INITIAL STUDY FOR THE LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM (LA-RICS) LAND MOBILE RADIO (LMR) SYSTEM



Prepared for:

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TABLE OF CONTENTS

ACRON	IYMS AND ABBREVIATIONS	III
1 EN	NVIRONMENTAL CHECKLIST FORM	1
2 EN	NVIRONMENTAL FACTORS POTENTIALLY AFFECTED:	17
3 E\	/ALUATION OF ENVIRONMENTAL IMPACTS:	19
4 EN	IVIRONMENTAL ISSUES	21
4.1	AESTHETICS	21
4.2	AGRICULTURE AND FORESTRY RESOURCES	22
4.3	AIR QUALITY	23
4.4	BIOLOGICAL RESOURCES	24
4.5	CULTURAL RESOURCES	25
4.6	GEOLOGY AND SOILS	26
4.7	GREENHOUSE GAS EMISSIONS	27
4.8	HAZARDS AND HAZARDOUS MATERIALS	28
4.9	HYDROLOGY AND WATER QUALITY	30
4.1	0 LAND USE AND PLANNING	32
4.1	1 MINERAL RESOURCES	32
4.1	2 NOISE	33
4.1		
4.1	4 PUBLIC SERVICES	35
4.1	5 RECREATION	36
4.1	6 TRANSPORTATION/TRAFFIC	36
4.1	7 UTILITIES AND SERVICE SYSTEMS	38
4.1	8 MANDATORY FINDINGS OF SIGNIFICANCE	39
5 RE	FERENCES	41
APPEN	DIX A-1 – POTENTIAL LMR SITE LOCATIONS	43
LIST O	FTABLES	
Table 1	- General LMR Site Types and Features	11
Table 2	- Typical Construction Associated with the Four General LMR Site Types	12
LIST O	FIGURES	
Figure 1	L – Potential LMR Project Site Locations	3
_	2 - Typical Tower with Antennas	
_	B - Typical Monopole with Antennas	



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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Term
Authority	Joint Powers Authority
AVAQMD	Antelope Valley Air Quality Management District
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDC-CGS	California Department of Conservation, California Geological Survey
County	Los Angeles County
CY	cubic yard(s)
DHS	Department of Homeland Security
EIR	Environmental Impact Report
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FT	foot/feet
GHGs	Greenhouse gases
LA-RICS	Los Angeles Regional Interoperable Communications System
LF	linear foot/feet
LMR	Land Mobile Radio
MDAB	Mojave Desert Air Basin
MHz	megahertz
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SF	square foot/feet
SUV	sport utility vehicle
UHF	ultra high frequency
USFS	United States Forest Service





1 ENVIRONMENTAL CHECKLIST FORM

1. **Project title**: Los Angeles Regional Interoperable Communications System (LA-RICS) Land Mobile Radio (LMR) System

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**: multiple sites throughout Los Angeles County (County) and in adjacent areas of Orange and San Bernardino counties
- 5. Project sponsor's name and address:

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

- 6. General plan designation: varies by site
- 7. **Zoning**: varies by site

8. Description of project:

The Project is to install and operate up to 90 LMR facilities at sites located primarily in Los Angeles County (Figure 1). The LMR sites would contain the infrastructure and equipment necessary to provide voice communications coverage throughout the County for emergency responders. Currently, 120 sites are being considered for the LMR project. Their locations are shown on Figure 1, and Table A-1 in Appendix A-1 provides a list of the sites and their addresses. Of these 120 sites, 88 are included in the current proposed system design. The remaining 32 sites are intended to provide alternate site locations if any of the initial 88 sites are determined to be not viable during the site evaluation, system engineering, and permitting processes or in lease agreement discussions with the property owner and need to be removed from consideration. These alternate sites are included in the project description so that the potential environmental impacts of all sites that could potentially be part of the system are analyzed. A maximum of only approximately 80 to 90 sites would be built, however. These locations are widely dispersed across the County in both urban (intensively developed) and rural (less developed) settings. The settings range from coastal locations to downtown Los Angeles to remote mountain peaks throughout the County and to the northern high desert of the County.

In April 2005, the Regional Interoperable Steering Committee was formed to explore the development of a single, shared communications system for all public safety agencies in the greater Los Angeles region. Initial feasibility studies indicated that by leveraging the various agency efforts, a shared regional communications system would not only be possible but would also best meet the needs of the entire regional public safety community and the general public. As a result, the County of Los Angeles, 82 municipalities, and 3 other public sector entities in the region drafted a Joint Powers Agreement that established the Los Angeles Regional Interoperable Communications System (LA-RICS) Joint Powers Authority (Authority) to create a regional area-wide interoperable public safety communications network. Community anchor institutions associated with the project include police, sheriff, and fire departments, as well as hospitals.





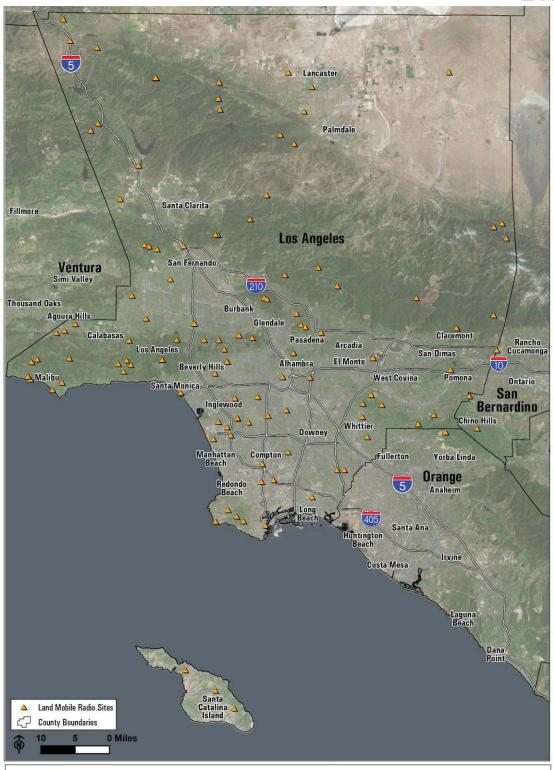


Figure 1. Potential LMR Project Sites

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





The proposed LMR project would be a modern, integrated wireless voice and narrowband data communications system designed and built to serve law enforcement, fire service, health service, and public works professionals throughout Los Angeles County. The new system would provide day-to-day communications within and among agencies and allow seamless interagency communications when responding to routine, emergency, and catastrophic events. The system would be comprised of four different subsystems:

- Digital Trunked Voice Radio System provides first responders radio communications utilizing digital technology. It seamlessly operates on two bands of spectrum (700 megahertz [MHz] and ultra high frequency [UHF])
- 2. Analog Conventional Voice Radio System provides first responders radio communications utilizing conventional analog technology
- 3. Los Angeles Regional Tactical Communications System consists of local, state, and federal interoperability channels in four different bands of spectrum in order to allow outside agencies responding to events in the County to have designated channels for communications
- 4. Narrowband Mobile Data Network a data system that provides critical dispatch communications

Purpose of the Project

Effective radio communication is critical in helping police officers prevent and respond to crime situations, keeping firefighters safe as they fight blazes, facilitating life-saving exchanges of information between emergency medical service professionals and hospitals, and allowing public works and utilities the opportunity to coordinate responses to disasters and special events. LMR would support a rapid, safe, and effective public safety response during daily operations. Additionally, it would support a faster, better-coordinated, large-scale response to emergencies such as wildfires, earthquakes, civil disturbance, or other disasters. It would replace the existing aging patchwork of LMR systems with a single county-wide network and would improve overall system capacity and coverage for first and second responders region-wide. Specifically, LMR would provide day-to-day voice and narrowband data radio communications for public safety agencies in the Los Angeles region, enable interoperability among member agencies and mutual aid providers, and support communication with regional, state, and federal agencies in the event of a natural or man-made disaster.

