Initial Study/Mitigated Negative Declaration

Ash Hill Communication Site Project

San Bernardino County, California

FEBRUARY 2024

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Table of Contents

APPENDICES

FIGURES

TABLES

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACEC	Area of Critical Environmental Concern
APE	area of potential effects
APM	Applicant Proposed Measure
BLM	Bureau of Land Management
BMP	best management practice
BNSF	Burlington Northern Santa Fe
BSA	biological study area
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDCA	California Desert Conservation Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CMA	conservation and management action
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2-equivalents
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
dBA	A-weighted decibels
DRECP	Desert Renewable Energy Conservation Plan
DTTP	Desert Tortoise Translocation Plan
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act
GHG	greenhouse gas
HCP	Habitat Conservation Plan
HVAC	heating, ventilation, and air conditioning
I-40	Interstate 40
ITP	Incidental Take Permit
kW	kilowatt
L_{dn}	day/night aggregated sound level over a 24-hour period

Acronym/Abbreviation	Definition
LSA	Lake and Streambed Alteration
LUPA	Land Use Plan Amendment
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MLD	Most Likely Descendant
MM	Mitigation Measure
mph	miles per hour
MRZ	Mineral Resource Zone
MT	metric tons
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NECO	Northern and Eastern Colorado Desert Plan
NEMO	Northern and Eastern Mojave Desert Management Plan
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O&M	operations and maintenance
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
PM_{10}	coarse particulate matter
$PM_{2.5}$	fine particulate matter
PRC	California Public Resources Code
Route 66	U.S. Route 66
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SO_2	sulfur dioxide
SO_x	sulfur oxides
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compounds
WEAP	Worker Environmental Awareness Program

1 Introduction

1.1 Introduction and Regulatory Guidance

The California Department of Fish and Wildlife (CDFW) has prepared this Initial Study for the proposed issuance of a 30-year Incidental Take Permit (ITP) for a California Endangered Species Act (CESA) listed species (California Fish and Game Code [CFGC] Section 2081[b] and [c]; also refer to 14 CCR 783.0 et seq.) as well as a Lake and Streambed Alteration (LSA) Agreement for a term of 5 years or less, unless extended in accordance with CFGC Section 1605(b) (CFGC Section 1600 et seq.) for the InterConnect Towers, LLC (Applicant), Ash Hill Communication Site Project (proposed Project or Project). The ITP Application and LSA Agreement are collectively referred to as "the permits" and are included as Appendices A1 and A2 to this Initial Study.

More specifically, the ITP is being requested for desert tortoise (*Gopherus agassizii*) under Section 2081(b) of CESA (refer to CFGC Section 2050 et seq. and 14 CCR 783.0 et seq.). The ITP, if issued, would authorize "take" as defined by CFGC Section 86, subject to various conditions, incidental to the Applicant's otherwise lawful construction, operations and maintenance (O&M), and decommissioning activities. In this respect the ITP, if issued, would condition how the Applicant implements certain activities to protect covered species that are subject to CDFW's regulatory authority and permitting jurisdiction under CESA. The proposed issuance of the ITP requested by the Applicant is the proposed discretionary approval of a project requiring CDFW to comply with the California Environmental Quality Act (CEQA) (refer to California Public Resources Code [PRC] Section 21080[a])

CDFW and the Applicant also expect that in certain instances, Project activities will be subject to CDFW's regulatory authority under CFGC Section 1600 et seq. In such circumstances, pre-activity notification to CDFW is required and, if CDFW determines the activity may substantially adversely affect fish and wildlife, CDFW will issue an LSA Agreement that includes reasonable measures necessary to protect the resources subject to this aspect of CDFW's regulatory authority (refer to CFGC Section 1602). The proposed issuance of an LSA Agreement, like the requested ITP, is the proposed discretionary approval of a project requiring CDFW to comply with CEQA. CDFW and the Applicant expect certain Project activities to be subject to CDFW's LSA Agreement regulatory authority; therefore, that prospect and related environmental effects are also addressed in this Initial Study.

CDFW will consider the issuance of the permits as provided by the CFGC, informed by, among other things, the broader CEQA lead agency analysis to be conducted under CEQA of potentially significant environmental effects of the "whole of the action." CDFW will also do so consistent with its central mission and trustee mandate. CDFW's mission under the CFGC is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public (CFGC Section 712.1[a][1]; also refer to CFGC Sections 703.3 and 703.5). CDFW is California's trustee agency for fish and wildlife resources and holds those resources in trust and exercises related jurisdiction by statute for all the people of the state (CFGC Sections 711.7[a] and 1802; also refer to PRC Section 21070 and 14 CCR 15386[a]). CDFW will also consider the proposed Project and related effects on fish and wildlife in the broader context of the public trust.

The requested permits, as noted, are the proposed discretionary approvals requiring CDFW to comply with CEQA. However, these proposed actions do not include or involve the proposed approval of the Applicant's

decommissioning plan. The ITP, if issued, will condition how the Applicant implements certain decommissioning activities in the future during the term of the ITP.

Notwithstanding the proposed approval under the CFGC, CEQA requires CDFW as a lead agency to consider the broader environmental consequences of approving the proposed Project as the whole of the action (refer to PRC Sections 21002.1[d] and 21100[b]; 14 CCR 783.3[b]; 14 CCR 15126). CDFW is the CEQA lead agency in this specific instance because there is no other state or local agency action subject to CEQA that is a necessary precondition to the proposed approval by CDFW under the CFGC (14 CCR 783.3[b]; also refer to PRC Section 21067 and 14 CCR 15367). Because CDFW is a CEQA lead agency for the requested ITP, specifically, this Initial Study also serves as the initial environmental analysis prepared under its CEQA-certified regulatory program for lead agency ITP permitting under CESA (14 CCR 783.3[b]; 14 CCR 783.5[d]; and 14 CCR 15251[o]; also refer to PRC Section 21080.5).

The scope of CDFW's lead agency analysis of the potentially significant environmental effects that may result with issuance of the requested permits is guided by the concept of the "project" under CEQA. Pursuant to CEQA Guidelines Section 15378(a), a "project" is defined as the whole of the action that has the potential to result in either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment, and is an activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies (14 CCR 15378[a]). CEQA Guidelines Section 15378(c) also describes a "project" for purposes of CEQA as the activity that is being approved and that may be subject to several discretionary approvals by governmental agencies, and not each separate governmental approval (14 CCR 15378[c]). These are important principles guiding CDFW's analysis and disclosure in this Initial Study of potential direct and reasonably foreseeable indirect environmental impacts that may result if CDFW issues the requested permits under the CFGC. These important principles also inform CDFW's lead agency consideration of, and its broader approval of, the proposed Project as the whole of the action under CEQA.

This Initial Study and its appendices have been prepared in accordance with state administrative guidelines to comply with CEQA. Based on the results of the Initial Study, included in Chapter 3 of this document, CDFW will determine the appropriate CEQA document (mitigated negative declaration or environmental impact report) for the proposed Project.

CEQA requires that public agencies identify the environmental consequences of their discretionary actions and consider mitigation measures, if necessary, that could avoid or reduce significant adverse impacts when avoidance or minimization is not feasible. It also gives the public and other public agencies an opportunity to comment on the proposed Project.

In this Initial Study, Applicant Proposed Measures (APMs) are considered in the evaluation of environmental impacts pursuant to CEQA (refer to Chapter 3, Initial Study). Refer to Section 2.7, Applicant Proposed Measures, for a complete list of the APMs.

The Project entails construction, operation, maintenance, decommissioning, and restoration of a multi-carrier communication site, including ancillary components and use of and minor improvements to existing access roads, which would occur on land administered by the Bureau of Land Management (BLM). The Applicant has separately filed an application for a 30-year right-of-way (ROW) grant from BLM for construction and operation of the Project; the Project site is not ancillary to an existing ROW. The proposed Project would be a multi-tenant wireless communication facility and is designed to accommodate a minimum of four national carriers, as well as government agencies (police, fire and rescue, and highway patrol), for a total of seven tenants.

1.2 CEQA Tribal Consultation and CDFW's Communication and Consultation Policy

Per CEQA, tribal cultural resources are primarily identified through outreach to the Native American Heritage Commission (NAHC) and government-to-government consultation between the lead agency and appropriate California Native American tribes. Assembly Bill (AB) 52 requires public agencies to consult with California Native American tribes (tribes) to ensure the consideration of tribal cultural resources during the CEQA process. On March 15, 2022, CDFW sent a request to NAHC for a search of the Sacred Lands File and a list of tribes that may be affiliated with the area of the Project site. The NAHC performed a record search of the Sacred Lands File and provided a list of Native American tribes who may have an interest in the cultural resources within the Project area on May 3, 2022. On May 27, 2022, CDFW provided notification of the proposed Project under CEQA Section 21080.3.1 and CDFW's Tribal Communication and Consultation Policy to the Morongo Band of Mission Indians, Serrano Nation of Mission Indians, Colorado River Indian Tribes, Quechan Tribe of the Fort Yuma Reservation, San Manuel Band Mission Indians, and the Twenty-Nine Palms Band of Mission Indians identified by NAHC and CDFW. Two responses were received. The first response was from the Quechan Tribe of the Fort Yuma Reservation on June 7, 2022, indicating they had no comments on the Project at that time. The second response was from the San Manuel Band Mission Indians on June 29, 2022, indicating that their tribal name had been changed to Yuhaaviatam of San Manuel Nation and requested that CDFW provide Project documents for their review. On October 4, 2023, representatives from the Yuhaaviatam of San Manuel Nation (Yuhaaviatam) confirmed via email that they had completed their review of the Final Class III Cultural Resources Inventory prepared for the Project in November 2017 and provided recommendations to be considered in the Initial Study. On October 4, 2023, the Yuhaaviatam recommended the inclusion of construction buffers and tribal monitoring. On October 17, 2023, CDFW confirmed that the proposed measures adequately addressed the Yuhaaviatam's concerns. Subsequently, the Applicant added these recommendations to the Draft Initial Study as APMs (APM CUL-1 and APM CUL-2). The Yuhaaviatam also requested that CDFW provide them a copy of the Draft Initial Study once complete.

