856	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17229	3	GGM 8000 Gateway	147CTB0867	SQM01SUM0205	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17230	3	GGM 8000 Gateway	147CTB0869	SQM01SUM0205	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17231	3	MLC 8000	112ITA0073	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17232	3	MLC 8000	112ITA0056	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17233	3	MLC 8000	112ITA0066	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17234	3	MLC 8000	112ITA0065	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17235	3	MLC 8000	112ITA0055	F2979	MOT	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17236	3	5 Channel 480MHz Single Band Integr	D45587001-1 (1 of 3)	DQNPDI57455	DBP	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17237	3	5 CHANNEL 480MHZ SINGLE BAND INTEGR	D45587001-1 (2 of 3)	DQNPDI57455	DBP	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17238	3	5 CHANNEL 480MHZ SINGLE BAND INTEGR	D45587001-1 (3 of 3)	DQNPDI57455	DBP	UASI	2014	FCCF-EQRM133ROW1-RACK11	FCCF	
17240	3	GPW 8000 Receiver	112CTB0857	T7540	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
17241	3	GPW 8000 Receiver	112CTB0856	T7540	MOT	UASI	2014	FCCF-EQRM133ROW3-RACK6	FCCF	
18081	2	180' Self-Supporting Tower	154018	S3TL-HD	SABRE	UASI	2012	FCCF-TWR	FCCF	
18101	3	Omni Corporate Collinear 9DBD 450-520MHz 3DEG DT,Pim Rated	12141456/42426 1	D5CC45009T3	RFA	UASI	2014	FCCF-TWR	FCCF	
18102	3	Omni Corporate Collinear 9DBD 450-520MHz 3DEG DT,Pim Rated	12141456/42426 2	D5CC45009T3	RFA	UASI	2014	FCCF-TWR	FCCF	
18103	3	Omni Corporate Collinear 9DBD 450-520MHz 3DEG DT,Pim Rated	12141456/42426 3	D5CC45009T3	RFA	UASI	2014	FCCF-TWR	FCCF	
18114	3	Omni Corporate Collinear 9DBD 450-520MHz 3DEG DT,Pim Rated	12921028/42669 4	D5CC45009T3	RFA	UASI	2014	FCCF-TWR	FCCF	
18136	3	Offset Exposed Dipole Array 9DBD, 400-520MHz Pim	11985192/42353 4	D5QA4067DIN	RFA	UASI	2014	FCCF-TWR	FCCF	
18170	3	Remote GPS Antenna Mobra	PNB011303	D5900372702	PTR	UASI	2014	FCCF-TWR	FCCF	
18171	3	Remote GPS Antenna Mobra	PNB011304	D5900372702	PTR	UASI	2014	FCCF-TWR	FCCF	
18172	3	Remote GPS Antenna Mobra	PNB011305	D5900372702	PTR	UASI	2014	FCCF-TWR	FCCF	
18173	3	Remote GPS Antenna Mobra	PNB011306	D5900372702	PTR	UASI	2014	FCCF-TWR	FCCF	
18254	3	Omni Corporate Collinear 9DBD 450-520MHz 3DEG DT,Pim R	13024537-1	D5CC45009T3	RFA	UASI	2013	MWHSE	FCCF	
18255	3	Omni Corporate Collinear 9DBD 450-520MHz 3DEG DT,Pim R	13024537-3	D5CC45009T3	RFA	UASI	2013	MWHSE	FCCF	
18928	3	OmniSwitch 6450 - Stackable Gigabit Ethernet Lan Switch	V4382364	OS6450-24	ALE	UASI	2017	FCCF-EQRM188RW3RK16	FCCF	
18934	3	OmniSwitch 6450 - Stackable Gigabit Ethernet Lan Switch	V4382398	OS6450-24	ALE	UASI	2017	FCCF-EQRM188RW3RK16	FCCF	
19025	3	SAR-18 Router, Shelf	NS1738F0827	3HE04991AA	NOK	UASI	2017	FCCF-EQRM188RW3RK16	FCCF	
19206	3	SaluLine Antenna 6ft. (1.8m)	17U5462245729	VHLP6-6W-6WH/B	NEC	UASI	2013	FCCF-TWR	FCCF	
19207	3	ValuLine Antenna 6ft. (1.8m)	17U5462362830	VHLPX6-18-NC3(A)	NEC	UASI	2013	FCCF-TWR	FCCF	
19208	3	ValuLine Antenna 1ft. (0.3m)	17U5462471050	VHLP1-23-NC3(G)	NEC	UASI	2013	FCCF-TWR	FCCF	
19209	3	ValuLine Antenna 3ft. (1m)	17U5462497337	VHLP3-23W-NC3(E)	NEC	UASI	2013	FCCF-TWR	FCCF	
19210	3	ValuLine Antenna 3ft. (1m)	17U5462503335	VHLP3-6W-6WH/A	NEC	UASI	2013	FCCF-TWR	FCCF	
19241	3	NETWORK SECURITY APPLIANCE	FGT60DQ16089237	FG-60D-BDL-950-36	FORTINET	UASI	2017	FCCF-EQRM188RW3RK16	FCCF	
19248	3	Z440 Workstation – Windows 7, 64Bit	2UA7501MY0	CTO-TT2833	PCW	UASI	2017	MWHSE	FCCF	
19250	3	DL380 G9 Server, HC 900 GB Disk	877CUB0048	DLN6975A	MOT	UASI	2017	FCCF-EQRM188RW3RK16	FCCF	
19258	3	ANTENNA, 6 FT (1.8M) SHIELDED	18US460051719	UX6-59-P3A/L	NEC	UASI	2017	FCCF-TWR	FCCF	
19259	3	ANTENNA, 8 FT (2.4M) SHIELDED	18US460051724	UHX8-59-P3A	NEC	UASI	2017	FCCF-TWR	FCCF	
19266	3	FORTINET FIREWALL APPLIANCE	147CUB1898	T8126	MOT	UASI	2017	FCCF-EQRM188RW3RK16	FCCF	
19267	3	FORTINET FIREWALL APPLIANCE	147CUB1889	T8126	MOT	UASI	2017	FCCF-EQRM188RW3RK16	FCCF	
19270	3	T/Mon LNX Alarm Management System, Dual -48V Quad-3.1 GHz	IAM1037113	D-PK-TMLNX-12001.00002	DPS	UASI	2017	MOTO	FCCF	Joshua
19313	3	17" LCD DRAWER W/ KEYBOARD & MOUSE, KVM 16 PORTS,	Z3H2-106-0269	DDN2092A	NICE	UASI	2017	MWHSE	FCCF	
19315	3	Procurve 620 Redundant/External Power Supply	SG538JM00M	0171106H06	HP	UASI	2017	MWHSE	FCCF	
19316	3	Procurve 620 Redundant/External Power Supply	SG538JM009	0171106H06	HP	UASI	2017	MWHSE	FCCF	
19317	3	Procurve 620 Redundant/External Power Supply	SG538JM005	0171106H06	HP	UASI	2017	MWHSE	FCCF	
19318	3	Procurve 620 Redundant/External Power Supply	SG418SM01D	0171106H06	HP	UASI	2017	MWHSE	FCCF	
19340	3	BASIC IDU FOR IPASOLINK 650	AB-3717-22-0853	13820-006	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19341	3	MAIN-B (CONTROL CARD (2GBE+16DS1) FOR IPASOLINK 650	AB-3816-15-6217	13820-080	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19342	3	MAIN-B	AB-3617-17-8201	CBG-13820-080	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19343	3	AMR MODEM CARD, EH, NO AES	0000003367	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19344	3	AMR MODEM CARD, EH, NO AES	0000003733	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19345	3	AMR MODEM CARD, EH, NO AES	0000003356	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19346	3	AMR MODEM CARD, EH, NO AES	0000003727	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19347	3	AMR MODEM CARD, EH, NO AES	0000003734	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19348	3	CEL-5 INTF CARD - 2XGBE RJ-45 + 2GB	AB-1015-19-5733	13820-180	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19349	3	CEL-5 INTF CARD - 2XGBE RJ-45 + 2GB	AB-1115-19-5988	13820-180	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19350	3	BASIC IDU FOR IPASOLINK 650	AB-3717-22-0851	13820-006	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	