The Los Angeles region is designated as a high-threat area by the Department of Homeland Security (DHS). The new LMR system would allow the region to respond effectively, if an incident were to occur, by providing an efficient and coordinated response to emergencies that presently is not possible in the Los Angeles metropolitan region.

Each of the sites identified for potential use in the LMR project would improve emergency communications within Los Angeles County. The new infrastructure would add capacity, replace existing aging infrastructure with infrastructure that meets current building codes and telecommunications industry standards that better support modern technology and provide for more technologically advanced equipment. The towers would follow general engineering practices for vertical and horizontal separation of equipment to lessen the amount of interference that can result from multiple systems on the same tower through greater separation of different radio frequencies. Different spectrum bands perform differently depending on their interaction with other bands. This enhanced separation of equipment would also allow for greater frequency flexibility and would increase overall system coverage and capacity.

Need for the Project

The greater Los Angeles region 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 the Los Angeles County region are provided by more than 80 public safety agencies represented by approximately 34,000 first responders and 17,000 secondary responders serving more than 10 million residents, tourists, and commuters in



the region. Many of these agencies use systems that have exceeded their natural 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.

Most of the region's public safety telecommunications infrastructure (shelters and towers) do not meet the technical or operational needs of the agencies that utilize them. Many of the aging communications system sites were built to older and now obsolete industry standards and building codes. Structures at these sites no longer meet the more stringent performance and survivability requirements in current industry standards and codes. This causes performance issues that hamper today's public safety and emergency response operations. Besides the overall age of many structures, most do not possess space (whether inside a shelter or on a tower) to add equipment, and in many cases the towers cannot be cost-effectively retrofitted to support additional antennas because they lack structural capacity and/or retrofitting would impact existing operations. Some towers do not have sufficient space to maintain adequate separation between existing and new antennas to minimize physical and electromagnetic interference. Most of the current infrastructure has not undergone a significant rebuild in several decades.

Additionally, the communication systems deployed by agencies in Los Angeles County do not provide the necessary coverage that all users need. This is particularly the case for the Los Angeles County Sheriff's Department and the Los Angeles County Fire Department. These agencies cover large tracts of the county, and their current radio systems are inadequate and/or antiquated. Often, separate but simultaneous incidents require coordinated emergency responses so that adequate and appropriate personnel are dispatched to each incident. The lack of complete coverage sometimes results in the departments not being able to dispatch the nearest team to the incident because of communication problems.

Without adequate capacity on the radio system, even on a daily basis, first responders often struggle to acquire the necessary resources to communicate. The issue is exacerbated on large incidents where a shortage of radio resources greatly impacts operations due to the need for multiple command, tactical, and mutual aid channels. For example, first responders may not be able to request additional resources to assist them in life-threatening situations, hear evacuation orders, or hear broadcasted warning messages from dispatchers. Without adequate capacity to dedicate individual radio channels to individual incidents, the likelihood of interference between units responding to separate incidents is high.

Proposed Project Description

The proposed LMR sites were selected such that voice coverage could be provided over the Authority's service area, which is all of Los Angeles County (see Figure 1), with the fewest number of sites possible. Locations were selected within or adjacent to existing communication facilities to the maximum extent feasible. The sites include a variety of types (e.g., water tanks, rooftops, police and fire stations, hospitals, remote mountaintops, etc.). Most of these locations have existing communications equipment but do not necessarily have communication towers.

Each LMR site would require installation of multiple, new, fiberglass collinear and microwave antennas and supporting indoor communication equipment and backup batteries. Fiberglass collinear and microwave antennas generally would be installed on either existing or new lattice towers or monopoles, as depicted on Figure 2 and Figure 3. The number of antennas installed would vary by site. Because the LMR sites are proposed for a variety of locations ranging from rooftops and urban police and fire stations to undeveloped or sparsely developed hilltops and mountain peaks, the facilities proposed at each site vary depending on what infrastructure is currently present and the topography of the location.

In general, three general infrastructure components are proposed at each LMR site:

- antenna structure which could be a lattice tower, monopole, or building mounts
- equipment shelter



emergency generator

New infrastructure at a site would include either a lattice tower or a monopole, but not both. At a few sites antennas would be façade-mounted on existing buildings (e.g., rooftops) rather than on a new or existing tower or monopole. Additionally, most sites would require construction of a new shelter to house radio communication equipment, although some sites would utilize an existing equipment room or shelter. Descriptions of existing structures that would be used vary. General descriptions of the four basic structures that may be newly constructed for the LMR project are provided below.

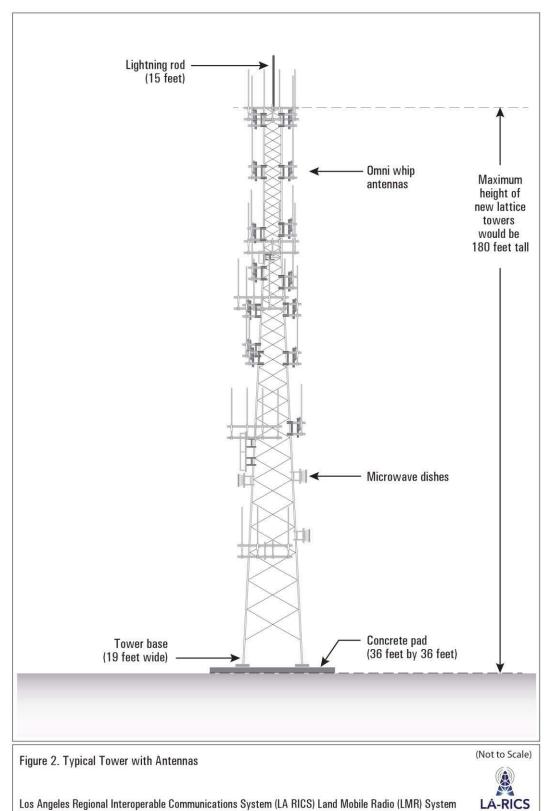
<u>Lattice Tower</u>. New, self-supporting lattice towers would be a maximum of 180 feet tall (without appurtenance) and on a new concrete pad that would be approximately 36 feet by 36 feet (Figure 2); however, at one site which has an existing 200-foot tower, the new tower may also be 200 feet tall to accommodate the equipment to be installed on the new tower. The existing 200-foot tower does not support space for new equipment, and the spacing of existing equipment is not adequate. Line-of-sight microwave connectivity is also a consideration for the new tower height.