1.3 Purpose of This Document

The purpose of this document is to evaluate the potential environmental effects of the proposed Project and to present government agency decision makers and the public with the environmental consequences of implementing the proposed Project. The Draft Initial Study is available for a 30-day public review period from February 20, 2024, to March 21, 2024.

Comments should be addressed to:

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Ontario, California 91764
Attn: Julia Karo

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Location of Documents Available for Public Review

The Initial Study may be viewed online at https://www.wildlife.ca.gov/Notices. In addition, copies of the Initial Study and appendices on CD are available for review at the locations listed in Table 1-1.

Table 1-1. Public Repository Sites

Site	Address	Telephone
CDFW Bermuda Dunes Office	78078 Country Club Drive, Suite 109, Bermuda Dunes, California 92203	760.200.9158
CDFW Ontario Office	3602 Inland Empire Boulevard, Suite C220, Ontario, California 91764	909.484.0167
Barstow Library	304 East Buena Vista Street, Barstow, California 92311	760.256.4850
Needles Library	1111 Bailey Avenue, Needles, California 92363	760.326.9255

After comments are received from the public and reviewing agencies, CDFW will consider those comments and may (1) adopt the mitigated negative declaration and mitigation and monitoring program and approve the proposed Project, (2) undertake additional environmental studies, or (3) abandon the Project.

1.4 Documentation Organization

This Initial Study is organized to provide an analysis of the potentially significant environmental impacts and mitigation measures for the proposed Project. To describe the direct and indirect impacts, as well as mitigation measures for the proposed Project, this Initial Study is organized as follows:

Chapter 1, Introduction, serves as a foreword to the Initial Study, introducing the applicable environmental review procedures, intended uses of the Initial Study, format of the Initial Study, and summary of conclusions of the environmental analysis.

Chapter 2, Project Description, provides a description of the proposed Project components, including construction equipment and schedule.

Chapter 3, Initial Study, provides a description of the existing environmental setting and an analysis of the potentially significant environmental impacts identified for the proposed Project, including APMs to be incorporated into the Project and proposed mitigation measures to reduce or avoid any potentially significant impacts.

Chapter 4, List of Preparers, lists members of the Initial Study team that contributed to the preparation of this document, as well as their primary Initial Study responsibility and qualifications.

Chapter 5, References, lists references used in preparation of the Initial Study.

Appendices include various information and technical studies prepared for the proposed Project, as listed in the table of contents.

1.5 Summary of Findings

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed Project.

Based on the issues evaluated in Chapter 3, it was determined that the proposed Project would have no impact or a less-than-significant impact on the following issue areas:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Implementation of the proposed Project would be less than significant with implementation of mitigation measures in the following issue areas:

- Biological Resources
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Utilities and Service Systems
- Mandatory Findings of Significance

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2 Project Description

2.1 Project Objectives

The Applicant seeks to provide improved cellular communication capability within the Interstate 40 (I-40) northeast of National Trails Highway (U.S. Route 66 [Route 66]) and north of the east–west-oriented Burlington Northern Santa Fe (BNSF) railroad. I-40 is a heavily traveled roadway that carries regional traffic between Southern California and Arizona, with an average daily traffic count along this segment typically surpassing 13,000 vehicles per day (Caltrans 2019a). This segment of I-40 and adjacent lands have been identified as having inadequate cellular transmission coverage. Wireless telecommunication providers (e.g., Verizon, AT&T) have determined a need for an additional communication site based on any or all of the following criteria:

- Need to provide signal coverage to an area or zone
- Need to strengthen/densify coverage to an area or zone
- Customer demand for coverage
- Emergency response agency demand for coverage
- Law enforcement agency demand for coverage
- Federal/Homeland Security demand for coverage

The proposed Project would remedy the existing coverage deficiencies in the area and would meet one or more of the objectives outlined above. The facility would be made available for collocated use by existing wireless telecommunication providers and other telecommunication service providers.

The Applicant has applied to CDFW for an ITP for the desert tortoise under CFGC Section 2081 and an LSA Agreement under CFGC 1600. Proposed issuance of the permits to the Applicant are regulatory actions involving the exercise of discretion and independent judgment by CDFW, consistent with its jurisdictional authority under the CFGC. Issuance of the ITP by CDFW, subject to specific conditions of approval, including a term of 5 years, would authorize "take" as defined by state law of desert tortoise incidental to the Applicant's otherwise lawful construction of the Project. Issuance of the LSA Agreement by CDFW, consistent with the notification, would be conditioned on reasonable measures necessary to protect fish and wildlife subject to CDFW's regulatory jurisdiction under CFGC Section 1600 et seq. CDFW, as the CEQA lead agency, has analyzed and disclosed the environmental effects of the Project, in combination, as the "whole of the action" in this Initial Study. Although the Applicant is seeking an ITP and LSA Agreement for construction that would remain in effect over an initial 5-year term, post-construction O&M and decommissioning are reasonably foreseeable future phases of the Project and are also considered in the environmental analysis as part of the whole of the action.

2.2 Project Location and Land Uses

The Project entails construction, operation, maintenance, decommissioning, and restoration of a multi-carrier communication site, including ancillary components and use of and minor improvements to existing access roads, which would occur on BLM-administered land. The Applicant has separately filed an application for a 30-year ROW grant from BLM for construction and operation of the Project; the Project site is not ancillary to an existing ROW. The proposed Project would be a multi-tenant wireless communication facility and is

designed to accommodate a minimum of four national carriers, as well as government agencies (police, fire and rescue, and highway patrol) for a total of seven tenants.

The Project site is in San Bernardino County, California. The proposed communication site is approximately 300 feet from I-40. Access roads associated with the Project extend from the proposed communication site to the southwest, east, and south toward Route 66. Further, the proposed communication tower site and segments of proposed access roads are within BLM California Desert District Utility Corridor G (Figure 2-1, Project Location). With the exception of I-40, Route 66, and existing open and informal/unauthorized access roads, the area surrounding the Project site comprises undeveloped desert lands. The Project would include a rectangular 0.23-acre lease area; an access road measuring approximately 5.77 miles in length and averaging 14 feet in width, predominantly on 8.52 acres of previously disturbed unpaved road; and an additional 0.18 acres of new disturbance relating to access road improvements off BLM Route NS0003 leading to the proposed communications facility. It should be noted that the 0.18 acres has been previously disturbed from non-Project-related activities, but because BLM had not authorized the prior disturbance and it is not part of the existing BLM-approved access route, the 0.18-acre impact is considered a new disturbance.

The total Project area is 8.93 acres, of which 0.41 acres is considered undisturbed habitat and 8.52 acres is existing developed or maintained areas. Areas of new, permanent disturbance would include the communication site and the new portion of the access road from BLM Access Road NS0003, as described above. All new disturbances would be considered permanent in nature given the sensitivity of desert ecosystems to ground-disturbing activities. Areas of new disturbance would total approximately 0.41 acres (see Table 2-1).

Land ownership as it pertains to the Project ROW and surrounding area is depicted in Figure 2-2, Land Management Status. Figure 2-3 illustrates the communication site plan and Figure 2-4 illustrates the access road alignment.

Table 2-1. Project Acreage

Project Component	Permanent	Previously Disturbed	New Disturbance
Communication Site	0.23	0.0	0.23
Proposed Access Roads	8.70	8.52	0.18
Total	**8.93**	**8.52**	**0.41**

2.3 Summary of Project Components

The proposed communication facility would meet Motorola R56 Design Standards or equivalent and would include three principal components: (1) a communication tower; (2) an equipment shelter and supporting components; and (3) access roads. Additional information about each of these components is provided below.

Communication Tower

The communication tower would be a self-supporting three-legged lattice-style structure; would be 196 feet in height; and would be designed by Sabre, a national tower manufacturing company, to Motorola R56 Standards (Motorola 2005). The tower would serve as the structure on which the communication equipment would be mounted. The tower would be placed upon a 28-foot by 28-foot concrete slab foundation and would consist of

either cast-in-place caissons or shallow foundations designed to carry axial loads and moments of force applied by wind and other factors on the tower. The tower, foundations, and all other structures on the site would be built to professional standards and applicable building codes. Soil tests and other investigations would be performed within the location of the proposed site to determine the specific foundation requirements.