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Asset	Phase	Description	Serial Number	Model	Vendor	Funding Source	FY	Position	Deployed Loc	Assigned To
19351	3	MAIN-B (CONTROL CARD (2GBE+16DS1) FOR IPASOLINK 650	AB-3617-17-8191	13820-0B0	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19352	3	MAIN-B	AB-1015-14-7490	CBG-13820-0B0	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19353	3	AMR MODEM CARD, EH, NO AES	0000003485	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19354	3	AMR MODEM CARD, EH, NO AES	0000003462	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19355	3	AMR MODEM CARD, EH, NO AES	0000003496	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19356	3	AMR MODEM CARD, EH, NO AES	0000003457	A-86220-001	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19357	3	CEL-5 INTF CARD - 2XGBE RJ-45 + 2GB	AB-1015-19-5804	13820-180	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19358	3	CEL-5 INTF CARD - 2XGBE RJ-45 + 2GB	AB-1015-19-5783	13820-180	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19359	3	NETGUARDIAN VOIP ORDER WIRE DUAL -48V, SPEAKER & HANDSET	60312	D-PK-216OW-12004	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19360	3	NETG G4 480, DUAL -24/48V, RTC, 1-PLUG, TP	60844	Q24-FR000000133051	NEC	UASI	2013	FCCF-EQRM188RW3RK16	FCCF	
19361	3	TRP-6G-2E, IAP, L6G, SB-B, TX-LO, N-TYPE	0000009581	84116-FC0-LB	NEC	UASI	2013	FCCF-TWR	FCCF	
19362	3	TRP-6G-2E, IAP, L6G, SB-B, TX-LO, N-TYPE	0000009582	84116-FC0-LB	NEC	UASI	2013	FCCF-TWR	FCCF	
19363	3	TRP-6G-2E, IAP, L6G, SB-C, TX-LO, N-TYPE	0000009583	84116-FC0-LC	NEC	UASI	2013	FCCF-TWR	FCCF	
19364	3	TRP-6G-2E, IAP, L6G, SB-D, TX-LO, N-TYPE	0000009586	84116-FC0-LD	NEC	UASI	2013	FCCF-TWR	FCCF	
19365	3	TRP-6G-2E, IAP, L6G, SB-D, TX-LO, N-TYPE	0000009587	84116-FC0-LD	NEC	UASI	2013	FCCF-TWR	FCCF	
19366	3	TRP-18G-1E, IAG, 18G, ODU, S-B C, TX HI	0000108646	78619-CB0-HC	NEC	UASI	2013	FCCF-TWR	FCCF	
19367	3	TRP-18G-1E, IAG, 18G, ODU, S-B C, TX HI	0000108653	78619-CB0-HC	NEC	UASI	2013	FCCF-TWR	FCCF	
19368	3	TRP-23-1E, 23G, ODU, SB-FREE, TX:HI	0000072184	78620-CBA-H	NEC	UASI	2013	FCCF-TWR	FCCF	
19369	3	TRP-23-1E, 23G, ODU, SB-FREE, TX:HI	0000068048	78620-CBA-H	NEC	UASI	2013	FCCF-TWR	FCCF	
19370	3	TRP-23-1E, 23G, ODU, SB-FREE, TX:HI	0000069889	78620-CBA-HX	NEC	UASI	2013	FCCF-TWR	FCCF	
20174	3	AMR MODEM CARD, EH, NO AES	0000003761	A-86220-001	NEC	UASI	2013	MWHSE	FCCF	
20190	3	Power Edge R430 / IPASONET Server	110TBM2	F28S / KDM03	DELL	UASI	2017	FCCF-EQRM188RW3RK16	FCCF	