<u>Monopole.</u> New monopoles would generally be 70 feet tall (without appurtenance), although they could range up to 180 feet in height (without appurtenance). A typical monopole would be 6.5 feet in diameter, and installation would require drilling a 36-foot deep caisson. Monopoles would also be free-standing (Figure 3).

<u>Equipment Shelter</u>. New equipment shelters would be installed on a new concrete pad ranging in size from approximately 12 by 16 feet to 24 by 48 feet. Most equipment shelters would be single-story structures, although some sites may require two stories in order to house a generator.

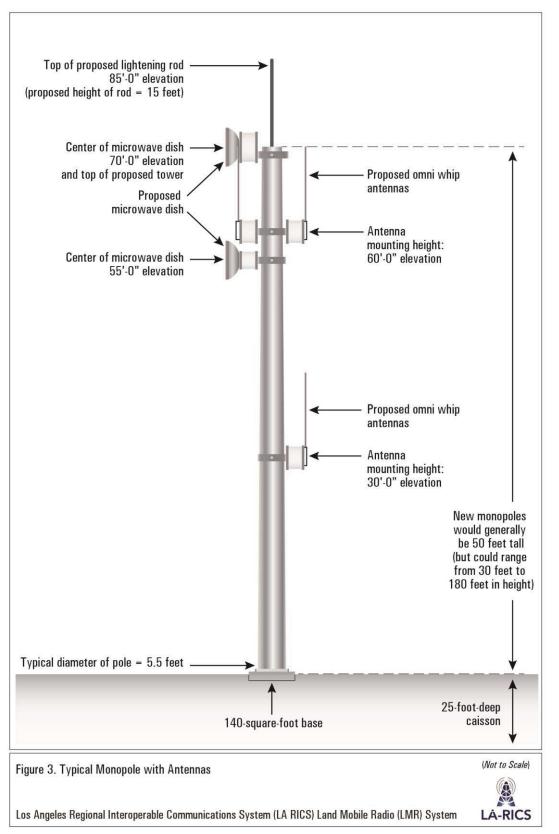
Emergency Generator. Most LMR locations would require a new back-up generator. Generators would be installed on concrete pads ranging in size from 6 by 11 feet to 9 by 13 feet. The generators would include 1,000- to 1,500-gallon internal double walled tanks for diesel fuel.















All of the newly constructed structure foundations described above would be surrounded by an underground ground ring installed in a trench about 30 inches below grade. Although the facilities required at each LMR site would vary, most sites can generally be categorized into four general types. These are listed in Table 1.

Table 1 - General LMR Site Types and Features

		LMR Site Types		
New Structures	New Lattice Tower	New Monopole	New Lattice Tower	New Equipment
Required	with New Shelter	with New Shelter	New Lattice Tower	Shelter
Lattice Tower	X	NA	X (generally 180'	existing (height
Lattice Tower	(generally 180' tall)	INA	tall)	varies)
Monopole	NA	X (generally 70' tall)	NA	NA
Equipment Shelter	X	X	(existing)	Х
Emergency	Х	Х	Х	٧
Generator	^	^	^	٨

NA - not applicable

Utilities

Electricity is available at all of the proposed LMR sites. Three sites not connected to an electrical utility line are solar powered. At all non-solar sites, new electrical lines would be installed in new underground conduit between the LMR facility and the nearest existing interconnection point. Underground electrical conduit would also be installed between new emergency generators and the equipment shelter. The amount of trenching required to install the conduit would vary at each site depending on the distance between the LMR facilities and the nearest point of interconnection. The maximum length of total trenching at any site is not expected to exceed 1,000 linear feet.

No other utility infrastructure would be installed as part of the proposed LMR project. The LMR sites would not require water or natural gas, and no wastewater would be generated.

Construction

Construction of the LMR sites is expected to begin in Summer 2015 and be completed in Fall 2016. Construction activity would occur for approximately six weeks at a site. Construction activities could occur at more than one site at a time.

Table 2 provides a summary of construction disturbance needed to construct a representative of each of the four general LMR site types.



Table 2 - Typical Construction Associated with the Four General LMR Site Types

	New Lattice Tower with New Shelter	New Monopole with New Shelter	New Lattice Tower	New Equipment Shelter
Grading	5-20 CY	5-10 CY	5-10 CY	10-30 CY
Temporary Disturbance (staging area)	1,000 SF	1,000 SF	1,800 SF	1,000 SF
Long-term Disturbance (includes structure foundations and conduits)	1,900 SF	2,000 SF	1,600 SF	600 SF
Foundations	Tower (6'x36'x36') pad & pier foundation	Monopole 6'-6" ft. Dia., 36 ft. Deep drilled caisson; caisson area 140 sf	Tower= 6'x36'x36' pad and pier foundation	Tower = NA
	Shelter= (12'x24') slab foundation with (24"x18") footing	Shelter= (12'x16') slab foundation with (18"x18") footing	Shelter = NA	Shelter = 12'x24' slab foundation with 18"X18" footings
	Generator = (8'- 6"x11'-0"x9") slab foundation	Generator = (8'- 6"x13'-6"x9") slab foundation	Generator = (9'- 6"X13'-6"X9") slab foundation	Generator = 8'- 6"x11'x9" slab foundation
Trenching for electrical and coaxial cable conduits	18" wide, 50 FT long trench from existing utility pole to meter (36" below grade	18" wide, 180 FT long trench from transformer to meter (36" below grade)	18" wide, 30 FT long trench from generator to shelter. (36" below grade)	18" wide, 12 FT long trench from transformer to shelter (36" below grade).
	18" wide, 10 FT long trench from generator to shelter (24" below grade)	18" wide, 10 FT long trench from generator to shelter (36" below grade)		12" wide, 10 FT long trench from generator to shelter (24" below grade)
		24" wide, 70 FT long trench for coaxial from shelter to monopole (36" below grade)		
Trenching for grounding	30" below grade around perimeter of each new concrete pad (approx. 260 LF)	30" below grade around perimeter of each new concrete pad (approx. 145 LF)	30" below grade around perimeter of each concrete pad (approx. 200 LF)	30" below grade around perimeter of each new concrete pad (approx. 115 LF)
CY – cubic yards SF – square feet		T – foot/feet F – linear feet	NA – not applic	able



Construction activities at each site would result in temporary disturbance of a maximum of approximately 5,000 square feet (0.11 acre). A maximum of approximately 2,000 square feet (0.05 acre) of new impermeable surface would be created at locations that require installation of new concrete pads for a tower, shelter, and generator.

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. Almost all LMR facilities would be constructed within or adjacent to existing telecommunications or other facilities, such as water tanks, or at developed locations that currently have public radio service such as police and fire stations. At facilities such as urban police and fire stations, LMR construction may occur within paved or landscaped areas of the facility property.

Each site, with the exception of the sites that would be installed on buildings or some sites installed at urban police or fire stations, would be secured within a chain link fence. Where LMR sites would be collocated at existing telecommunication sites, construction of new facilities would occur within the existing fenced area of the facility to the maximum extent feasible. At some sites, an existing fenced area may need to be expanded or a new fenced area may be installed adjacent to the existing facility to allow construction of the LMR facilities. The total fenced area of the largest LMR sites would generally be less than 5,000 square feet.