The structural members and bracing units of the tower would be constructed of industry-standard galvanized steel with a silver-gray color tone. The types of communication equipment installed on the tower would depend on the specific carriers housed at the site and the equipment requirements for their specific systems, but would likely include a rectangular antenna array, omni antennas, and microwave dishes. Lastly, one motion-detector light would be installed approximately 10 feet high on the base of the tower. The light would be shielded and directed downward to limit sky glow and light trespass.

Equipment Shelter, Backup Generators and Supporting Components, and Solar Arrays

The site would include an equipment shelter adjacent to the tower to house interior communication equipment. The shelter would likely be a 20-foot by 40-foot slab block building that would be constructed on site. Alternately, the shelter could be an assemblage of smaller industry standard prefabricated units or equipment cabinets brought by truck and installed on site. Regardless of construction method, the structure or structures would each be mounted on a concrete foundation sized according to structure dimensions and other design requirements. The shelter would be divided into two or more interior compartments or rooms, depending upon carrier requirements. The shelter would include an environmental control system for heating, ventilation, and air conditioning (HVAC) to keep the interior of the shelter within the temperature range required for the operation of the electronic communication equipment inside. Alternately, a three- or four-sided Applicant-provided open-air shelter would be constructed.

Electrical power to the Project site would be provided by up to three 15-foot by 40-foot photovoltaic solar arrays. The panels would be approximately 8 feet in height on the south side, angling to 15 feet high along the north edge of the solar panels. Electronic equipment would be installed within a series of weatherproof cabinets located beneath the solar panels. The compound would also include up to two 100-kilowatt (kW) standby generators located outside the equipment shelter and mounted on a concrete pad. The generators would provide electric power in the event of failure of grid power or during periods of high electric power consumption. The generators would be powered by propane, fed by up to three 2,000-gallon steel tanks located adjacent to the shelter. The generators would include mufflers on the power units to minimize noise.

The communication site facility would be enclosed within a Motorola R56 Design Standard chain-link fence or equivalent measuring 8 to 10 feet in height, with three strands of barbed wire on the top, bringing the total height of the fencing to 9 to 11 feet. Galvanized hardware mesh with 1-inch by 2-inch openings would be attached to the lower 18 inches of the chain-link fencing and buried to a 12-inch depth or bent outward and secured to the ground. A gate would provide access to the compound for persons and vehicles. As stated above in the Communication Tower description, a downward-shielded security light would be installed approximately 10 feet high on the base of the tower and would be activated by a motion sensor.

Access Roads

The access roads would utilize two existing BLM-designated open access roads off Route 66. The access roads would utilize Route 66 to Road NS0017 to Road NS0003 to the Project site, for a total of approximately 5.77 miles. The section of access road leading from NS0003 to the communication facility utilizes previously

disturbed land and would not require significant improvement (i.e., no widening). Any minor grading proposed would be performed to smooth out the existing dirt road, similar to road maintenance following heavy rains. To the extent feasible, repair of the existing access roads would occur in a biologically inactive season (e.g., winter or summer).

Figure 2-4 shows the locations and names/identification of the proposed access roads.

2.4 Project Construction

Temporary access and staging would be required for construction and are discussed in additional detail below. The number of workers at the Project site on any given day during construction would typically vary between four and six. Table 2-2 shows the estimated number of construction equipment types anticipated. Flagging would be completed by a licensed land surveyor under BLM supervision. Site grading and clearing would be required. Total days of construction would be approximately 45 days. Construction is anticipated to begin in 2024. Construction would occur 6 days a week from the hours of 7:00 a.m. to 5:00 p.m. There would be no fill imported or exported for construction of the Project. Therefore, construction trips would be limited to construction worker trips. Equipment would be staged at the Project site for the duration of construction, limiting the number of construction trips to mobilization and demobilization.

Contingency plans are to be at the direction of BLM. All industry safety requirements would be strictly adhered to at all times. No industrial waste or toxic substances would be generated or created during the construction process. Common hazardous substances including oil, fuel, coolants, lubricants, and batteries would be used during construction and transported within the ROW.

Table 2-2. Construction Equipment

Equipment Type	Quantity
Excavator	1
Mini excavator	1
Tractors/loaders/backhoes	1
Bulldozer	1
Grader	1
Water truck	1
Cement/mortar mixer	2
Crane	1
Forklift	1
Portable generator	1
Pickup truck and other light/medium duty road vehicle	4

Communication Site (Including Equipment Shelter and Supporting Components)

Prior to construction of the communication site, the soils and substrate at the site would be sampled and tested to assist in tower foundation design. Typically, a mobile boring machine would be utilized to bore a number of 6- to 8-inch-diameter holes using a hollow boring auger. These tests would be conducted only within

the area of the proposed Project footprint. Soils density tests would be performed at specified levels and samples would be collected for laboratory analysis. This information would be used to determine the tower foundation designs and methods of construction. The holes would be backfilled immediately following the drilling and analysis processes, prior to moving to the next boring location.

Construction at the communication site would proceed with site preparation and grading occurring first, followed by excavation for tower footings and equipment slabs. Site grading and clearing would be required for construction and appropriate dust control methods would be implemented to limit visible dust emissions and stabilize surface areas. The soil type throughout is gravel and rock based. Any disturbed soils would be evenly spread throughout the Project site. No borrow material would be utilized. The tower site would be leveled using earthmoving equipment, such as a bulldozer, and then the excavation for the tower foundation would proceed. Small foundations for the shelter/building and the solar arrays would be excavated. Rebar for the foundation footings would be installed and the anchor bolts for the tower/building/solar mounts would be placed. The concrete foundations would be poured in a single day for the tower and shelter and for the solar arrays. It is anticipated that the site would be accessible by concrete trucks so that premixed concrete could be delivered directly to the site. Should this prove infeasible, a batch concrete mixing station would be located on site, with water provided by a water truck.

Following placement of necessary foundations, the tower would be erected. The use of helicopters would not be required, and no additional temporary access would be required. The tower would be constructed in the site compound in 20-foot sections. All assembly would consist of sections brought to the tower site and stacked in a single day. The shelter/solar and supporting components would be constructed in place. Upon completion of the shelter/solar, internal and external equipment would be installed. Propane tanks and generators would be mounted on concrete-berm foundations to contain spills or leaks that could occur during operation, fuel replenishment, and maintenance.

Construction equipment used on site would vary based upon the type of work currently underway, but equipment would likely be confined to that listed in Table 2-2. Not all of the equipment listed in the table may be necessary, nor would all the equipment be operating at the same time.

Access Roads

The existing access roads are currently of adequate width for the site access road and would not require significant improvement (i.e., no widening) to construct the communication site. Any minor grading proposed would be performed to smooth out the existing dirt road, similar to road maintenance following heavy rains. No new disturbances would occur aside from that created by continued vehicular access and hauling construction equipment to the proposed communication tower site, as well as limited, necessary road repairs of a 300-foot stretch of Road NS0017 located 100 feet northeast of the BNSF railroad alignment, and potentially placing material such as gravel over the existing road bed within 15 meters (50 feet) of the isolate (i.e., ISO-002 – lithic cores) identified on the southern road shoulder of NS0017, if road maintenance is required there. Also, light smoothing of Roads NS0017 and NS0003 may be necessary following heavy rains.

Desert tortoise exclusionary fencing would not be installed along access road segments. Rather, and as presented in Mitigation Measure (MM) BIO-15 (refer to Section 3.4.2 of this Initial Study), a pre-construction clearance survey would be conducted to locate and remove desert tortoise and nests prior to initial grubbing and grading (i.e., repair) of select existing access roads. In addition, repair of the existing access roads would occur in a biologically inactive season (e.g., winter or summer) to the extent feasible.

2.5 Project Operation and Maintenance

Following construction, the site would operate 24 hours a day, 7 days a week for the duration of the lease period. The electronic equipment housed in the equipment cabinets would be temperature controlled by wall-mounted HVAC units. During warmer periods, the HVAC units could periodically be in operation 24 hours a day.

Maintenance activities at the site would consist of monthly visits by technicians associated with each of the carriers that have equipment at the site. While the number of site visits would vary depending on specific maintenance requirements and other activities, the number of separate visits would likely be between 6 and 10 visits per month, although this number could be greater and more frequent during the initial installation of carrier equipment. Workers would typically arrive in crews of one to three people in standard road vehicles. A typical monthly visit could be concluded in as little as an hour but could extend to a full day or multiple days, depending on the task being undertaken. The on-site generators would typically run part-time and switch on automatically once per week or more frequently to ensure the maintenance of adequate lubrication within the units and to test them for proper operation. The units would be equipped with sensors to report their operational status; in the event of a fault, a technician would be dispatched to conduct repairs.

Refills of the propane fuel for the generators would require periodic visits by a fuel delivery truck. Fuel levels would be monitored by a remote system, and refills would occur as needed, probably once a month. A prolonged power outage would necessarily require more frequent visits. The solar panels would require occasional washing with water to maintain their efficiency. The frequency of washing would be unlikely to exceed twice per year. Water for this purpose would be brought to the site by truck.