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Asset	Phase	Description	Serial Number	Model	Vendor	Funding Source	FY	Position	Deployed Location	Subsystem
10207	1	ISGW SERVER USED FOR ISSI / CSSI	USE334CPJL	SQM01SUM0227A	MOTOROLA	UASI	2009	PLM-RM114RW2CB1	PLM	DTVRS
10215	1	ISG 1000 FIREWALL	0133012013000089	TT1932A	JUNIPER	UASI	2009	PLM-RM114RW2CB1	PLM	DTVRS
10571	1	MASTER SITE CONFIGURATION - VMS09	USE346L263	SQM01SUM0239	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
10572	1	MASTER SITE CONFIGURATION - VMS10	USE346L26C	SQM01SUM0239	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
10573	1	MASTER SITE CONFIGURATION - DAS03	877CQB0322	T7782A	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
10645	1	NM 2420 High Tier WIN7-IE9 64 Bit DSR NM Client 01	2UA4041PJ	TT2565C	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
10655	1	GGM 8000 Gateway (Border Router)	147CQB0145	SQM01SUM0205A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10673	1	SSG140 Firewall W/2 YRS SUPPORT (Firewall 1)	185112013600924	DDN9590A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10674	1	SSG140 Firewall W/2 YRS Support (Firewall 2)	185112013600953	DDN9590A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10675	1	2620-24 Ethernet Switch (CNE Black Switch)	CN39DRR0N6	CLN1856A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10676	1	2620-24 Ethernet Switch (DMZ LAN Switch 01)	CN39DRR0FW	CLN1856A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10677	1	2620-24 Ethernet Switch (DMZ LAN Switch 02)	CN39DRR0PS	CLN1856A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10678	1	2620-24 ETHERNET SWITCH (CEN Red Switch)	CN39DRR0N9	CLN1856A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10679	1	GGM 8000 Gateway (Peripheral Router RTR02)	147CQB1110	SQM01SUM0205A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10680	1	GGM 8000 Gateway (Peripheral Router RTR01)	147CQB1112	SQM01SUM0205A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10681	1	GGM 8000 Gateway (Border Gateway 02)	147CQB1111	SQM01SUM0205A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10683	1	48 PORT TERMINAL SERVER	00A09C-01E240	LX-4048T-102AC	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10684	1	GGSN ROUTER 01	147CQB1605	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10685	1	GGSN ROUTER 02	147CQB1604	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10686	1	GATEWAY ROUTER	147CQB1609	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10687	1	GATEWAY ROUTER	147CQB1607	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10688	1	CORE LAN SWITCH 01	SG30G0W17J	T7856A	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10689	1	CORE LAN SWITCH 02	SG30G0W17K	T7856A	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10690	1	CORE LAN SWITCH 03	SG30G0W181	T7856A	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10691	1	CORE ROUTER 09	147CQB1606	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10692	1	CORE ROUTER 10	147CQB1611	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10693	1	BACKHAUL SWITCH 01	CN30DRR18N	T7854A	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10694	1	BACKHAUL SWITCH 02	CN30DRR20Y	T7854A	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10695	1	CORE ROUTER 11	147CQB1613	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10696	1	CORE ROUTER 12	147CQB1610	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10698	1	EXIT ROUTER 02	147CQB1608	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
10762	1	ASTRO 25 PDEG Encryption Unit	137CQB0010	T7539A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10763	1	ASTRO 25 PDEG Encryption Unit	137CQB0009	T7539A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10766	1	UNIFIED NETWORK SERVICES UNS01	USE342HTM2	SQM01SUM0257A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10767	1	UNIFIED NETWORK SERVICES UNS02	USE432HTM4	SQM01SUM0257A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10768	1	UNS-DAS 01	232CQB0016	SQM01SUM0221A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10770	1	SPARE CABINET ASTRO 7.9 & BEYOND	280CQB0024	CVN6565A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10771	1	SPARE CABINET ASTRO 7.9 & BEYOND	280CQB0023	CVN6565A	MOTOROLA	UASI	2010	PLM-RM114RW2CB2	PLM	DTVRS
10774	1	17" LCD Drawer W/ Keyboard & Mouse, KVM 16 Ports,	Z8D9-064C6-0036	DDN8325A	NICE	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
10775	1	KMF CRYPT8	NSN	SQM01SUM0222A	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10777	1	KMF DL380 G8 Server W/Windows Server 2008 Emb.	USE349MC5H	TT2551B	MOTOROLA	UASI	2010	PLM-RM114RW2CB3	PLM	DTVRS
10785	1	Z420 Low Tier WorkStation WIN7 64 Bit KFM Client 01	2UA4032LJZ	TT2538B	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
10786	1	Z420 Low Tier WorkStation WIN7 64 Bit Text Messaging Client AMS Client 01	2UA4032LH9	TT2538B	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
10836	1	PRIME/MASTER SITE REDUNDANT MODULAR FREQUENCY TIMI	1346	DSTRAK91008E	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
16091	3	EXIT ROUTER 01	147IPN0201	ST6000C-S6000	MOTOROLA	UASI	2010	PLM-RM114RW2CB1	PLM	DTVRS
16762	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501D8H	TT2833	PCW	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16763	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F3T	TT2833	PCW	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16771	3	GGM 8000 GATEWAY	147CSD0259	SQM01SUM0205	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16775	3	GGM 8000 GATEWAY	147CSD0253	SQM01SUM0205	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16847	3	GTR 8000 EXPANDABLE SITE SUBSYSTEM	112CSD0312	T7054A	MOTOROLA	UASI	2011	PLM-RM114RW1RK1	PLM	DTVRS
16848	3	GGM 8000 GATEWAY	112CSD0304	CA01706AA	MOTOROLA	UASI	2011	PLM-RM114RW1RK1	PLM	DTVRS
16849	3	GGM 8000 GATEWAY	112CSD0305	CA01706AA	MOTOROLA	UASI	2011	PLM-RM114RW1RK1	PLM	DTVRS
16851	3	TTA, DUAL DIVERSITY, 796-824 MHZ, R	192768-B	DS432E83I01T	TXR	UASI	2011	PLM-TWR	PLM	DTVRS
16856	3	ADVANCED POWER MONITOR, 740-870 MHZ	13038004	DSAPM7487K248	RFA	UASI	2011	PLM-RM114RW1RK1	PLM	DTVRS
16865	3	2620-24 ETHERNET SWITCH	147CSD0585	CLN1856	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	DTVRS
16866	3	2620-24 ETHERNET SWITCH	147CSD0586	CLN1856	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	DTVRS
16872	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ5510649	TT2669	NICE	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16873	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201K1	TT2669	NICE	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16876	3	INFOR R7.0 TURNKEY BUNDLE SERVER	MXQ6020276	TT2672	NICE	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16880	3	NICE STORAGE CENTER SW AND SERVER	MXQ6020287	TT2693	NICE	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16884	3	NICE STORAGE CENTER SW AND SERVER	MXQ6020284	TT2693	NICE	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16888	3	17 IN LCD DRAWER WITH KEYBOARD AND	Z8FB-041A4-0021	DDN2092	NICE	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16889	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0042	B1933	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16890	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0046	B1933	MOTOROLA	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16891	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0044	B1933	MOTOROLA	UASI	2011	PLM-RM114RW1CB1	PLM	Logging

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EQUIPMENT LISTS FOR FCCF AND PLM EXHIBIT D.2.2