System components would be staged and pre-installed at manufacturers' facilities and would be shipped and stored locally with the construction materials at a central location or multiple warehouses. At sites with limited laydown areas, all construction material would be shipped to each system site for just-in-time field installation with minimal field staging. If sufficient developed, landscaped, or previously disturbed areas exist on or adjacent to the LMR site, material could be staged at the site.

Each of the LMR sites would be accessed via existing paved or unpaved roads. No road improvements or new road construction is anticipated.

Operation

No staff would be required at any of the sites to operate the LMR equipment. The LMR facilities and equipment would need to be inspected, maintained, and repaired as necessary. Maintenance activities would involve both routine preventive maintenance and emergency procedure testing, including emergency generator testing, to maintain service continuity. Facilities and system components 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. Fuel tanks in the emergency generators would require occasional refilling. The LMR system 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 sport utility vehicle (SUV) might be required.

The sites would have security lighting. Towers would have lighting and markings in compliance with Federal Aviation Administration (FAA) requirements, as applicable based on proposed structure height and location.

As part of site development and maintenance, vegetation on or immediately adjacent to an LMR site would be removed, as needed, in accordance with plans or procedures applicable to the site (i.e., jurisdictional requirements; type of infrastructure to be protected; and site factors including vegetation type, slope, and aspect).

9. **Surrounding land uses and setting:** The 120 LMR project sites being considered are located in varying settings ranging from urban to rural. Adjacent land uses include commercial, industrial, residential, recreational, and undeveloped areas. Most sites are adjacent to existing telecommunication facilities or other utility facilities,



such as municipal water tanks, or are at police, sheriff, and fire station facilities, hospitals, and county and local government buildings.

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

- Federal Emergency Management Agency
- Federal Aviation Administration
- Federal Communications Commission
- National Park Service
- U. S. Army Corps of Engineers
- U. S. Bureau of Land Management
- U. S Coast Guard
- U. S. Forest Service
- U. S. Fish and Wildlife Service
- California Coastal Commission
- California Department of Fish and Wildlife
- California State Historic Preservation Officer
- Antelope Valley Air Quality Management District
- South Coast Air Quality Management District
- Lahontan Regional Water Quality Control Board
- Los Angeles Regional Water Quality Control Board
- Santa Ana Regional Water Quality Control Board
- Los Angeles County
- Orange County
- City of Agoura Hills
- City of Beverly Hills
- City of Burbank
- City of Carson
- City of Cerritos
- City of Chino Hills
- City of Claremont
- City of Compton
- City of El Monte
- City of El Segundo
- City of Glendale
- City of Glendora
- City of Huntington Park
- City of Inglewood
- City of Lancaster
- City of Los Angeles



- City of Malibu
- City of Palmdale
- City of Pasadena
- City of Rancho Palos Verdes
- City of Redondo Beach
- City of Rolling Hills
- City of San Dimas
- City of Santa Monica
- City of Signal Hill
- City of West Hollywood
- City of Westlake Village
- City of Whittier





2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

			v would be potentially affected by this as indicated by the checklist on the fol		
\boxtimes	Aesthetics		Agriculture and Forestry Resources	\boxtimes	Air Quality
	Biological Resources	\boxtimes	Cultural Resources	\boxtimes	Geology /Soils
\boxtimes	Greenhouse Gas Emissions	\boxtimes	Hazards & Hazardous Materials	\boxtimes	Hydrology / Water Quality
\boxtimes	Land Use / Planning		Mineral Resources	\boxtimes	Noise
	Population / Housing		Public Services	\boxtimes	Recreation
\boxtimes	Transportation/Traffic	\boxtimes	Utilities / Service Systems	\boxtimes	Mandatory Findings of Significance
DET	ERMINATION: (To be complete	ed by 1	he Lead Agency)		
On t	he basis of this initial evaluatio	n:			
	l find that the proposed proje DECLARATION will be prepare		OULD NOT have a significant effect or	the e	environment, and a NEGATIVE
	significant effect in this case b	oecaus	oject could have a significant effect on se revisions in the project have been in DECLARATION will be prepared.		
	I find that the proposed proje IMPACT REPORT is required.	ct MA	Y have a significant effect on the env	ironm	ent, and an ENVIRONMENTAL
	mitigated" impact on the env document pursuant to applica	ironm ble le _l ed on	AY have a "potentially significant impa ent, but at least one effect 1) has bee gal standards, and 2) has been address attached sheets. An ENVIRONMENTA emain to be addressed.	en ade	equately analyzed in an earlier mitigation measures based on
	potentially significant effects of pursuant to applicable standa	(a) hav ards, s luding	project could have a significant effeige been analyzed adequately in an ear and (b) have been avoided or mitigation measures the	rlier E ted p	IR or NEGATIVE DECLARATION ursuant to that earlier EIR or
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Sign	ature		C	ate	
Sign	ature		Č	ate	





3 EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.





4 ENVIRONMENTAL ISSUES

4.1 **AESTHETICS**

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

- a) Some LMR sites would include installation of new lattice towers or new monopoles that may be visible from scenic vistas and could result in significant visual impacts. Potentially significant impacts to scenic vistas will be evaluated in the EIR.
- b) The project area includes Los Angeles County and a small portion of adjacent Orange and San Bernardino counties (one potential site is in Orange County and two are in San Bernardino County). One designated state scenic highway traverses this area, State Route 2 in the Angeles National Forest, which is also a U.S. Forest Service (USFS) scenic byway. A number of eligible state scenic highways are in this area, and a few roads in the Santa Monica Mountains area are Los Angeles County designated scenic highways (Caltrans 2014). The proposed LMR towers may be visible from some of these scenic highways. Although none of the towers would be located where they would be expected to damage resources within a scenic highway, potentially significant impacts to scenic highways will be evaluated in the EIR.
- c) The project area encompasses the Wilderness areas within Angeles National Forest. Proposed LMR facilities near the Wilderness areas will be evaluated in the EIR for potential to be seen from Wilderness areas and the potential for the change to have an impact on the recreational experience because of the visibility of the facilities. Although all LMR sites are proposed at or adjacent to existing facilities, the presence of additional towers or monopoles or of new structures that may be taller or otherwise more visible than those currently present and could affect the existing visual character or quality at some locations. Potentially significant impacts to visual character and quality will be evaluated in the EIR.
- d) LMR facilities would require security lighting. Some towers may require lighting in accordance with Federal Aviation Administration requirements, depending on proposed tower height and locations. Glare from reflective surfaces may result from construction of some of the facilities. Potentially significant impacts from light and glare from LMR sites will be evaluated in the EIR.



4.2 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 Less Than agencies may refer to information compiled by the California Significant Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment with Project and the Forest Legacy Assessment project; and forest Potentially Mitigation Less Than carbon measurement methodology provided in Forest Protocols Significant Incorporate Significant No adopted by the California Air Resources Board. Would the project: **Impact** d Impact Impact \boxtimes П 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? \bowtie b) Conflict with existing zoning for agricultural use or a Williamson Act contract? \boxtimes 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))? \boxtimes d) Result in the loss of forest land or conversion of forest land to nonforest use? \boxtimes 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?