The gates and fences associated with the Project site would be monitored to determine the need for repair. It is estimated that maintenance repairs would occur approximately once every 10 years. The access road could require occasional, intermittent maintenance based on usage and storm events. Routine maintenance activities would be limited to minor smoothing using a front-end loader or grader during dry conditions. The access road would maintain its current width, so no road widening would occur during facility operations. Any maintenance performed would be in compliance with a Low Volume Resource Road and the design standards provided in BLM MS 9113 – Roads (BLM 2015).

2.6 Decommissioning and Restoration

Upon termination of the ROW grant, the Applicant would restore the premises to as close to the original condition as possible, under the direction of BLM. A decommissioning plan would be prepared and would provide detail for the following procedures:

- All structures, tower, fencing, and buildings would be deconstructed and removed from the Project site.
- Any cement foundations would be covered over with local soils from within the compound.
- Any access gates would be removed.
- Revegetation would be allowed to occur naturally to blend with the surrounding area.

2.7 Applicant Proposed Measures

Table 2-3 provides a list of APMs specific to the Project. The Applicant commits to complying with these measures to avoid or substantially lessen potentially significant impacts to the extent feasible during construction and operation. Therefore, the APMs are considered part of the Project Description.

The impact analysis in this Initial Study assumes implementation of all the APMs. However, where other impacts are identified that are not addressed by these APMs, or where the APMs are not adequate to reduce impacts to less-than-significant levels, the Initial Study recommends additional mitigation measures. All mitigation measures and APMs will be incorporated into CDFW's Mitigation Monitoring and Reporting Program developed for the Project, and the Applicant will implement all monitoring and reporting obligations for the APMs as detailed in this Initial Study.

Table 2-3. Applicant Proposed Measures

APM No.	Full Text of APM
Aesthetics	
APM AES-1	In general, materials and surface treatments shall be selected to repeat the form, line, color, and texture of the surrounding landscape. Use non-reflective materials, coatings, and/or paint.
APM AES-2	All exposed metal surfaces shall be composed of a non-reflective material or coating or painted a color that matches the characteristic landscape. Galvanized steel on structures shall be allowed to weather naturally to prevent glare.
APM AES-3	The exposed surfaces of the buildings, propane tanks, and other components shall be painted a color that matches the color of the characteristic landscape.
APM AES-4	Use BLM Color Chart CC-001 as a starting guide for color selection. Colors shall be one or two shades darker than the landscape.
APM AES-5	Significantly sized exposed concrete pads, walkways, and other concrete surfaces, if seen from I-40, shall be "colorized" to match the surrounding landscape.
APM AES-6	Building plans shall demonstrate that all exterior lighting for Project elements shall be shielded, downward focused, and activated by motion detectors.
APM AES-7	As much of the existing vegetation as possible shall be retained. Straight line edges shall be avoided—scalloped, irregular cleared edges are more natural looking.
APM AES-8	Early reclamation and quick restoration of areas no longer needed after construction shall be promoted. Disturbed areas shall be recontoured to approximate natural slopes. Cut slopes and recontoured areas shall be scarified/roughened. Rocks, brush, and wood debris shall be salvaged and replaced. When reclaiming areas, native vegetation shall be used to replicate the existing landscape.
APM AES-9	Unnecessary cuts and fills shall be avoided when upgrading existing roads and constructing new road segments. An aggregate color shall be used by only using surrounding road aggregate to maintain the landscape color.
APM AES-10	Non-toxic coloring agents that mimic the dark weathering patterns on soil and rocks in arid environments may be used if needed to reduce contrast created from disturbance along portions of the proposed access road visible from I-40, particularly those areas requiring cut and fill along the upper reaches of the roadway. Stain

Table 2-3. Applicant Proposed Measures

APM No.	Full Text of APM
	application rates and color tint shall be site specific, depending on the adjacent natural landscape. The stain can be applied with backpacks or from a truck-mounted sprayer. Permeon (Product of SoilTech, Las Vegas, Nevada) or similar for rocks and ACT (Product of SoilTech, Las Vegas, Nevada) or similar product for soils may be used.
Cultural Resources	
APM CUL-1	**Unanticipated Discovery.** In the event that previously unknown, pre-contact cultural resources (sites, features, or artifacts) are exposed during grading or other construction activities, all construction work occurring within 50 feet of the find shall immediately stop until a qualified archaeologist can evaluate the significance of the find and determine whether or not additional study is warranted. The BLM Needles Field Office archaeologist will be notified immediately to assess the nature of the find. Depending upon the significance of the find, the archaeologist may record the find and allow work to continue. If the discovery proves significant in the independent professional judgment of the archaeologist, including based on the National Register of Historic Places or California Register of Historical Resources list eligibility criteria, a specific resource documentation or recovery shall be implemented, including preparation of an archaeological treatment plan, testing, or data recovery. As part of this evaluation, a representative from the Yuhaaviatam of San Manuel Nation (Yuhaaviatam) will be contacted if any such find occurs and be provided information and permitted/invited to perform a site visit when the qualified archaeologist makes their assessment, in order to provide tribal input including identification of feasible ways to protect the significance and tribal value of the resource. The qualified archaeologist shall also solicit input from other geographically and culturally affiliated tribal representatives as identified by the Native American Heritage Commission. The qualified archaeologist shall complete an isolate/site record for the find and submit this document to BLM for dissemination to the Yuhaaviatam and, upon request, other geographically and culturally affiliated tribes. During the assessment and recovery time, construction work may proceed in other areas outside the 50-foot buffer area around a find. If eligible pre-contact cultural resources are discovered, and avoidance cannot be ensured, a qualified archaeologist shall be retained to develop a Cultural Resources Treatment Plan and a Discovery and Monitoring Plan. Drafts of said plan shall be provided to the Yuhaaviatam for review and comment. BLM or a designated point of contact shall, in good faith, consult with the Yuhaaviatam on the disposition and treatment of any artifacts or other cultural materials encountered during the Project.
APM CUL-2	**Treatment of Human Remains.** In accordance with state law (California Health and Safety Code Section 7050.5; California Public Resources Code, Section 5097.98) and as requested by the Yuhaaviatam of San Manuel Nation, if human remains or funerary objects are encountered during any activities associated with the Project, all ground-disturbing activities shall halt within a 100-foot buffer of the find. The Bureau of Land Management and the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the find or any nearby area

Table 2-3. Applicant Proposed Measures

APM No.	Full Text of APM
	reasonably suspected to overlie potential remains shall occur until the County Coroner has determined whether the remains are subject to his or her authority. The County Coroner must make this determination within 2 working days of notification of the discovery (pursuant to California Health and Safety Code Section 7050.5[b]). If the County Coroner determines that the remains do not require an assessment of cause of death and that the remains are, or are believed to be, Native American, the Coroner must notify the Native American Heritage Commission by telephone within 24 hours. The Native American Heritage Commission must in turn immediately notify those persons it believes to be the most likely descendants (MLDs) of the deceased Native American. The MLDs shall complete their inspection and make recommendations within 48 hours of being granted access to the site. The MLDs may recommend means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods.
Geology and Soils	
APM GEO-1	If potential paleontological resources are discovered, all ground disturbance shall immediately cease within a 25-foot radius of the discovery until a qualified paleontologist can mobilize to the site to examine the discovery, evaluate its significance, and make further recommendations as appropriate. A qualified paleontologist is as defined in the Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources prepared by the Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee in 2010. The evaluation and, if applicable, salvage and curation shall also be conducted in accordance with these standard procedures.
Hazards and Hazardous Materials	
APM HAZ-1	Project construction, operations and maintenance (O&M), and decommissioning shall be in compliance with all federal and state regulations pertaining to the transport, use, storage and disposal of hazardous materials as defined by the California Health and Safety Code, Division 20, Chapter 6.5 and the California Code of Regulations Title 22. As applicable, a Risk Management Plan and associated hazardous fluid spill prevention plan shall be prepared in accordance with the California Accidental Release Program (Chapter 6.95, 2). As applicable, the hazardous fluid spill prevention plan shall be implemented during construction, O&M, and decommissioning activities, and shall require the following: 1. Equipment operators and other personnel shall be informed of specific measures to be implemented in the event of a detected hazardous material fluid leak, including the use of spill containment material, which shall be carried with the equipment or vehicle. 2. Equipment shall be inspected daily to ensure proper functioning condition and to minimize the potential for fluid leaks. Fluids shall be stored in appropriate containers on pallets, inside rubber berms, indoors, or under a cover, as shall other materials that could impact stormwater runoff. Equipment maintenance activities shall be prohibited within the Project area.