16892	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0043	B1933	MOTOROLA	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16893	3	MOTOROLA VOICE PROCESSOR MODULE	443CSD0045	B1933	MOTOROLA	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16894	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F9K	TT2833	PCW	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16895	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F9T	TT2833	PCW	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16897	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F8H	TT2833	PCW	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16899	3	COMPUTER, Z440 WORKSTATION WINDOWS	2UA5501F9P	TT2833	PCW	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16900	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201CY	TT2669	NICE	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16901	3	2620-24 ETHERNET SWITCH	147CSD0172	CLN1856	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16902	3	2620-24 ETHERNET SWITCH	147CSD0171	CLN1856	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16903	3	GGM 8000 GATEWAY	147CSD0613	SQM01SUM0205	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16904	3	FORTINET FIREWALL APPLIANCE	147CSD0181	T8126	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16905	3	SPARE CABINET ASTRO 7.9 & BEYOND	280CSD0027	CVN6565	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16906	3	SPARE CABINET ASTRO 7.9 & BEYOND	280CSD0026	CVN6565	MOTOROLA	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16907	3	GGM 8000 GATEWAY	147CSD0617	SQM01SUM0205	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16908	3	FORTINET FIREWALL APPLIANCE	147CSD0180	T8126	MOTOROLA	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16911	3	Master Site Configuration/HP DL380 GEN 9 CTO Server	MXQ604002P	T8095A	MOTOROLA	UASI	2011	PLM-RM114RW2CB1	PLM	DTVRS
16916	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201KQ	TT2669	NICE	UASI	2011	PLM-RM114RW1CB2	PLM	Logging
16917	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201B9	TT2669	NICE	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16918	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ60201FX	TT2669	NICE	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16919	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ6551064J	TT2669	NICE	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16932	3	Master Site Configuration/HP DL380 GEN 9 CTO Server	MXQ604002S	T8095A	MOTOROLA	UASI	2011	PLM-RM114RW2CB1	PLM	DTVRS
16969	2	DC POWER SYSTEM, FP2 -48/600A D23C2	161143000007	DS350627	ELTEK	UASI	2011	PLM-SHLTR	PLM	GENSITE
16981	1	Uninterruptible Power Supply	EK165CBC03	TB0511A51133010	EATON	UASI	2012	PLM-PWR	PLM	DTVRS
16982	1	9390 Battery Cabinet	FK163DA001	TS0503E20111101	EATON	UASI	2012	PLM-PWR	PLM	DTVRS
16983	3	120 SIMUL CALL MCC 7500 IP RECORDER	MXQ551062S	TT2669	NICE	UASI	2011	PLM-RM114RW1CB1	PLM	Logging
16996		19" KVM Server Tray	16070717	KVT419A-R4	GRAYBAR	MSI Funded		PLM-RM114RW2CB3	PLM	Logging
17076	3	HD 746-869 MHz 6dB DT06 Low Pim PIP	CC000083859-2-1	DSSC479HF1D6E5749	SINCLAIR	UASI	2014	PLM-TWR	PLM	DTVRS
17077	3	COLL OMNI 746-869 MHz 9 DB Null Fill DT4	CC000083859-1-1	DSSC479HF1LDFD4NU	SINCLAIR	UASI	2014	PLM-TWR	PLM	DTVRS
17078	3	COLL OMNI 746-869 MHz 9 DB Null Fill DT4	CC000083859-1-2	DSSC479HF1LDFD4NU	SINCLAIR	UASI	2014	PLM-TWR	PLM	DTVRS
18184	3	Remote GPS Antenna Mobra	PNB011317	DS900372702	PTR	UASI	2014	PHN-TWR	PLM	DTVRS
18185	3	Remote GPS Antenna Mobra	PNB011318	DS900372702	PTR	UASI	2014	PHN-TWR	PLM	DTVRS
18186	3	Remote GPS Antenna Mobra	PNB011319	DS900372702	PTR	UASI	2014	PLM-TWR	PLM	DTVRS
18187	3	Remote GPS Antenna Mobra	PNB011320	DS900372702	PTR	UASI	2014	PLM-TWR	PLM	DTVRS
18388	3	TRP-11G-2E IAP ODU S-B FREE TX HI	6539	84121-CBA-H	NEC	UASI	2013	MWHSE	PLM	Backhaul
18389	3	TRP-11G-2E IAP ODU S-B FREE TX HI	6540	84121-CBA-H	NEC	UASI	2013	MWHSE	PLM	Backhaul
18390	3	TRP-11G-2E IAP ODU S-B FREE TX HI	6543	84121-CBA-H	NEC	UASI	2013	MWHSE	PLM	Backhaul
18391	3	TRP-11G-2E IAP ODU S-B FREE TX HI	10829	84121-CBA-H	NEC	UASI	2013	MWHSE	PLM	Backhaul
18392	3	Antenna 3ft, 11GHz OMT	16U5463064688	VHLPX3-11W-NC3(A)	NEC	UASI	2013	PLM-TWR	PLM	Backhaul
18393	3	Antenna 3ft, 11GHz OMT	17U5461109135	VHLPX3-11W-NC3(A)	NEC	UASI	2013	PLM-TWR	PLM	Backhaul
18435	2	HVAC CONTROLLER-48V BASE WALL UNIT	1035065	DSDPKHVAC4UNIT	DPS	UASI	2013	PLM-SHLTR	PLM	GENSITE
18439	3	S6000 MNR MULTI-P CORE ROUTER	147CTT2482	ST6000C	MOT	MSI Funded	2017	PLM-RM114RW2CB2	PLM	DTVRS
18440	3	S6000 MNR MULTI-P CORE ROUTER	147CTT2483	ST6000C	MOT	MSI Funded	2017	PLM-RM114RW2CB2	PLM	DTVRS
18929	3	OmniSwitch 6450 - Stackable Gigabit Ethernet Lan Switch	V4382367	OS6450-24	ALE	UASI	2017	PLM-SHLTR	PLM	Backhaul
18931	3	OmniSwitch 6450 - Stackable Gigabit Ethernet Lan Switch	V4382378	OS6450-24	ALE	UASI	2017	PLM-SHLTR	PLM	Backhaul
19024	3	SAR-18 Router, Shelf	NS1738F1172	3HE04991AA	NOK	UASI	2017	PLM-SHLTR	PLM	Backhaul
19242	3	NETWORK SECURITY APPLIANCE	FGT60D4Q16093620	FG-60D-BDL-950-36	FORTINET	UASI	2017	PLM-SHLTR	PLM	SMMS
19246	3	Z440 Workstation - Windows 7, 64Bit	2UA7501MX9	CTO-TT2833	PCW	UASI	2017	MWHSE	PLM	Backhaul
19264	3	FORTINET FIREWALL APPLIANCE	147CUB1890	T8126	MOTOROLA	UASI	2017	PLM-SHLTR	PLM	Backhaul
19265	3	FORTINET FIREWALL APPLIANCE	147CUB1891	T8126	MOTOROLA	UASI	2017	PLM-SHLTR	PLM	Backhaul
19271	3	T/Mon LNX Alarm Management System, Dual -48V Quad-3.1 GHz	IAM1037114	D-PK-TMLNX-12001.00002	DPS	UASI	2017	MWHSE	PLM	SMMS
19312	3	DL380 G9 Server, HC 900 GB Disk	877CUB0499	DLN6975A	MOT	UASI	2017	PLM-SHLTR	PLM	Backhaul
19314	3	17" LCD DRAWER W/ KEYBOARD & MOUSE, KVM 16 PORTS,	Z3H2-106-0268	DDN2092A	NICE	UASI	2017	MWHSE	PLM	Backhaul
19441	3	BASIC IDU FOR IPASOLINK 650	AS-3715-22-0011	13820-006	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19442	3	MAIN-B (CONTROL CARD (2GBE+16DS1) FOR IPASOLINK 650	AB-3816-15-6135	13820-080	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19443	3	MAIN-B	AB-5017-17-9222	CBG-13820-080	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19444	3	AMR MODEM CARD, EH, NO AES	0000003722	A-86220-001	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19445	3	AMR MODEM CARD, EH, NO AES	0000003737	A-86220-001	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19446	3	AMR MODEM CARD, EH, NO AES	0000003383	A-86220-001	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19447	3	AMR MODEM CARD, EH, NO AES	0000003339	A-86220-001	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19448	3	CEL-5 INTF CARD - 2XGBE RJ-45 + 2GB	AB-1115-19-6051	13820-180	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19449	3	CEL-5 INTF CARD - 2XGBE RJ-45 + 2GB	AB-1115-19-6083	13820-180	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19450	3	NETGUARDIAN VOIP ORDER WIRE DUAL -48V, SPEAKER & HANDSET	60309	D-PK-2160W-12004	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
19451	3	NETG G4 480,DUAL -24/48V,RTC,1-PLUG,TP	60899	Q24-FR000000133051	NEC	UASI	2013	PLM-SHLTR	PLM	Backhaul
20189	3	Power Edge R430 / IPASONET Server	3X3JL2	F28S / KDM03	DELL	UASI	2017	PLM-SHLTR	PLM	Backhaul

AGENDA ITEM J - ENCLOSURE 3



LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100
Monterey Park, California 91754
Telephone: (323) 881-8291
<http://www.la-rics.org>

SCOTT EDSON
EXECUTIVE DIRECTOR

July 31, 2018

LA-RICS Board of Directors
Los Angeles Regional Interoperable Communications System Authority (the "Authority")

Dear Directors:

APPROVE AMENDMENT NO. 30 FOR AGREEMENT NO. LA-RICS 008 FOR LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM PUBLIC SAFETY BROADBAND NETWORK

SUBJECT

Board approval is requested to authorize the Executive Director to execute Amendment No. 30 to extend the term of Agreement No. LA-RICS 008 for the Public Safety Broadband Network (PSBN) for sixty (60) days until September 30, 2018, at no cost.