- a) None of the proposed LMR sites is located on an area mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program (FMMP 2010). No further analysis is warranted.
- b) None of the LMR sites are currently used for agricultural use or are under a Williamson Act contract. All of the LMR sites are either within or adjacent to existing telecommunications or other facilities and are not available for agricultural uses. No further analysis is warranted.
- c) None of the LMR sites are currently used for forestry use. All of the LMR sites, including those proposed for locations within the Angeles National Forest, are either within or adjacent to existing telecommunications or other facilities and are not available for forestry uses. No further analysis is warranted.
- d) None of the LMR sites are currently forest land. All of the LMR sites, including those proposed for locations within the Angeles National Forest, are either within or adjacent to existing telecommunications or other facilities and are not forest land. No further analysis is warranted.



e) The purpose of the project is to enhance communications. The project would not involve any activities that would convert Farmland or forest land to other uses. No further analysis is warranted.

4.3 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:	•	Significant with Mitigation Incorporate d	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			
b) Violate any air quality standard 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)?			
d) Expose sensitive receptors to substantial pollutant concentrations?	\boxtimes		
e) Create objectionable odors affecting a substantial number of people?			

- a) The majority of project sites would be located in the South Coast Air Basin (SCAB), within the South Coast Air Quality Management District (SCAQMD). Ten of the potential site locations are in the Mojave Desert Air Basin (MDAB) within the Antelope Valley Air Quality Management District (AVAQMD). The SCAB is designated a nonattainment area for the federal standards for ozone, 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 ozone, particulate matter less than 10 microns in size (PM₁₀), and PM_{2.5}. The Antelope Valley is designated a nonattainment area for the federal standard for ozone and for the State standards for ozone and PM₁₀. (CARB 2014).
 - Both districts have established standards for air pollutants generated by construction and by operational activities. During construction of the project, emissions may be generated by grading activities, construction workers traveling to and from the project site, delivery and hauling of construction supplies and debris, and fuel combustion by onsite construction equipment. Construction air emissions would be short-term and would be limited only to the time period when construction activity is taking place; however, an evaluation is needed to determine if air emissions would conflict with air quality plans. Potentially significant air quality impacts will be evaluated in the EIR.
- b) Both the SCAQMD and the AVAQMD have established standards for air pollutants generated by construction and by operational activities. During construction of the project, emissions may be generated by grading activities, construction workers traveling to and from the project site, delivery and hauling of construction supplies and debris, and fuel combustion by onsite construction equipment. Construction air emissions would be short-term and would be limited only to the time period when construction activity is taking place; however, an evaluation is needed to determine if air emissions would violate or contribute to existing air quality violations. Potentially significant air quality impacts will be evaluated in the EIR.



- c) Both the SCAQMD and the AVAQMD have established standards for air pollutants generated by construction and by operational activities. During construction of the project, emissions may be generated by grading activities, construction workers traveling to and from the project site, delivery and hauling of construction supplies and debris, and fuel combustion by onsite construction equipment. Construction air emissions would be short-term and would be limited only to the time period when construction activity is taking place; however, an evaluation is needed to determine if air emissions would be cumulatively considerable. Potentially significant air quality impacts will be evaluated in the EIR.
- d) Air emissions from construction of the LMR sites would be short-term (e.g., five to six weeks), and pollutant concentrations would be localized in the vicinity of the individual LMR construction site; however, some sites would be constructed adjacent to residential areas. Potentially significant impacts from pollutant concentrations from site construction will be evaluated in the EIR.
- e) Exhaust from construction vehicles and equipment may produce odors. These would be temporary and localized and would not affect a substantial number of people. Impacts would be less than significant; however, this will be evaluated in the EIR to confirm this expectation.

4.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Significant with Mitigation Incorporate d	Significant	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?				
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?				
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?				
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?	_			
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
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?				



DISCUSSION

- a) Some LMR sites are located within or adjacent to areas that may provide suitable habitat for candidate, sensitive, or special status species, including areas designated as critical habitat under the federal Endangered Species Act. Potentially significant impacts to these species and their habitat will be evaluated in the EIR.
- b) Construction of the LMR sites may adversely affect riparian or other sensitive natural communities.

 Potentially significant impacts to the sensitive natural communities and wetlands will be evaluated in the EIR.
- c) Construction of the LMR sites may adversely affect wetlands. Potentially significant impacts to wetlands will be evaluated in the EIR.
- d) Some LMR sites would require creation of new fenced areas in locations that could be used by wildlife. Potentially significant impacts to fish and wildlife movement and use will be evaluated in the EIR.
- e) The EIR will evaluate whether conflicts with local policies and ordinances would result in significant impacts to biological resources.
- f) Some of the LMR sites are proposed for areas covered by Habitat Conservation Plans and Natural Community Conservation Plans. The project is not expected to conflict with these plans; however, the EIR will evaluate whether conflicts with such plans would result in significant impacts.

Less Than

4.5 CULTURAL RESOURCES

Would the project:	•	Significant with Mitigation Incorporate d	Significant	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?				
b)Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d)Disturb any human remains, including those interred outside	\boxtimes			

- a) The proposed LMR sites would be located on sites throughout Los Angeles County, with one site potentially in Orange County and two sites potentially in San Bernardino County. Site locations may contain historic buildings and landmarks. While the project would be constructed mostly within existing communication facilities sites, construction and operation have the potential for both direct and indirect impacts to historical resources. Potentially significant impacts to historical resources will be evaluated in the EIR.
- b) Construction activities would require excavation for installation of tower or monopole and other facility foundations. Therefore, unknown archaeological resources have potential to be encountered during



project construction. Potentially significant impacts to archaeological resources will be evaluated in the EIR.

- c) Construction activities would require excavation for installation of tower or monopole and other facility foundations. Therefore unknown paleontological resources and/or unique geological features have potential to be encountered during project construction. Potentially significant impacts to paleontological resources and geologic features will be evaluated in the EIR.
- d) The project could result in the disturbance of unknown human remains due to anticipated grading and excavation activities, including those outside formal cemeteries. The potential for impacts to human remains will be evaluated in the EIR.

4.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Significant with Mitigation Incorporate d	Significant	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.				
ii) Strong seismic ground shaking?	\boxtimes			
iii) Seismic-related ground failure, including liquefaction?	\boxtimes			
iv) Landslides?	\boxtimes			
b) Result in substantial soil erosion or the loss of topsoil?	\boxtimes			
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?				
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?				
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?				

DISCUSSION

a) Some of the proposed LMR sites would be located within Alquist-Priolo Earthquake Fault Zones (CDC-CGS 2009). Given the location of the project in the southern California region, the entire project area is subject to the effects of seismic activity. An evaluation of earthquake fault, seismic, and landslide hazards at the LMR sites will be provided in the EIR.