Table 2-3. Applicant Proposed Measures

APM No.	Full Text of APM
	3. Propane tanks and generators shall be mounted on concrete-bermed foundations to contain spills or generator oil leaks that could occur during operation, fuel replenishment, and maintenance.
APM HAZ-2	All non-vegetative construction debris and waste materials shall be removed from the site within 2 weeks of the completion of construction activities and be transported and disposed of at an approved facility in accordance with applicable regulations, such as California Code of Regulations, Title 22, Division 4.5. Operations and maintenance and decommissioning activities shall also comply with California Code of Regulations, Title 22, Division 4.5.
Hydrology and Water Quality	
APM HWQ-1	Where ground disturbances will occur, soil loss from erosion shall be controlled through implementation of best management practices (BMPs) such as erosion-control blankets/mats, gravel bags, silt fencing, stabilized construction entrances, and scheduling management consistent with National Pollutant Discharge Elimination System Construction General Permit requirements. Construction equipment staging and access and disposal or temporary placement of excess fill within drainages shall be prohibited.
APM HWQ-2	Slopes where erosion occurs shall be protected with straw wattles or blankets. All straw wattles, straw bales, or hay bales shall be certified weed-free and shall not be made of materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar materials. To reduce entanglement risks to wildlife, fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute or coconut (coir) fiber, which allows animals to push through the weave because it expands when spread.
APM HWQ-3	During construction prior to forecasted rain events, best management practices (BMPs) shall be inspected and repaired. Damaged or worn silt fences, straw wattles, gravel bags, and other BMPs shall be replaced prior to rain events.
APM HWQ-4	Equipment shall be inspected daily to ensure proper functioning condition and to minimize the potential for fluid leaks. Fluids shall be stored in appropriate containers on pallets, inside rubber berms, indoors, or under a cover, as shall other materials that could impact stormwater runoff. Equipment maintenance activities shall be prohibited within the Project area.
APM HWQ-5	Approved portable toilets shall be utilized during construction activity and shall be regularly maintained in a sanitary condition.
Noise	
APM NOI-1	The Project construction plans shall demonstrate that all on-site generators shall include factory-approved sound-attenuating weather enclosures and accompanying combustion exhaust mufflers on the power units to minimize noise.
Wildfire	
APM WF-1	Project construction, operations and maintenance (O&M), and decommissioning shall comply with all applicable federal, state and local fire codes, including but not

Table 2-3. Applicant Proposed Measures

APM No.	Full Text of APM
	limited to the San Bernardino County Fire Protection District Fire Code and the California Fire Code. Prior to the start of construction, BLM the Bureau of Land Management and San Bernardino County Fire Protection District shall be consulted to ensure all requirements are met. The procedures that shall be implemented for minimizing potential ignition during construction, O&M and decommissioning activities, including, but not limited to: ▪ Vegetation and debris clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, and hot work restrictions. ▪ Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days. ▪ Equipment and personnel shall stay within the Project footprint. ▪ All internal combustion engines used at the Project sitesite shall be equipped with spark arrestors and kept in good working condition. ▪ Construction and maintenance trucks shall be equipped with fire extinguishers or other fire-fighting equipment. ▪ A fire watch personnel shall be designated during construction activities.

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3 Initial Study

1. **Project Title:**

   Ash Hill Communication Site Project

2. **Lead Agency Name and Address:**

   California Department of Fish and Wildlife
   Inland Deserts Region
   3602 Inland Empire Boulevard, Suite C-220
   Ontario, California 91764

3. **Contact Person and Phone Number:**

   Julia Karo
   909.278.2950

4. **Project Location:**

   The Project site is located in San Bernardino County, California, approximately 8 miles east of the community of Ludlow, just south of I-40. The Project site is in the Mojave Desert on the south slope of the Bristol Mountains. The proposed communication site, access road, and all ancillary components would be entirely on BLM-managed lands.

5. **Project Proponent's Name and Address:**
   InterConnect Towers, LLC
   27762 Antonio Parkway No. 471
   Ladera Ranch, California 92694

6. **General Plan/Zoning Designation:**

   The Project site is on federal land and is designated for Resource/Land Management (San Bernardino County 2019a). Note: General Plan/zoning designations do not apply to federal land.

   The communication site is within the California Desert Conservation Area (CDCA) Utility Corridor G, a 2-mile-wide utility corridor, as designated by the CDCA Plan (BLM 1980). Since the CDCA was amended in 1982, wireless telecommunication has replaced coaxial cable for interstate communications. Although the use of corridors for long-distance microwave communication towers was not envisioned, it is supportive to the specific scope of the corridors, which is to address the expansion of utility facilities constructed for the purpose of telecommunications, electricity, gas, water, and other commodities.

   The Project site is within the boundary of the Desert Renewable Energy Conservation Plan (DRECP) Land Use Plan Amendment (LUPA) (BLM 2016). The Project site is within California Desert National Conservation Lands and the Bristol Mountains Area of Critical Environmental Concern (ACEC), as designated by the DRECP. The Bristol Mountains ACEC is composed of approximately 214,190 acres of

BLM-administered lands and is designated to protect biological values, including habitat quality, populations of sensitive species, and landscape connectivity while providing for compatible public uses.

7. Project:

See Chapter 2, Project Description.

8. Surrounding Land Uses and Setting:

The Project includes approximately 8.93 acres of land, all of which is administered by BLM. The Project site is within unincorporated San Bernardino County. Surrounding land uses include vacant desert lands, utility lines, the community of Ludlow, Route 66, and I-40. The Project site is also within a portion of the Mojave Trails National Monument (Mojave Trails).

9. Other Required Agency Approvals:

CDFW would serve as lead agency for the Project and would be responsible for approving the mitigated negative declaration. The Project would result in minimal impact to sensitive habitats; however, additional agency approvals may be necessary pending review, including the following:

- **U.S. Fish and Wildlife Service (USFWS):** Endangered Species Act (ESA) compliance
- **Regional Water Quality Control Board (RWQCB):** Porter-Cologne Water Quality Control Act
- **BLM:** Notice to Proceed

Determination: An Initial Study was prepared to assess the Project's potential effects on the environment and the significance of those effects. Based on the analysis conducted in the Initial Study, it has been determined that implementing the Project would have no significant adverse effects on the environment.

Applicant Proposed Measures: Table 2-3 lists Project-specific APMs. Mitigation measures (MMs) to reduce Project-related impacts are presented in Section 3.4, Biological Resources, of this Initial Study.

Environmental Factors Potentially Affected

As indicated by the checklist in Sections 3.1 through 3.21, and summarized in the checklist below, none of the environmental factors considered in this analysis would be subject to an impact that would be "potentially significant." Potential impacts identified in this Initial Study would be avoided (i.e., no impact) or reduced to less than significant with the Applicant's commitment to incorporate APMs as part of the Project, as well as their commitment to implement additional feasible biological resources mitigation measures identified to avoid or substantially lessen potentially significant effects. The environmental factors checked below would be less then significant with mitigation incorporated.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
☒ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

Evaluation of Environmental Impacts

This section analyzes the potential environmental impacts that could result from the Project. Impacts are evaluated by statement of the questions relevant to each section from the Initial Study Checklist, followed by answers determined through the analysis undertaken as part of the Initial Study. Impacts considered in the analysis include potential short-term (construction-related) impacts as well as long-term, operational, or day-to-day impacts. For each question, there are four possible conclusions as described below.

1. ***No Impact.*** Future development arising from the Project's implementation will not have any measurable impact on the environment and no additional analysis is required.
2. ***Less-Than-Significant Impact.*** The development associated with Project implementation will have the potential to impact the environment; these impacts, however, will be less than the levels or thresholds that are considered significant, and no additional analysis is required.
3. ***Potentially Significant Unless Mitigated.*** The development will have the potential to generate impacts that may be considered as a significant effect on the environment, although mitigation measures or changes to the Project's physical or operational characteristics can reduce these impacts to levels that are less than significant.
4. ***Potentially Significant Impact.*** Future implementation will have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less-than-significant levels.

Determination:

On the basis of this initial evaluation:

☐ I find that the project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the 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 project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the 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 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 project, nothing further is required.

DocuSigned by:
Heidi Calvert
CAEE4779B63E4A3...

Signature

2/15/2024

Date

Heidi Calvert
Regional Manager, Inland Deserts Region
California Department of Fish and Wildlife

Environmental Checklist

3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.1 AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Environmental Setting

The proposed communication facility site is located within approximately 300 feet of I-40 and access roads are located to the east and north of Route 66. In the Project area, I-40 offers views of the Mojave Trails National Monument, which is within the Project site and south of I-40, and the Bristol Mountains, north of the Project site. Mojave Trails spans 1.6 million acres and includes rugged mountain ranges, ancient lava flows, Route 66, and sand dunes (Obama 2016). Mojave Trails allows for new telecommunications facilities to be constructed within the monument to the extent consistent with the care and management of the objects identified in the 2016 presidential proclamation that are situated within the monument. However, I-40 is the most noticeable visual element in the Project area. In the Project area, I-40 is configured with two lanes in each direction with associated on- and off-ramps at the I-40/Kelbaker Road interchange, which is located north of the Project site.

The segment of I-40 in the vicinity of the I-40/Kelbaker interchange carries approximately 12,400 vehicles per day (Caltrans 2019a). The areas on either side of I-40 receive comparatively light public use. Most people who view the Project area view it while traveling along I-40. A person traveling eastbound on I-40 approaching the Project area would recognize that they are traveling through a mountain pass, with hills and mountains on either side, with views of the Bristol Mountains to the north. A person traveling westbound on I-40 would have views of Mojave Trails in front of them and to the south of them.

Vegetation in the Project area is sparse, characterized by fairly short shrubs and wide spaces between plants. Following adequate winter–spring (and occasionally, summer) rainfall, a light cover of annual forbs, wildflowers, and short-lived grasses forms within shrub interspaces and beneath shrub canopies in the area.