RECOMMENDED ACTIONS

It is recommended that your Board:

1. Approve Amendment No. 30 to Agreement No. LA-RICS 008 for the PSBN with Motorola Solutions, Inc. (Motorola), in substantially similar form to the (Enclosure), which extends the Term of the Agreement for an additional sixty (60) days from August 1, 2018, until September 30, 2018, unless sooner terminated or extended in whole or in part, at no cost.
2. Delegate Authority to the Executive Director to execute an amendment to extend the term for an additional thirty (30) days, at no cost, should the need exist, to allow for the finalization of scope for the PSBN Round 2 buildout, provided such amendment is approved as to form by Counsel to the Authority.
3. Delegate authority to the Executive Director to execute Amendment No. 30, in substantially similar form to the enclosed Amendment.

BACKGROUND

On December 14, 2017, your Board authorized the Authority to enter into an Asset Transfer Agreement with AT&T Corp. (AT&T) to transfer and assign its 20% right, title, and interest in the initial Broadband Technologies Opportunity Program (BTOP) grant funded buildout of the LA-RICS PSBN for inclusion into the First Responder Network Authority (FirstNet) National Public Safety Broadband Network (NPSBN). This Agreement required, among other things, the Authority continue with the PSBN buildout contemplated in the PSBN Round 2 Project Implementation Plan (PIP) under Objective 1 (Coverage Augmentation) and requires the National Telecommunications and Information Administration (NTIA) and National Oceanic and Atmospheric Administration (NOAA) to approve the PSBN Round 2 PIP.

On February 15, 2018, the Authority submitted the PSBN Round 2 PIP to NTIA and NOAA for consideration.

On June 25, 2018, NTIA and NOAA have approved Objective 1 (Coverage Augmentation) and Objective 2 (Rapid Response Vehicles) contemplated in the PSBN Round 2 PIP.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

Approval of the recommended actions will authorize the Executive Director to execute Amendment No. 30 to extend the Term of Agreement with Motorola until September 30, 2018, at no cost.

It is necessary to extend the Term of the Agreement for an additional sixty (60) days, to allow the Authority and Motorola to continue to work together to determine if it can finalize the scope and cost for the Objective 1 (Coverage Augmentation) work contemplated in the PSBN Round 2 PIP. The Authority and Motorola have been working intimately and have made progress on finalizing the scope for this work, however, it may be necessary to extend the term for an additional thirty (30) days beyond September 30, 2018, to ensure we present a comprehensive amendment in both scope and cost. If the parties are able to agree on an amendment, the Authority staff will return to your Board with the amendment to contemplate the additional scope regarding the PSBN Round 2 buildout upon completion of scope and corresponding cost.

FISCAL IMPACT/FINANCING

There is no fiscal impact for the recommended actions at this time.

FACTS AND PROVISIONS/LEGAL REQUIREMENT

The Authority's counsel has reviewed the recommended actions.

CONCLUSION

Upon the Board's approval of the recommended action, on behalf of the Authority, the Executive Director will have authority to execute Amendment No. 30 with Motorola, substantially similar in form to the enclosed.

Respectfully submitted,



SCOTT EDSON
EXECUTIVE DIRECTOR

JA:pl

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Enclosure

c: Counsel to the Authority

AMENDMENT NUMBER THIRTY
TO AGREEMENT NO. LA-RICS 008
FOR
LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM –
PUBLIC SAFETY BROADBAND NETWORK

Recitals

This Amendment Number Thirty (together with all exhibits, attachments, and schedules hereto, ("Amendment No. 30") is entered into by and between the Los Angeles Regional Interoperable Communications System Authority ("Authority") and Motorola Solutions, Inc. ("Contractor"), effective as of July _____, 2018, based on the following recitals:

WHEREAS, Authority and Contractor have entered into that certain Agreement No. LA-RICS 008 for Los Angeles Regional Interoperable Communications System ("LA-RICS") – Public Safety Broadband Network (PSBN), dated as of March 6, 2014 (together with all exhibits, attachments, and schedules thereto, all as amended prior to the date hereof, the "Agreement").

WHEREAS, the Agreement has been previously amended by Amendment Number One, effective as of March 6, 2014, to exercise the Unilateral Option for all Work pertaining to Phase 1.

WHEREAS, the Agreement has been previously amended by Amendment Number Two, effective April 7, 2014, to (a) make changes necessary to reflect the Authority's exercise of the Unilateral Option for all Work pertaining to Phase 1 for Additive Alternate No. 1, System Design Work for the Home Subscriber Server ("HSS"), and all Work pertaining to Phase 1 for Additive Alternate No. 2, System Design Work for the Redundant Evolved Packet Core ("EPC"), and (b) to make other changes as reflected in Amendment No. 2.

WHEREAS, the Agreement has been previously amended by Amendment Number Three, effective June 20, 2014, to exercise the Unilateral Option for all Work pertaining to Phase 2, Site Construction and Site Modification, and Phase 3, Supply PSBN Components.

WHEREAS, the Agreement has been previously amended by Amendment Number Four, effective July 16, 2014, to exercise the Unilateral Option for all Work pertaining to (i) Phase 2 for Additive Alternate No. 1, Site Construction and Site Modification for the HSS, (ii) Phase 3 for Additive Alternate No. 1, Supply PSBN Components Work for the HSS, (iii) Phase 2 for Additive Alternate No. 2, Site Construction and Site Modification Work for the Redundant EPC, and (iv) Phase 3 for Additive Alternate No. 2, Supply PSBN Components Work for the Redundant EPC.

WHEREAS, the Agreement has been previously amended by Amendment Number Five, effective September 24, 2014, to exercise the Unilateral Option for all Work

pertaining to Phase 4, PSBN Implementation, including Phase 4 Work for Additive Alternate 1 (Home Subscriber Server) and Additive Alternate 2 (Redundant Evolved Packet Core), to install, optimize, test, commission, and deploy all or such portion of the PSBN as authorized by the Authority via notices to proceed, and to make other certain changes as reflected in Amendment No. 5.

WHEREAS, the Agreement has been previously amended by Amendment Number Six, effective October 3, 2014, to (a) make changes necessary to reflect the removal of three (3) PSBN Sites and all the Work and equipment associated with these PSBN Sites; (b) to make the changes necessary to reflect the replacement of undisguised antenna support structures to disguised antenna support structures at 32 PSBN Sites and all of the Work and equipment affected by these replacements; (c) to make other certain changes; and (d) to increase the Maximum Contract Sum by \$2,613,300 from \$175,583,275 to \$178,196,575.