- b) Ground-disturbing activities would occur during construction of the project from activities such as installing concrete foundations for site structures, trenching for utility connections, and installing fences at some sites. Total ground disturbance at each site would not exceed an acre. Standard soil erosion control measures would be implemented during construction. The maximum disturbance area at any site would not exceed approximately 5,000 square feet, and construction activity at a site would typically be completed in five to six weeks. Based on the limited construction area size, the short duration of construction activity, and the implementation of soil erosion control measures, substantial soil erosion and loss of topsoil is not expected. Potentially significant impacts from soil erosion will be evaluated in the EIR.
- c) Prior to any construction and as a standard practice, a geotechnical evaluation would be prepared which would prescribe methods, techniques, and specifications for: site preparation, treatment of undocumented fill and/or alluvial soils, fill placement on sloping ground, fill characteristics, fill placement and compactions, temporary excavations and shoring, permanent slopes, treatment of expansive soils, and treatment of corrosive soils. Design and construction of the project would conform to recommendations in the geotechnical evaluation. Potentially significant impacts from unstable soil or geologic units will be evaluated in the EIR.
- d) Prior to any construction and as a standard practice, a geotechnical evaluation would be prepared which would prescribe methods, techniques, and specifications for: site preparation, treatment of undocumented fill and/or alluvial soils, fill placement on sloping ground, fill characteristics, fill placement and compactions, temporary excavations and shoring, permanent slopes, treatment of expansive soils, and treatment of corrosive soils. Design and construction of the project would conform to recommendations in the geotechnical evaluation. Potentially significant impacts from expansive soil will be evaluated in the EIR.
- e) 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. No further analysis is warranted.

4.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Significant with Mitigation Incorporate d	Significant	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	\boxtimes			
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	\boxtimes			

DISCUSSION:

a) Greenhouse gas (GHG) emissions may be generated during construction by grading activities, construction workers traveling to and from the project site, delivery and hauling of construction supplies and debris, and fuel combustion by onsite construction equipment. Operation would also result in an increase in electrical usage, which would generate GHG emissions. An evaluation based on SCAQMD and AVAQMD significance thresholds for greenhouse gas emission is needed to determine if project-related emissions are potentially significant. This will be evaluated further in the EIR.



b) GHG emissions may be generated during construction by grading activities, construction workers traveling to and from the project site, delivery and hauling of construction supplies and debris, and fuel combustion by onsite construction equipment. Operation would also result in an increase in electrical usage, which would generate GHG emissions. An evaluation for greenhouse gas emission is needed to determine if project-related emissions would conflict with any applicable plans, policies, or regulations. This will be evaluated further in the EIR.

4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Significant with			
	-	Mitigation Incorporate d	Significant	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
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?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste 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?				
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?				
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?				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
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?				

DISCUSSION

a) Construction of the project would require the use of gasoline, diesel fuel, oil, solvents, and lubricants associated with vehicles and construction activities. Operation of the project would require routine testing of the diesel-powered emergency generator that would be installed at most LMR sites. The



- internal storage tank would be double-walled and would contain a maximum of 1,500 gallons of diesel fuel. The potential to affect human health and safety from the transport, use, or disposal of hazardous substances during construction or operations will be evaluated in the EIR.
- b) Construction of the project would require the use of gasoline, diesel fuel, oil, solvents, and lubricants associated with vehicles and construction activities. Releases of these substances could occur during construction. Operation of the project would require routine testing of the diesel-powered emergency generator that would be installed at most LMR sites. The internal storage tank would be double-walled and would contain a maximum of 1,500 gallons of diesel fuel. In the unlikely event of an accident during the transport of diesel fuel or refueling the generator tank that resulted in a release of product, emergency procedures would include notification of appropriate authorities; containment of the spilled product; and clean-up of the spill to federal, State, and local standards. The potential to affect human health and safety from a release of hazardous substances during construction or operations as the result of accident will be evaluated in the EIR.
- c) Some proposed LMR sites are located within one-quarter mile of schools. Because most sites would include installation of a diesel-powered emergency generator, diesel fuel storage may occur within one-quarter mile of schools. The use of diesel fuel in a generator within one-quarter mile of a school is not expected to have a potentially significant impact because of the limited amount of diesel fuel that would be present inside a storage tank at any site (maximum 1,500 gallons) and because fuel tanks would be monitored with a leak detection and alarm system; however, this will be evaluated in the EIR to confirm this expectation.
- d) A review of the LMR sites and hazardous material sites will be conducted, and potentially significant impacts will be evaluated in the EIR.
- e) Some LMR sites would be located within the vicinity of airports. Potentially significant impacts related to hazards from individual sites located within airport land use plans or within2 miles of a public or public use airport will be evaluated in the EIR.
- f) Some LMR sites would be located within the vicinity of private airstrips. Potentially significant impacts related to hazards from individual sites located within the vicinity of a private airstrip will be evaluated in the FIR
- g) The project would improve communications to allow for better coordination of emergency response action or evacuation plans. Temporary road or lane closures could be required at or near some LMR sites during construction activities. Any temporary roadway or lane closure would be coordinated with local jurisdictions to minimize potential impacts to emergency access and evacuation routes. No significant impacts would occur; however, this will be evaluated in the EIR to confirm this expectation.
- h) LMR sites not proposed for urban areas may be in areas subject to wildland fires. Potentially significant impacts from wildland fires will be evaluated in the EIR.



4.9 HYDROLOGY AND WATER QUALITY

Would the project:	Significant with			
	-	Mitigation Incorporate d		. No
a) Violate any water quality standards or waste discharge requirements?				
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)?				
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?				
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?				
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?				
f) Otherwise substantially degrade water quality?	\boxtimes			
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?				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
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?				
j) Inundation by seiche, tsunami, or mudflow?				

DISCUSSION

a) Project operations would not produce any wastewater. If shallow groundwater is encountered during excavation for foundations or drilling for monopole installation, dewatering may be necessary. Any water produced by dewatering activities during construction would be disposed of in accordance with applicable regulations. Impacts are anticipated to be less than significant; however, this will be evaluated in the EIR to confirm this expectation.