3.1.2 Impact Analysis

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

The tower would be partially to fully blocked from view from I-40 in several locations by the 40-foot steep road cuts that allow I-40 to travel along a nearly level roadbed. While the proposed lattice tower would form the tallest structure in the area as viewed from the foreground views (refer to Figure 3.1-1, KOP 1: Westbound I40), the proposed communication tower is likely to attract the attention of the traveler on I-40 for less than a minute assuming a travel speed of 65 miles per hour (mph). The tower would therefore not "dominate the view of the casual viewer" or travelers along the I-40 corridor relative to the eastbound and westbound panoramic landscapes. The tower would not be visible to travelers on Route 66 (see Figure 3.1-2, KOP 2a: Eastbound Route 66, and Figure 3.1-3, KOP 2b: Eastbound Route 66, which illustrate the view from eastbound Route 66 toward the proposed communication site). Regarding other components associated with the Project, site structures, visual effects resulting from construction, hardscape areas, and facility lighting may be visible from certain locations along the I-40 corridor. Lastly, the access road to the communication facility may be visible from certain locations along the I-40 corridor where line of sight to the access road alignment is available. The existing access road would be visible to travelers on Route 66.

Implementation of APM AES-1 and APM AES-2 would require that the communication tower not use reflective materials, coatings, and/or paint to minimize the potential for glare and substantially interrupted views. Regarding visibility of non-tower structures at the communication facility, APM AES-3 and APM AES-4 would be implemented to match (to the extent feasible) the color of structure exteriors with colors present in the surrounding landscape (the use of compatible colors would reduce the overall prominence of visible structures as experienced from I-40). Similar to and consistent with APM AES-5, larger concrete pads, walkways, and other concrete surfaces that would be visible from I-40 would be colorized to match the surrounding landscape (to the extent feasible and reduce the visual prominence of these features in the landscape and in the views of passing motorists). Site lighting would be controlled via the installation of shielded, downward-focused, and motion-detection-activated fixtures (see APM AES-6; limitation of lighting would reduce occurrences of potential night view interruption due to lighting). Regarding the proposed Project-related landscape disturbances, including access road maintenance, APM AES-7 through APM AES-10 would be implemented and would require retaining as much existing vegetation as possible (APM AES-7), restoration of areas no longer needed after construction (APM AES-8), avoidance of unnecessary landscape cuts and fills (APM AES-9), and use of coloring agents to minimize line and color contrasts with adjacent areas of undisturbed terrain (APM AES-10). The intent of

these methods and measures is to reduce visible line, color, and texture contrasts to the extent feasible and reduce the overall visibility of landscape alteration.

The Project would also include the staging of equipment and vehicles; however, this activity would be temporary. The temporary nature of construction and the existence of existing nearby utility uses would not substantially affect a scenic vista. Additionally, the high rate of speed along I-40 and Route 66 would minimize the amount of time construction activities would be visible to travelers. Therefore, with incorporation of APM AES-1 through APM AES-10 into the proposed Project design, the Project would not result in substantial adverse effects on scenic vistas. Impacts would therefore be **less than significant**.

Applicant Proposed Measures:

APM AES-1 In general, materials and surface treatments shall be selected to repeat the form, line, color, and texture of the surrounding landscape. Use non-reflective materials, coatings, and/or paint.

APM AES-2 All exposed metal surfaces shall be composed of a non-reflective material or coating or painted a color that matches the characteristic landscape. Galvanized steel on structures shall be allowed to weather naturally to prevent glare.

APM AES-3 The exposed surfaces of the buildings, propane tanks, and other components shall be painted a color that matches the color of the characteristic landscape.

APM AES-4 Use BLM Color Chart CC-001 as a starting guide for color selection. Colors shall be one or two shades darker than the landscape.

APM AES-5 Significantly sized exposed concrete pads, walkways, and other concrete surfaces, if seen from I-40, shall be “colorized” to match the surrounding landscape.

APM AES-6 Building plans shall demonstrate that all exterior lighting for Project elements shall be shielded, downward focused, and activated by motion detectors.

APM AES-7 As much of the existing vegetation as possible shall be retained. Straight line edges shall be avoided—scalloped, irregular cleared edges are more natural looking.

APM AES-8 Early reclamation and quick restoration of areas no longer needed after construction shall be promoted. Disturbed areas shall be recontoured to approximate natural slopes. Cut slopes and recontoured areas shall be scarified/roughened. Rocks, brush, and wood debris shall be salvaged and replaced. When reclaiming areas, native vegetation shall be used to replicate the existing landscape.

APM AES-9 Unnecessary cuts and fills shall be avoided when upgrading existing roads and constructing new road segments. An aggregate color shall be used by only using surrounding road aggregate to maintain the landscape color.

APM AES-10 Non-toxic coloring agents that mimic the dark weathering patterns on soil and rocks in arid environments may be used if needed to reduce contrast created from disturbance along portions of the proposed access road visible from I-40, particularly those areas

requiring cut and fill along the upper reaches of the roadway. Stain application rates and color tint shall be site specific, depending on the adjacent natural landscape. The stain can be applied with backpacks or from a truck-mounted sprayer. Permeon (Product of SoilTech, Las Vegas, Nevada) or similar for rocks and ACT (Product of SoilTech, Las Vegas, Nevada) or similar product for soils may be used.

Mitigation Measures: No mitigation is required.

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

I-40 is a designated state scenic highway (Caltrans 2019b). As described in Response 3.1.2(a), there are nearby unique features (mountains, valleys, and Mojave Trails) that are visible from the Project area. While the Project would entail construction of a new telecommunication tower and ancillary facilities as well as use of existing access roads, the Project site is adjacent to I-40, where there are existing utilities. Further, the Project would be confined to the BLM-designated utility corridor and the ROW granted for the Project. The communication tower would not be visible from Route 66 (Amec Foster Wheeler 2018a). Further, APM AES-1 and APM AES-2 would be incorporated into Project design and would require that the communication tower not be finished with reflective materials, coatings, and/or paint to minimize the potential for glare and substantially interrupted views (including views from I-40). In addition, the effects of communication facility lighting on nighttime views from I-40 would be minimized through the installation of shielded, downward-directed, and motion-detector-activated lighting (APM AES-6). Lastly, APM AES-5 and APM AES-7 through APM AES-10 would be incorporated and would minimize potential line and color contrasts between proposed areas of disturbance and adjacent areas of undisturbed terrain outside the Project footprint. Therefore, implementation of the Project would not substantially damage scenic resources within a state scenic highway and impacts would be **less than significant**.

Mitigation Measures: No mitigation is required.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

As described in Response 3.1.2(a), there are nearby unique features (mountains, valleys, and Mojave Trails). The Project would entail construction of a new communication tower and ancillary facilities as well as use of existing access roads; however, the Project site is adjacent to I-40, where there are existing utilities. Further, the Project would be confined to the BLM-designated utility corridor and the ROW granted for the Project. The tower would likely attract the view of travelers on I-40 for a short period of time, probably no more than a minute or so at typical interstate speeds. Travelers' views would not be dominated by the Project, because the footprint of the proposed communication facility is relatively small (and difficult to discern in the landscape from nearby I-40) and the thin, vertical lines of the tower would be visible for no more than a minute. The existing access roads would be visible to travelers on I-40 and Route 66. As discussed in Responses 3.1.2(a) and 3.1.2(b), APM AES-1 and APM AES-2 would be incorporated into the Project design and would ensure that the communication tower is not finished with reflective materials, coatings, and/or paint to minimize the potential for glare and

substantially interrupted views (including views from I-40). Visible color contrast between non-tower structures/components and undisturbed terrain would be minimized through incorporation of APM AES-3 and APM AES-4. The effects of communication facility lighting on nighttime views would be minimized through the installation of shielded, downward-directed, and motion-detector-activated lighting (APM AES-6). Also, APM AES-5 and APM AES-7 through APM AES-10 would be incorporated and would minimize potential line and color contrasts between proposed areas of disturbance and adjacent areas of undisturbed terrain outside the Project footprint. As such, impacts would be **less than significant**.

Mitigation Measures: No mitigation is required.

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

The communication site would include a downward-shielded security light that would be activated by a motion sensor (refer to APM AES-6). In addition, all Project materials, coatings, and paints would be non-reflective (APM AES-1 and APM AES-2) to minimize the potential for daytime glare. Temporary construction activities would not occur during evening hours. Therefore, the Project would not result in substantial adverse light or glare effects on daytime or nighttime views in the Project area. Impacts would be **less than significant**.

Mitigation Measures: No mitigation is required.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
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 non-agricultural use?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Environmental Setting

The Project area is located in unincorporated San Bernardino County approximately 8 miles east of the community of Ludlow. The Project site consists of rural desert land adjacent to I-40.

The California Department of Conservation Farmland Mapping and Monitoring Program was established to assess the location and quantity of agricultural lands and conversion of these lands to other uses. Since the Project site is in unincorporated San Bernardino, the San Bernardino County Countywide Plan was used in conjunction with the Farmland Mapping and Monitoring Program to assess potential Project impacts on agricultural and forest resources (San Bernardino County 2019a).

The Project site is located on federal land. The Countywide Plan designates the Project area as open space. Open space is designated to provide and preserve publicly owned land for parks and open space and to manage, preserve, and protect natural areas, habitats, and wildlife corridors.