WHEREAS, the Agreement has been previously amended by Amendment Number Seven, effective December 31, 2014, to (a) make changes necessary to reflect the replacement of undisguised antenna support structures with various types of antenna support structures at eight PSBN Sites and all of the Work and equipment affected by these replacements; (b) reconcile hose tower designs for 28 sites in Phase 2; and (c) to make other certain changes as reflected in Amendment No. 7.

WHEREAS, the Agreement has been previously amended by Amendment Number Eight, effective February 13, 2015, to (a) make changes necessary to reflect the removal of thirty-six (36) PSBN Sites and all the Work and equipment associated with the removal of these sites (b) make changes necessary to reflect the addition of six (6) PSBN Sites and all the Work and equipment associated with the addition of these sites and exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply PSBN Components), and Phase 4 (PSBN Implementation) for these six (6) PSBN Sites; (c) reconcile hose tower installation and associated foundation costs for twenty-eight (28) PSBN Sites in Phase 2; (d) to reduce the Maximum Contract Sum by \$11,941,896 from \$178,196,575 to \$166,254,679; and (d) to make other certain changes reflected in Amendment No. 8.

WHEREAS, the Agreement has been previously amended by Amendment Number Nine, effective March 23, 2015, to (a) make changes necessary to reflect the removal of twenty-four (24) PSBN Sites and all the Work and equipment associated with the removal of these sites; (b) make changes necessary to reflect the addition of six (6) PSBN Sites and all the Work and equipment associated with the addition of these sites and exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply PSBN Components), and Phase 4 (PSBN Implementation) for these six (6) PSBN Sites; (c) make changes necessary to reflect Phase 1 Work, site design visit for one (1) potential PSBN System Site; (d) to reduce the Maximum Contract Sum by \$7,324,405 from \$166,254,679 to \$158,930,274; and (e) to make certain other changes reflected in Amendment No. 9.

WHEREAS, the Agreement was previously amended by Amendment Number Ten, effective June 25, 2015, to (a) make changes necessary to remedy certain miscalculations reflected in Amendment No. 9 resulting in a reduction in the amount by \$280,622; (b) make changes necessary to reflect the inclusion of Phase 1 (System Design) Work for fifteen (15) Cell-on-Wheels (COWs) as set forth in Exhibit C (Schedule of Payments) attached to Amendment No. 10, and exercise the Unilateral Option for all Work Pertaining to Phase 1 (System Design) for the COWs in the amount of \$411,981; (c) make changes necessary to reflect construction restoration Work for thirty (30) PSBN Sites to return the sites to preconstruction conditions in the amount of \$2,321,257; (d) make changes necessary to reflect the inclusion of fiber optic equipment and related Work for the County of Los Angeles and the City of Los Angeles to allow for interconnectivity among the agencies and the PSBN in the amount of \$1,275,000; (e) to increase the Maximum Contract Sum by \$3,727,616 (\$4,008,238 - \$280,622) from \$158,930,274 to \$162,657,890; and (f) to make certain other changes as set forth in Amendment No. 10.

WHEREAS, the Agreement was previously amended by Amendment Number Eleven, effective July 16, 2015, to (a) make changes necessary to reflect the inclusion of one (1) PSBN Site and all Work and equipment associated with the addition of this site in the amount of \$336,081 as set forth in Exhibit C (Schedule of Payments) attached to this Amendment No. 11; (b) make changes necessary to reflect the inclusion of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply PSBN Components), and Phase 4 (PSBN Implementation) Work for fifteen (15) COWs in the amount of \$3,244,880 as set forth in Exhibit C (Schedule of Payments) attached to this Amendment No. 11; (c) exercise the Unilateral Options for all Work Pertaining to Phase 1 (System Design) for one (1) PSBN Site (PASDNPD) and Phase 2 (Site Construction and Site Modification), Phase 3 (Supply PSBN Components), and Phase 4 (PSBN Implementation) for the one (1) PSBN Site and the fifteen (15) COWs; and (d) to increase the Maximum Contract Sum by \$3,580,961 from \$162,657,890 to \$166,238,851. The parties acknowledged that the Maximum Contract Sum would be adjusted down accordingly in future amendments reducing the scope of the PSBN Project.

WHEREAS, the Agreement was previously amended by Amendment Number Twelve, effective August 13, 2015, to (a) account for the removal of forty-two (42) sites from the scope of the PBSN; (b) make changes necessary to reflect the removal of tower foundations from seven (7) PSBN Sites as part of construction restoration Work to return the sites to preconstruction conditions in the amount of \$37,607; (c) make changes necessary to include construction restoration Work for one (1) PSBN Site (LASDCVS) to return the site to preconstruction conditions in the amount of \$19,800; (d) make changes necessary to reflect the inclusion and purchase of 5,000 Universal Integrated Circuit Cards (UICC) in the amount of \$245,000; (e) make changes necessary to reflect the inclusion and purchase of five (5) CISCO routers and five (5) corresponding units of data service in the amount of \$17,500; (f) make changes necessary to reflect site construction changes in the amount of \$150,740 (g) make changes necessary to remedy certain miscalculations in cost in the amount of \$165,422; (h) make the changes necessary to reflect a cost reduction for forty-two (42) terminated PSBN Sites in the amount of \$12,989,223; (i) resulting in a reduction in the Maximum Contract Sum by \$12,353,154

(\$12,989,223 – \$636,069 when taking the above cost increases into consideration) from \$166,238,851 to \$153,885,697; and (j) to make other certain changes as set forth in Amendment No. 12.

WHEREAS, the Agreement was previously amended by Amendment Number Thirteen, effective September 4, 2015, to (a) account for the removal of seventy-seven (77) PSBN Sites from the scope of the PSBN; (b) account for the replacement of one (1) PSBN Site (LAPP001 replacing LAFD049) and the equipment and Work associated with the replacement of this site with an increased amount of \$404,053; (c) reconcile microwave equipment to align with the final backhaul design with an increased amount of \$813,381; (d) identify equipment for PSBN Sites that have since been dropped from the PSBN design where such equipment had already been ordered, manufactured and/or delivered and installed with an increased amount of \$10,727,207; (e) make changes necessary to reflect site construction changes with an increased amount of \$482,923; (f) make changes necessary to remedy certain miscalculations resulting in a cost reduction of \$25,854; (g) make changes necessary to reflect various site reconciliations and corresponding adjustments resulting in a cost reduction of \$6,304,207; (h) make changes necessary to reflect a cost reduction for seventy-seven (77) terminated PSBN Sites in the amount of \$30,511,394; (i) all actions decreasing the Maximum Contract Sum by \$24,413,891 (\$36,841,455 – \$12,427,564 when taking the above cost increases and reductions into consideration) from \$153,885,697 to \$129,471,804; and (j) to make other certain changes as set forth in Amendment No. 13.

WHEREAS, the Agreement was previously amended by Amendment Number Fourteen, effective October 9, 2015, to (a) reconcile spare equipment required for the continued operation and support of the PSBN for an increased amount of \$1,214,021; (b) reconcile equipment necessary for the fifteen (15) Cell-On-Wheels (COWs) for an increased amount of \$2,157,669; (c) make changes necessary to reflect site construction changes for an increased amount of \$80,220; (d) reconcile excess equipment for a decreased amount of \$24,229; and (e) all actions increasing the Maximum Contract Sum by \$3,427,681 (\$1,214,021 + \$2,157,669 + \$80,220 - \$24,229) from \$129,471,804 to \$132,899,485; and (e) to make other certain changes as set forth in the Amendment No. 14.