- b) Construction of the proposed LMR sites would result in the creation of new impermeable surfaces at some sites; however, each LMR site is relatively small (maximum of 5,000 square feet total) and would not be expected to substantially interfere with groundwater recharge at any site. Project operations would not require use of water. During construction of the proposed LMR sites, water for dust control and concrete mixing would be obtained from existing municipal sources (e.g., fire hydrants). Water from these sources may come at least partially from local groundwater supplies. Impacts on water supplies from water usage by the project will be evaluated in the EIR.
- c) The project would not result in alteration of a stream or river. The project may require grading at some sites and the addition of impermeable surfaces that may increase stormwater runoff. Best management practices to control soil erosion and stormwater runoff would be implemented during construction, and erosion controls would be incorporated into site design. Although each LMR site would not exceed 5,000 square feet, and changes in site topography and stormwater runoff would not be expected to result in substantial erosion or siltation, potential erosion impacts will be evaluated in the EIR to confirm this expectation.
- d) The project would not result in alteration of a stream or river. The project may require grading at some sites and the addition of impermeable surfaces that may increase stormwater runoff. Best management practices to control soil erosion and stormwater runoff would be implemented during construction, and erosion controls would be incorporated into site design. Although each LMR site would not exceed 5,000 square feet, and changes in site topography and stormwater runoff would not be expected to result in substantial flooding, potential flooding impacts will be evaluated in the EIR to confirm this expectation.
- e) The size of each LMR site would not exceed 5,000 square feet, and the increase in impermeable surface area at any LMR site would not exceed 2,000 square feet. A significant increase in surface water runoff would not be expected. Potential sources of polluted surface water runoff would be limited to leaks or spills associated with construction equipment operations and from leaks of diesel fuel from the emergency generator, particularly when the generator is serviced or refueled. Standard accidental release responses that would be implemented during construction would minimize potential impacts from construction equipment usage. The storage tank in the emergency generator would be double-walled to provide secondary containment and minimize the potential for fuel being released that could pollute stormwater runoff. The potential to affect water quality from a fuel leak or spill during service or refueling will be evaluated in the EIR.
- f) Diesel-powered emergency generators would be required at most LMR sites. The generators would include internal tanks containing 1,000 to 1,500 gallons of diesel fuel. The tank would be double-walled, providing secondary containment for tank leaks. The potential to affect water quality from a fuel leak or spill during service or refueling will be evaluated in the EIR.
- g) The project does not include the construction of any housing and therefore would not result in placing housing in a flood hazard area. No further analysis is warranted.
- h) At least one proposed LMR site is located within a 100-year flood zone (FEMA 2014). Potentially significant impacts to LMR structures within a 100 year flood hazard area will be evaluated in the EIR.
- i) At least one proposed LMR site is located within a 100-year flood zone (FEMA 2014). Potentially significant impacts from damage due to flooding at the proposed LMR sites will be evaluated in the EIR.
- j) Some LMR sites would be located near the coast and therefore could be in locations potentially affected by a tsunami. Potentially significant impacts from seiches, tsunamis, or mudflows at the proposed LMR sites will be evaluated in the EIR.



4.10 LAND USE AND PLANNING

			Less Than Significant with		
Would	the project:		Mitigation Incorporate d	Significant	No Impact
a) Phys	cically divide an established community?				\boxtimes
an ag limite zonir	flict with any applicable land use plan, policy, or regulation of gency with jurisdiction over the project (including, but not ed to the general plan, specific plan, local coastal program, or ng ordinance) adopted for the purpose of avoiding or gating an environmental effect?				
	lict with any applicable habitat conservation plan or natural munity conservation plan?				
DISCUS	SSION				
a)	The proposed project is the construction and operation of corphysically connected in any way that has the potential to physicallysis is warranted.				
b)	The proposed LMR sites would be located in areas with a varie jurisdiction of a number of agencies that regulate land use inc USFS, the federal Bureau of Land Management, and the Califor significant impacts related to changes in land use and consists zoning at each LMR site will be further addressed in the EIR.	cluding Los A ornia Coastal	ngeles Count Commission	y, multiple . Potentially	cities, /
c)	Portions of the project sites are located within the boundaries community conservation plans. Consistency of the proposed sto these plans will be evaluated in the EIR.				
1.11 N	/INERAL RESOURCES				
			Less Than Significant with		
Would	the project:	-	Mitigation Incorporate d	Significant	No Impact
	It in the loss of availability of a known mineral resource that d be of value to the region and the residents of the state?				
resou	ult in the loss of availability of a locally-important mineral urce recovery site delineated on a local general plan, specific or other land use plan?				



DISCUSSION

- a) None of the proposed LMR sites is currently being used for mineral resource extraction. All the proposed sites contain existing facilities and structures whose presence precludes use of the area for mineral resource extraction; and, therefore, mineral resources are not available at these sites. Proposed LMR facilities would be constructed at or adjacent to these existing facilities and structures; therefore, the project would not result in a change in site conditions that would affect mineral resource availability. No further analysis is warranted.
- b) None of the proposed LMR sites is currently being used for mineral resource extraction. All the proposed sites contain existing facilities and structures whose presence precludes use of the area for mineral resource extraction; and, therefore, mineral resources are not available at these sites. Proposed LMR facilities would be constructed at or adjacent to these existing facilities and structures; therefore, the project would not result in a change in site conditions that would affect availability of locally important mineral resource recovery sites. No further analysis is warranted.

4.12 NOISE

Would the project result in:		Significant with Mitigation Incorporate d	Significant	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?	,			
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
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?				
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?				

DISCUSSION

a) Noise levels in the vicinity of the project would increase during the construction phase of the project. Most city noise ordinances exempt construction activities during daytime hours, and some allow such activities to occur during nighttime hours; however, construction activities generally must comply with noise level restrictions during specified daytime and/or nighttime hours. Noise impacts could be potentially significant, but mostly a person's sensitivity to noise increases during nighttime hours. People



are generally less sensitive to noise during daytime hours when moderate to high noise levels generally dominate ambient conditions. Construction activities at each site would be designed to comply as much as possible with the applicable noise ordinances that limit the hours and/or noise levels during which construction activities may occur. Potentially significant noise impacts will be analyzed in the EIR.

- b) Construction of the project may generate ground-borne vibrations or ground-borne noise. This will be analyzed in the EIR.
- c) Construction activities may temporarily increase noise levels in the vicinity of the project (see item XII-d below), but increases would be short-term (five to six weeks). 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 a project site. Impacts would be less than significant. No further analysis is warranted.
- d) Operation of construction equipment at the proposed LMR sites may produce a temporary increase in noise levels in the vicinity of a site. The emergency generator that would be present at most LMR sites would be operated periodically as part of routine maintenance testing, which could produce a temporary noise increase. This will be analyzed in the EIR.
- e) Some LMR sites may be located within airport land use zones or within 2 miles of a public airport or public use airport. An evaluation of which sites are located near a public airport and the potential noise impacts at these sites will be analyzed in the EIR.
- f) Some LMR sites may be located within the vicinity of a private airport. An evaluation of which sites are located near a private airport and the potential noise impacts at these sites will be analyzed in the EIR.

4.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Significant with Mitigation Incorporate d	Significant	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)?				
b)Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				

DISCUSSION

a) The project would involve the construction and operation of an LMR system that is intended to 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 facilities would result in a short-term increase in construction employment that would be spread throughout Los Angeles County and adjacent areas. 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. No further analysis is warranted.



- b) The construction and operation of the LMR system would not displace any existing housing. No further analysis is warranted.
- c) The construction and operation of the LMR system would not displace any people. No further analysis is warranted.

4.14 PUBLIC SERVICES

	 Significant with Mitigation Incorporate d	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?		
Police protection?		
Schools?		
Parks?		
Other public facilities?		

DISCUSSION

a) The purpose of the project is to facilitate communications among emergency response agencies including fire, police, and hospitals. Many LMR sites would be constructed at fire stations, police stations, and other public facilities such as 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 significant impacts to other public facilities. No further analysis is warranted.