3.2.2 Impact Analysis

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 non-agricultural use?

There is no mapped important farmland at the Project site (DOC 2016). There are also no existing agricultural uses nearby. Therefore, the Project would not result in the conversion of any land to non-agricultural use. **No impact** would occur.

Mitigation Measures: No mitigation is required.

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

The Project would not affect any properties zoned for agricultural use or currently under a Williamson Act contract. No Williamson Act contract lands are located within the Project area (DOC 2016). **No impact** would occur.

Mitigation Measures: No mitigation is required.

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))?

The Project is not located on designated timberland, as defined by the California PRC. The Project is also not located on timberland zoned as timberland production, as defined by California Government Code. There are also no forests or woodlands near the Project site (San Bernardino County 2007). Thus, there is no potential for conflict with PRC Section 12220(g), PRC Section 4526, or Government Code Section 51104(g). **No impact** would occur.

Mitigation Measures: No mitigation is required.

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

As discussed in Response 3.2.2l, no forest lands are near the Project site (San Bernardino County 2007). The Project site is mapped entirely as Mojave creosote bush scrub and Mojave desert wash scrub. Therefore, the Project would not result in the loss of forest land or conversion of forest land to non-forest use. **No impact** would occur.

Mitigation Measures: No mitigation is required.

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

As discussed in Response 3.2.2(c), there is no farmland, agricultural use, or forest land on the Project site. While the Project would provide improved communication coverage in the area, the Project is unlikely to result in additional population that could result in future farmland or forest land conversion because the strengthening of communication coverage is not a main factor that induces population

growth. Therefore, the Project would not contribute to increases in the conversion of farmland to non-agricultural use or forest land to non-forest use. **No impact** would occur.

Mitigation Measures: No mitigation is required.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3 AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Environmental Setting

The Project site is located in unincorporated San Bernardino County, within the Mojave Desert Air Basin (MDAB) and within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD).

Proposed construction activities for the Project were analyzed to determine whether those activities would result in emissions of criteria air pollutants that may cause exceedances of the National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS) or contribute to existing nonattainment of ambient air quality standards. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (coarse particulate matter, or PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (fine particulate matter, or $PM_{2.5}$), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are precursors to O_3 (i.e., O_3 is not directly emitted), as well as CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$.

The MDAB is designated nonattainment for federal and state O_3 and PM_{10} standards. The MDAB is designated nonattainment for the state $PM_{2.5}$ standard as well. The MDAB is designated as an attainment or unclassifiable/attainment area for federal and state CO standards, NO_2 standards, SO_2, and lead standards.

Appendix G of the CEQA Guidelines states that significance criteria established by the applicable air district may be relied on to determine whether a project would have a significant impact on air quality. MDAQMD's CEQA Air and Federal Conformity Guidelines (MDAQMD 2016) sets forth quantitative emission significance thresholds for criteria air pollutants below which a project would not have a significant impact on ambient air quality within the MDAB. Project-related criteria air pollutant emissions estimated in this environmental analysis would be considered significant if any of the following MDAQMD significance thresholds would be exceeded: 137 pounds per day for VOCs, 137 pounds per day for NO_x, 548 pounds per day for CO, 137 pounds per day for SO_x, 82 pounds per day for PM_{10}, and 65 pounds per day for $PM_{2.5}$. MDAQMD has also identified quantitative annual emission significance thresholds for criteria pollutants. Project-related criteria air pollutant emissions would be considered significant if the following annual thresholds would be exceeded: 25 tons per year for VOCs, 25 tons per year for NO_x, 100 tons per year for CO, 25 tons per year for SO_x, 15 tons per year for PM_{10}, and 12 tons per year for $PM_{2.5}$. Because regional air quality standards have been established for these criteria pollutants to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution, these thresholds of significance can also be used to assess Project emissions and inform the Project's impacts to regional air quality and health risks under CEQA.

3.3.2 Impact Analysis

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

Air quality plans describe the air pollution control strategies to be implemented by a regional, county, or city air district. The primary purpose of an air quality plan is to bring an area that does not attain the NAAQS and the CAAQS into compliance with those standards pursuant to the requirements of the federal Clean Air Act and the California Clean Air Act.

As stated previously, the Project site is located within the jurisdiction of MDAQMD. Accordingly, the applicable air quality plan for the Project is prepared by MDAQMD and plans for improving air quality in the region. MDAQMD has adopted a variety of attainment plans for the pollutants that are in nonattainment in the region, such as the 2008 Federal 8-Hour Ozone Attainment Plan, the 2004 State and Federal Ozone Attainment Plan, and the 1995 Federal PM_{10} Attainment Plan. Consistency with the air quality plans is determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations or contribute to a new violation of the NAAQS. As explained in MDAQMD's CEQA Guidelines, consistency with the MDAQMD attainment plans is also determined through consistency with the existing land use plan (MDAQMD 2016).

The Project would involve construction activities, which are short term (45 days) and temporary in nature. Approximately two to four workers would be at the Project site on any given day during construction. Construction equipment to be used on site would vary based on the type of work currently underway, but equipment would likely be confined to that listed in Table 2-2. Not all equipment listed in the table may be necessary, nor would all the equipment be operating at the same time.

The Project would entail the construction and operation of a communication site and ancillary facilities within an existing BLM-designated utility corridor. The Project site is bounded on all sides by existing transmission, distribution, pipeline, and fiber-optic infrastructure. As such, the Project would be consistent with the existing land uses. Therefore, the Project would be consistent with the applicable MDAQMD attainment plans.

Following construction, the site would operate 24 hours a day, 7 days a week for the duration of the lease period. The electronic equipment housed in the equipment cabinets would be temperature controlled by wall-mounted HVAC units. During warmer periods, the HVAC units could periodically be in operation 24 hours a day. Electric power would be provided via photovoltaic solar panels and backup emergency generators. The Project would entail mostly minor maintenance activities consisting of monthly visits by technicians associated with each of the carriers that have equipment at the site.

Because the Project would be consistent with the existing land use and would not increase the construction activity or emissions above assumptions in the applicable air quality attainment plans, and operation would be limited to minor maintenance activities, the Project would not impede achieving the air quality goals of the region. Therefore, the Project would not conflict with or obstruct implementation of the applicable air quality plan and impacts would be **less than significant**.

Mitigation Measures: No mitigation is required.

b) 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?

The cumulative analysis of construction and operational emissions focuses on whether a specific project would result in a cumulatively considerable increase in emissions. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and this regional impact is cumulative rather than being attributable to any one source.

Construction of the Project would generate temporary emissions of VOCs, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. VOC, NO_x, CO, and SO_x emissions are associated primarily with mobile equipment exhaust, including off-road construction equipment and on-road motor vehicles. Fugitive dust emissions (PM_{10} and $PM_{2.5}$) are associated primarily with site preparation and vary as a function of parameters such as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles.

Construction emissions for the Project were estimated using emission factors from the California Air Resources Board (CARB) OFFROAD2017 and EMFAC2017 database models (CARB 2019). Construction emissions from the operation of diesel-fueled off-road equipment were estimated by multiplying daily usage (i.e., hours per day) and total days of construction by OFFROAD2017 equipment-specific factors. Emissions from on-road motor vehicles were estimated using vehicle trips, vehicle miles traveled, and EMFAC2017 mobile source emission factors. The emission factors represent the fleet-wide average emission factors in San Bernardino County. Fugitive dust emissions were estimated using the U.S. Environmental Protection Agency's Compilation of Air Pollutant Factors (AP-42) and are based on earthwork estimates and vehicle miles traveled on paved and unpaved roads (EPA 2023).

Construction of the Project was initially assumed to begin in 2020. Due to unforeseen delays associated with preparation and review of the environmental document, the construction start date has been delayed and pushed back to approximately fall/winter 2024. The analysis assumed four worker trips for personnel traveling to the site daily, resulting in approximately eight worker trips per day. Equipment would be staged at the Project site for the duration of construction, limiting the amount of construction trips for mobilization and demobilization. In addition, the analysis assumed tower foundation, fence, and solar panels and carrier equipment would be delivered on a heavy-duty truck originating approximately 60 miles away from the Project site. It was also assumed that any spoils or excess soil materials resulting from excavations or borings would be distributed evenly across the site.

As shown in Table 3.3-1, construction activities for the Project would generate maximum daily emissions of approximately 2 pounds of VOCs, 15 pounds of CO, 18 pounds of NO_x, less than 1 pound of SO_x, 65 pounds of PM_{10}, and 11 pounds of $PM_{2.5}$. Additional modeling assumptions and details are provided in Appendix B, Air Quality and Greenhouse Gas Emissions Estimates.

Table 3.3-1. Unmitigated Daily and Annual Construction Emissions

	VOCs	CO	NOx	SOx	PM10	PM2.5
Maximum daily emissions (lb/day)	1.61	14.68	18.22	0.12	64.60	10.62
Daily threshold of significance (lb/day)	**137**	**548**	**137**	**137**	**82**	**65**
Significant impact?	No	No	No	No	No	No
Maximum annual emissions (tons/year)	0.01	0.16	0.15	<0.00	0.09	0.03
Annual threshold of significance (tons/year)	**25**	**100**	**25**	**25**	**15**	**12**
Significant impact?	No	No	No	No	No	No

Source: Appendix B (note that while construction and operational emissions in Appendix B were modeled/estimated in 2019, the emission estimates remain applicable and are an accurate approximation of Project emissions).
Notes: VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = suspended particulate matter; $PM_{2.5}$ = fine particulate matter; lb/day = pound per day

Fugitive dust emissions include reductions associated with dust control methods as required for compliance with MDAQMD Rule 403 – Fugitive Dust Control.