WHEREAS, the Agreement was previously amended by Amendment Number Fifteen, effective December 21, 2015, to settle the Contractor Claims, including the dispute over the project management fees and any and all other claims for additional compensation above the current Maximum Contract Sum that Contractor or its subcontractors may have against the Authority relating to any Work that has been performed or is required to be performed under the PSBN Agreement, increasing the Maximum Contract Sum by \$10,685,472 from \$132,899,485 to \$143,584,957.

WHEREAS, the Agreement was previously amended by Amendment Number Sixteen, effective March 15, 2016, to include all Work related to additional Radio Frequency (RF) Emissions testing at twelve (12) PSBN Sites increasing the Maximum Contract Sum by \$3,300 from \$143,584,957 to \$143,588,257.

WHEREAS, the Agreement was previously amended by Amendment Number Seventeen, effective May 4, 2016, to make the changes necessary to reflect the termination of Waterway Coverage Testing, Freeway Coverage Testing, Special Operational Testing, and PSBN Burn-In Testing, which decreased the Maximum Contract Sum by \$931,936, from \$143,588,257 to \$142,656,321.

WHEREAS, the Agreement was previously amended by Amendment Number Eighteen, effective August 31, 2016, to make changes necessary to (a) extend the Warranty Period until December 31, 2016, at no additional cost; (b) reflect the reconciliation of excess equipment for a decreased amount of \$600,502; (c) reflect the reconciliation of spare equipment for a decreased amount of \$768,027, (d) make changes necessary to reconcile the cost of LASDCVS to reflect costs for that were inadvertently omitted for construction Work performed that was not included as part of restoration and has not been paid to date for an increased amount of \$62,969, (e) make changes necessary to correct certain administrative errors for an increased amount of \$25,964; (f) to make other certain changes as set forth in the Amendment No. 18; and (g) decrease the Maximum Contract Sum by \$1,279,596, $[(-\$600,502) + (-\$768,027) + \$62,969 + \$25,964]$, when taking the above cost increases and reductions into consideration from \$142,656,321 to \$141,376,725.

WHEREAS, the Agreement was previously amended by Amendment Number Nineteen, effective December 21, 2016, to make changes necessary to (a) extend the Warranty Period until March 31, 2017, at no additional cost; (b) make changes necessary to upgrade the Authority's Deployable Vehicle (System on Wheels), which includes the requisite services, equipment, material, configuration, installation, provide backup power, antenna storage and mounts, fiber connectivity and backhaul services, and related Work to support Special Events for an increase in the amount of \$235,768; (c) reflect a reduction in Training as certain Training courses will not be provided to the Authority for a decrease in the amount of \$200,000; (d) reflect a reduction in Wide Area Coverage Testing as it is no longer necessary for a decrease in the amount of \$2,153,150; (e) reflect Optimization Work necessary to account for extended Optimization efforts for an increase in the amount of \$550,000; (f) to make other certain changes as set forth in this Amendment No. 19; and (g) decreasing the Maximum Contract Sum by \$1,567,382 $(\$235,768 - \$200,000 - \$2,153,150 + \$550,000)$, when taking the cost increases and decreases into consideration, from \$141,376,725 to \$139,809,343.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty, effective March 20, 2017, to make changes necessary to (a) reflect the relocation of certain equipment (towers, generator fuel tanks, tower hardware, etc.) from the Southern California Edison (SCE) Mesa Substation site to the County of Los Angeles Fire Departments Del Valle Training Facility as the original storage site is no longer available after April 15, 2017, for an increase in the amount of \$208,338; (b) make other certain changes as set forth in Amendment No. 20; and (c) increase the Maximum Contract Sum by \$208,338 from \$139,809,343 to \$140,017,681.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-One, effective March 20, 2017, to make changes necessary to (a) extend the

Warranty Period on a month-to-month basis, at no additional cost; (b) with the first month commencing on April 1, 2017, and expiring on April 30, 2017; and (c) agree and acknowledge that subsequent month-to-month Warranty Period extensions, if any, will be mutually agreed upon by both parties.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-Two, effective April 13, 2017, to make changes necessary to (a) revise Exhibit A (Statement of Work) to allow the Contractor to create Access Point Names (APNs) for the Authority's member agencies at a cost of \$977 per member agency, with a minimum of four (4) agencies to be deployed at a time, for a cost increase in the amount of \$3,908; (b) increasing the Maximum Contract Sum by \$3,908 from \$140,017,681 to \$140,021,589; and (c) make other certain changes as set forth in Amendment No. 22.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-Three, effective April 13, 2017, to (a) make changes necessary to extend the Warranty Period until May 31, 2017, at no additional cost; and (b) make other certain changes as set forth in Amendment No. 23.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-Four, effective May 18, 2017, to make changes necessary to (a) extend the Initial Term of the Agreement by exercising the first one-year Option Term for Maintenance Work under Phase 5 (PSBN Maintenance), commencing on June 1, 2017 and expiring on May 31, 2018, unless sooner terminated or extended, in whole or in part, in the amount of \$2,991,000 resulting in a cost decrease in the amount of \$2,964,683, when taking the currently contemplated first year Maintenance cost of \$5,955,683 into consideration; (b) exercise the Unilateral Option for the first one-year Option Term for Maintenance Work under Phase 5 (PSBN Maintenance); (c) revise Exhibit A (Statement of Work) to increase the scope of PSEN Work to allow the Contractor to assist the Authority with connecting its member agencies to the PSBN for a not-to-exceed cost increase in the amount of \$275,000; (d) decrease the Maximum Contract Sum by \$2,689,683 from \$140,021,589 to \$137,331,906 when taking the cost increases and decreases into consideration; and (e) make other certain changes as set forth in Amendment No. 24.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-Five, effective October 19, 2017, to make changes necessary to (a) revise Exhibit A (Statement of Work) and Exhibit B (PSBN Specifications) to reflect a reduction in the scope of certain Work related to Network Management System and Inventory Management System and a corresponding reduction in the cost in the amount of \$316,767; (b) reflect a reduction in the scope of certain Work related to Documentation and a corresponding reduction in the cost in the amount of \$68,515; (c) reflect a reduction in the scope of certain Work related to Additive Alternate No. 2 (Redundant Evolved Packet Core [EPC]) and a corresponding reduction in the cost in the amount of \$1,061,704; (d) reflect the removal of the scope of all Work related to Additive Alternate No. 3 (Location Services) and a corresponding reduction in the cost in the amount of \$2,592,246; (e) reflect a reduction in the scope of certain Work related to Cell on Wheels (COWs) and a corresponding reduction in the cost in the amount of \$129,977; (f) reflect

a reduction in the scope of certain Work related to Site Construction Changes and a corresponding reduction in the cost in the amount of \$14,046; (g) decrease the Maximum Contract Sum by \$4,183,255 from \$137,331,906 to \$133,148,651 when taking the cost decreases into consideration; and (h) make other certain changes as set forth in Amendment No. 25.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-Six, effective November 21, 2017, to make changes necessary to (a) reflect an increase and decrease in the scope of certain Work related to a certain Cell on Wheels (COWs) site (CHPNWHLL) resulting in a net increase in the cost in the amount of \$97,220; (b) reflect a reduction in the scope of certain Work related to Site Construction Changes and a corresponding reduction in the cost in the amount of \$33,674; (c) increase the Maximum Contract Sum by \$63,546 from \$133,148,651 to \$133,212,197 when taking the cost increases and decreases into consideration; and (d) make other certain changes in Amendment No. 26