4.15 RECREATION

			Less Than Significant with		
		-	Mitigation Incorporate d		No Impact
regi phy	uld the project increase the use of existing neighborhood and ional parks or other recreational facilities such that substantial sical deterioration of the facility would occur or be elerated?				
con	es the project include recreational facilities or require the struction or expansion of recreational facilities which might e an adverse physical effect on the environment?				
DISCU	JSSION				
a)	The project would not cause a direct population increase (see operation of the LMR system would have no effect on the use parks or recreational facilities. Therefore, the project would not of recreational facilities. Because some LMR sites would be located facilities, impacts to recreation will be analyzed in the EIR.	of existing not result in s	eighborhood ubstantial ph	d parks or re lysical deter	egional ioratio
b)	The project does not include or require construction or expansanalysis is warranted.	sion of any r	ecreational f	acilities. No	further
1.16	TRANSPORTATION/TRAFFIC				
			Less Than Significant with		
Woul	d the project:	-	Mitigation Incorporate d		No Impact
mea syst mas the stre	inflict with an applicable plan, ordinance, or policy establishing asures of effectiveness for the performance of the circulation tem, taking into account all modes of transportation including as transit and nonmotorized travel and relevant components of circulation system, including but not limited to intersections, eets, highways and freeways, pedestrian and bicycle paths, and as transit?				
incl den	nflict with an applicable congestion management program, uding, but not limited to level of service standards and travel nand measures, or other standards established by the county gestion management agency for designated roads or highways?				
incr	sult in a change in air traffic patterns, including either an rease in traffic levels or a change in location that results in stantial safety risks?				



Would the project:	Potentially Significant Impact	Significant with Mitigation Incorporate d		No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e) Result in inadequate emergency access?			\boxtimes	
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?				

DISCUSSION

- a) Construction of the project, including workers' vehicles and construction equipment, would temporarily increase traffic in the vicinity of the proposed LMR sites. Potential impacts to transportation during construction of the project will be evaluated in the EIR.
- b) Construction of the project, including workers' vehicles and construction equipment, would temporarily increase traffic in the vicinity of the proposed LMR sites. Potential impacts to congestion management programs during construction of the project will be evaluated in the EIR.
- c) The project includes the construction of antenna support structures up to 180 feet tall without appurtenances at some locations where structures of this height do not currently exist. Potentially significant impacts to aircraft traffic patterns will be evaluated in the EIR.
- d) The proposed LMR sites would be accessed using existing roads and related infrastructure such as parking lots. The project would not entail any changes to transportation system designs and, therefore, would not introduce any design feature hazards or incompatible uses. No further analysis is warranted.
- e) Temporary road or lane closures could be required at some LMR sites during construction activities. Any temporary roadway or lane closure would be coordinated with local jurisdictions to minimize potential impacts to emergency access and evacuation routes. No significant impacts would be expected; however, potential impacts to emergency access and evacuation routes will be evaluated in the EIR to confirm this expectation.
 - The LMR facilities would not be sited where they could affect emergency access. During the design process, siting of the LMR 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 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 on emergency access. By incorporating code requirements in the placement and design of LMR facilities, operation of the project would have no impact on emergency access.
- f) The project consists of the construction and operation of telecommunication sites. None of the sites would be constructed where public transit, bicycle, or pedestrian facilities are located. 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. No further analysis is warranted.



4.17 UTILITIES AND SERVICE SYSTEMS

			Significant		
Would	the project:		with		
		_	Mitigation		
		_	Incorporate	_	
		Impact	d	Impact	Impact
	eed wastewater treatment requirements of the applicable onal Water Quality Control Board?				
treat	uire or result in the construction of new water or wastewater them the facilities or expansion of existing facilities, the truction of which could cause significant environmental cts?				
facili	uire or result in the construction of new stormwater drainage ties or expansion of existing facilities, the construction of h could cause significant environmental effects?				
exist	e sufficient water supplies available to serve the project from ing entitlements and resources, or are new or expanded lements needed?				
which to se	ult in a determination by the wastewater treatment provider h serves or may serve the project that it has adequate capacity rve the project's projected demand in addition to the ider's existing commitments?				
	erved by a landfill with sufficient permitted capacity to mmodate the project's solid waste disposal needs?	\boxtimes			
	ply with federal, state, and local statutes and regulations ed to solid waste?				
DISCU	SSION				
a)	During excavation activities, dewatering may be necessary. Direct Regional Water Quality Control Board (RWQCB) requirements involve discharging concentrated wastewater or large volume facility that would exceed treatment requirements set forth be significant impact on requirements of the wastewater treatment during construction of the project. During operations, the program wastewater that would require treatment. Although less to impacts from wastewater discharge will be evaluated in the Electrical Control of the project.	. Constructions of wasteway the RWQC ent plants in ject would not have significated.	on of the proj ater to a was B. As a result the project a ot result in th ant impacts a	iect would tewater tre , a less tha irea is antion ne producti re expecte	not eatment n cipated ion of
b)	The project would not include construction or expansion of ar Therefore, no impact would occur to these types of facilities, a				
c)	The project may require grading at some sites and the addition increase stormwater runoff. Although each LMR site is relative 5,000 square feet) and changes in site topography and stormy	ely small (wo	ould not gene	rally excee	d

require major changes in existing stormwater drainage facilities or extensive new stormwater drainage

facilities, impacts from stormwater runoff facilities will be evaluated in the EIR.



- d) Water would be required during construction of the LMR sites for activities such as concrete mixing and dust suppression. No water would be required for routine operation of the sites. Water usage for construction and operation are expected to be minor; however, impact of the project's water requirements and water supplies will be evaluated in the EIR to confirm this expectation.
- e) The project would not result in generation of wastewater requiring treatment. No further analysis is required.
- f) Construction of the project would not generally entail demolition of existing structures that would generate waste requiring disposal. At some sites, existing chain link fencing may be removed to expand a fenced area. Small amounts of debris may be created as a routine part of constructing new facilities. Operation of the project would result in minimal or no solid waste on a routine basis. Although quantities of solid waste are expected to be small, an evaluation of solid waste generation and the capacity of landfills in the project area to accept that waste will be provided in the EIR.
- g) The amounts and types of waste that may be generated by construction of the project, as described under XVII f), would not conflict with solid waste regulations and statutes. Operation of the project would generate minimal solid waste; however, impacts to solid waste generation will be included in the EIR.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	-	Significant with Mitigation Incorporate d	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?			
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)?			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			

DISCUSSION

a) Potentially significant impacts that require evaluation in an EIR have been identified for several resources in this Initial Study. Surveys will be conducted to identify biological, archaeological, and cultural resources at and in the vicinity of the project sites to identify resources that may be affected by construction and operation of the project. This issue will be carried forward for analysis.



- b) The project has the potential to result in environmental impacts during construction and operation in several resource categories. In addition, other related projects in the vicinity of the LMR sites may also result in environmental impacts. As such, the project, combined with other projects in the area, has potential to result in a significant cumulative impact. Therefore, the proposed project's contribution to any significant cumulative impact will be analyzed further in the EIR.
- c) Implementation of the project would involve mostly construction impacts. After construction, operational impacts from the project could occur. This topic will be analyzed further in the EIR.



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APPENDIX A-1 – POTENTIAL LMR SITE LOCATIONS

For Copy of the proposed LMR Site List, please contact Marina Nguyen at Marina.Nguyen@jacobs.com



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