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-Seven, effective May 17, 2018, to make changes necessary to (a) extend the Initial Term of the Agreement by extending the first Option Term for Maintenance Work under Phase 5 (PSBN Maintenance) for an additional month, commencing on June 1, 2018 and expiring on June 30, 2018, unless sooner terminated or extended, in whole or in part, in the amount of \$195,306; (b) increase the Maximum Contract Sum by \$195,306 from \$133,212,197 to \$133,407,503 when taking the cost increase into consideration; and (c) make other certain changes as set forth in Amendment No. 27.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-Eight, effective June 27, 2018, to make changes necessary to (a) extend the Initial Term of the Agreement for an additional month, commencing on July 1, 2018 and expiring on July 31, 2018, unless sooner terminated or extended, in whole or in part; at no cost, with no obligation to Contractor to perform Maintenance Work or Services (b) make other certain changes as set forth in Amendment No. 28.

WHEREAS, the Agreement was previously amended by Amendment Number Twenty-Nine, effective July 26, 2018, to make changes necessary to (a) reflect a decrease in the scope of certain Work related to training for the Cell on Wheels (COWs) resulting in a net decrease in the cost in the amount of \$13,000; (b) reflect the removal of Phase 4 (PSBN Implementation) Work for a certain COW site (SCEMESA) and a corresponding reduction in the cost in the amount of \$8,345; (c) decrease the Maximum Contract Sum by \$21,345 from \$133,407,503 to \$133,386,158 when taking the cost decreases into consideration; and (d) make other certain changes as set forth in Amendment No. 29.

WHEREAS, the Authority and Contractor desire to further amend the Agreement the Agreement to make changes necessary to (a) extend the Initial Term of the Agreement for an additional sixty (60) days commencing on August 1, 2018, and expiring on September 30, 2018, unless sooner terminated or extended, in whole or in part; at no

cost, with no obligation to Contractor to perform Maintenance Work or Services; and (b) make other certain changes as set forth in Amendment No. 30.

WHEREAS, this Amendment No. 30 is authorized under Section 2 (Changes to Agreement) of the Agreement.

NOW THEREFORE, in consideration of the foregoing recitals, all of which are incorporated as part of this Amendment No. 30, and for other valuable consideration, the receipt and sufficiency of which are acknowledged, Authority and Contractor hereby agree as follows:

1. Capitalized Terms; Section References. Capitalized terms used herein without definition (including in the recitals hereto), have the meanings given to such terms in the Base Document. Unless otherwise noted, section references in this Amendment No. 30 refer to sections of the Base Document and its Exhibits, as amended by this Amendment No. 30.
2. Agreement Term. The parties further agree and acknowledge the Agreement term is being extended beyond July 31, 2018, until September 30, 2018, at no cost, and during this time the Contractor will not be obligated to provide Maintenance Work or Services, unless the parties agree otherwise. The Term of the Agreement may be extended on a no-cost basis for an additional thirty (30) days pursuant to the execution of an amendment, if any, in accordance with Section 2 (Changes to Agreement) of the Base Document. In the event that an amendment is executed to extend the term for an additional thirty (30) days beyond September 30, 2018, at no cost, Contractor will not be obligated to provide Maintenance Work or Services, unless the parties agree otherwise.
3. Amendments to Base Document.
 - 3.1 Section 3.1 (Initial Term and Option Terms) within Section 3 (Term) of the Base Document of the Agreement is deleted in its entirety and replaced with the following:
 - 3.1 Initial Term and Option Terms The initial term of this Agreement shall commence upon the Effective Date and shall expire at the end of the Warranty Period, unless sooner terminated or extended, in whole or in part, as provided in this Agreement (the "Initial Term"). The Authority may extend the Initial Term of this Agreement for up to four (4) additional consecutive one-year terms (each an "Option Term") in order for Contractor to perform Maintenance Work under Phase 5. Each Option Term shall be exercisable in the sole and unilateral discretion of the Authority in accordance with Section 4.1.2.2 (Unilateral Options). The Authority will endeavor to initiate the process described under 4.1.2.2 (Unilateral Options) no later than ninety (90) Days prior to the expiration of the Initial Term or then-current Option Term, but the Authority's failure to initiate such

process within such timeframe shall not prevent the Authority from thereafter exercising such Option Term at any time prior to the expiration of the Initial Term or then-current Option Term. As used herein, "Term" means and includes the Initial Term and each Option Term exercised by the Authority in accordance with this Agreement.

The Term of this Agreement, pursuant to Amendment No. 24, Amendment No. 27, Amendment No. 28, and Amendment No. 30 respectively, shall expire on September 30, 2018, unless sooner terminated or extended, in whole or in part, as provided in this Agreement. The Term may be extended for an additional thirty (30) days by the Authority, at no cost, via an amendment pursuant to Section 2 (Changes to the Agreement) of the Base Document.

4. This Amendment No. 30 shall become effective as of the date identified in the recitals, which is the date upon which:
 - 4.1 An authorized agent of Contractor has executed this Amendment No. 30;
 - 4.2 Los Angeles County Counsel has approved this Amendment No. 30 as to form;
 - 4.3 The Board of Directors of the Authority has authorized the Executive Director of the Authority to execute this Amendment No. 30; and
 - 4.4 The Executive Director of the Authority has executed this Amendment No. 30.
5. Except as expressly provided in this Amendment No. 30, all other terms and conditions of the Agreement shall remain the same and in full force and effect.
6. Contractor and the person executing this Amendment No. 30 on behalf of Contractor represent and warrant that the person executing this Amendment No. 30 for Contractor is an authorized agent who has actual authority to bind Contractor to each and every term and condition of this Amendment No. 30, and that all requirements of Contractor to provide such actual authority have been fulfilled.
7. This Amendment No. 30 may be executed in one or more original or facsimile counterparts, all of which when taken together shall constitute one in the same instrument.

* * *

**AMENDMENT NUMBER THIRTY
TO AGREEMENT NO. LA-RICS 008
FOR
LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM –
PUBLIC SAFETY BROADBAND SYSTEM**

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 30 to be executed on their behalf by their duly authorized representatives, effective as of the date first set forth above.

LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS
SYSTEM AUTHORITY

MOTOROLA SOLUTIONS, INC.

By: _____

Scott Edson
Executive Director

By: _____

Norm Folger
Motorola Project Director

APPROVED AS TO FORM FOR THE
LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS
SYSTEM AUTHORITY:

MARY C. WICKHAM
County Counsel

By: _____

Truc L. Moore
Principal Deputy County Counsel