As shown in Table 3.3-1, maximum daily and annual construction emissions of VOCs, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ would not exceed the recommended thresholds of significance. These thresholds are designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable CAAQS and NAAQS. Projects that would not exceed the thresholds of significance would not contribute a considerable amount of criteria air pollutant emissions to the region's emissions profile and would not impede attainment and maintenance of ambient air quality standards. Therefore, construction activities associated with the Project would not be cumulatively considerable.

Following construction, operation of the Project would entail mostly minor maintenance activities throughout the lease duration. As such, emissions would be limited to mobile source emissions (worker, fuel truck, and water truck trips) from monthly visits by technicians and stationary source emissions from the backup emergency generators. Operational emissions were also quantified using CARB's OFFROAD2017 and EMFAC2017 database models. While the number of site visits would vary depending on specific maintenance requirements and other activities, the analysis assumed there would be

approximately three visits per month of three crew members, or a maximum of nine daily trips on any given day. In addition, the analysis assumed there would be one fuel truck trip per month and two water truck trips per year. The analysis also assumed there would be up to two 100 kW backup generators that would switch on automatically once per week and run for a period of approximately 30 minutes to ensure the maintenance of adequate lubrication within the units and to test them for proper operation.

As shown in Table 3.3-2, operational emissions would also not exceed the recommended thresholds of significance. Additional modeling assumptions and details are provided in Appendix B.

Table 3.3-2. Unmitigated Daily and Annual Operational Emissions

	VOC	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$
Maximum daily emissions (lb/day)	0.15	3.93	4.08	0.01	38.21	4.59
Daily threshold of significance (lb/day)	**137**	**548**	**137**	**137**	**82**	**65**
Significant impact?	*No*	*No*	*No*	*No*	*No*	*No*
Maximum annual emissions (tons/year)	<0.00	0.04	0.03	<0.00	0.20	0.02
Annual threshold of significance (tons/year)	**25**	**100**	**25**	**25**	**15**	**12**
Significant impact?	*No*	*No*	*No*	*No*	*No*	*No*

Source: Estimated by AECOM in 2019 (Appendix B; note that while construction and operational emissions in Appendix B were modeled/estimated in 2019, the emission estimates remain applicable and are a rough approximation of Project emissions).
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; lb/day = pounds per day

As shown in Tables 3.3-1 and 3.3-2, the Project would result in construction and operational emissions that would not exceed MDAQMD's thresholds of significance. Activities associated with decommissioning after the lease period (30 years) are anticipated to be similar to construction activities. As such, due to advancements in engine technology and turnover in equipment fleet, emissions related to decommissioning are anticipated to be similar to or less than those determined for the construction phase of the Project. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable CAAQS or NAAQS. This impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when projects' air quality impacts are evaluated. The groups include children, older adults, and persons with preexisting respiratory or cardiovascular illnesses. MDAQMD defines sensitive receptor land uses to include residences, schools, daycare centers, playgrounds, and medical facilities.

The Project site is located in rural desert open space adjacent to I-40. The nearest receptors to the Project site generally include scattered rural residences approximately 8 miles west of the Project site in the community of Ludlow.

As shown in Tables 3.3-1 and 3.3-2, construction and operation of the Project would result in emissions of criteria air pollutants, but at levels that would not exceed the MDAQMD thresholds of significance. The thresholds of significance were designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable CAAQS and NAAQS, which were established using health-based criteria to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. As such, the construction-related criteria air pollutant emissions associated with the proposed Project would not expose sensitive receptors to substantial pollutant concentrations.

In addition to criteria air pollutants, construction of the Project would also generate toxic air contaminant (TAC) emissions, specifically diesel particulate matter, associated with heavy-duty construction equipment operations. The Office of Environmental Health Hazard Assessment (OEHHA) developed a Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015). According to OEHHA methodology, health effects from carcinogenic (cancer-causing) TACs are usually described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TAC emissions. Due to uncertainty in assessing cancer risk from very short-term exposures, OEHHA does not recommend assessing cancer risk for construction of projects lasting less than 2 months for the nearest residential receptor. Since the duration of construction activities for the proposed Project is anticipated to be approximately 45 days and such activities would cease following completion of the Project, the overall exposure period would not meet the requirements for assessing cancer risk (OEHHA 2015). In addition, construction emissions would occur intermittently throughout the day and would not occur as a constant plume of emissions from the Project site.

Due to the Project's limited construction time frame, workforce, and equipment assumptions and the substantial distance to the nearest sensitive receptors, the Project would not generate substantial pollutant concentrations. Following construction and installation of carrier equipment, maintenance activities would be intermittent (three visits per month with crews of one to three persons in standard road vehicles) and are not expected to generate substantial pollutant concentrations. Following heavy rainfall events, there is the potential for the existing access roads to require occasional maintenance to allow vehicles the ability to reach the communication site safely. However, this work would be intermittent and infrequent in nature and is not expected to generate substantial pollutant concentrations. In addition, the Project is not one of the project types that are substantial sources of TAC emissions and the nearest sensitive receptors are located at greater distances than identified in the MDAQMD CEQA and Federal Conformity Guidelines (MDAQMD 2016).[1] Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be **less than significant.**

Mitigation Measures: No mitigation is required.

[1] The MDAQMD CEQA and Federal Conformity Guidelines identifies project types as substantial sources of TAC emissions that must be evaluated within the specified distance to an existing or planned sensitive receptor land use as follows: any industrial project within 1,000 feet; a distribution center (40 or more trucks per day) within 1,000 feet; a major transportation project (50,000 or more vehicles per day) within 1,000 feet; a dry cleaner using perchloroethylene within 500 feet; or a gasoline-dispensing facility within 300 feet (MDAQMD 2016).

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they can still be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

The Project is not expected to generate any notable sources of odors. Potential construction-related sources of odors include diesel-powered construction equipment. Light- and medium-duty trucks and off-road equipment would emit diesel exhaust odors. However, because of the number and types of equipment, the temporary nature of these emissions, and the highly diffusive properties of diesel exhaust, nearby receptors would not be affected by odors associated with Project construction. Operation of the Project would entail intermittent maintenance activities (three visits per month with crews of one to three persons in standard road vehicles) and occasional road maintenance following heavy rainfall events, which are not expected to generate notable sources of odors. As a result, the Project would not create objectionable odors affecting a substantial number of people. Decommissioning activities are expected to be very similar to construction activities and may therefore also emit odors, including odors caused by exhaust from diesel equipment and heavy-duty trucks. After decommissioning, all associated odors would cease. As a result, the Project would not create objectionable odors affecting a substantial number of people. Therefore, impacts associated with odors during construction or operation would be **less than significant**.

Mitigation Measures: No mitigation is required.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.4 BIOLOGICAL RESOURCES – Would the project:				
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?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 state or 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?	☐	☒	☐	☐

3.4.1 Environmental Setting

Biological resource information in this section was gathered from the proposed Project's Environmental Assessment DOI-BLM-CA_D090-2016-0007-EA Ash Hill Communications Site (Amec Foster Wheeler 2018a), Biological Resources Assessment and Desert Tortoise Focused Survey Report (Appendix C), Jurisdictional Delineation of Arid Streams for the Proposed Ash Hill Communication Site (Jurisdictional Delineation) (Appendix D), and the Ash Hill Communication Site – 2022 Botanical Survey and Wildlife Habitat Assessment Report (Appendix E). The CDFW California Natural Diversity Database (CDFW 2019a), Consortium of California Herbaria (CCH 2019), and the USFwS Information for Planning and Consultation (IPaC) Tool (USFWS 2019)

were reviewed to search for known biological resources located within an approximately 5-mile radius of the Project site. The results of the reports are summarized below.

For the purpose of this discussion, Project work areas (communication site plus a 100-foot buffer and the existing access roads plus a 50-foot buffer), are referred to as the biological study area (BSA). Sensitive and special-status biological resources are defined as follows:

- Sensitive vegetation communities are those designated by NatureServe's Heritage Methodology as S1–S3 (CDFW 2019b). NatureServe's Heritage Methodology (CDFW 2019b) ranks vegetation communities as follows:
  - S1 = Critically Imperiled (critically imperiled in the state because of extreme rarity, 5 or fewer occurrences)
  - S2 = Imperiled (imperiled in the state because of rarity due to very restricted range, 20 or fewer occurrences)
  - S3 = Vulnerable (vulnerable in the state due to a restricted range, 80 or fewer occurrences)
  - S4 = Apparently Secure (uncommon but not rare; some cause for long-term concern due to declines or other factors)
  - S5 = Secure (common, widespread, and abundant in the state)
- Special-status plant species include species designated as rare, candidate, threatened, or endangered by CDFW or USFWS under the federal ESA or CESA; California species of special concern (CDFW 2019a); BLM sensitive species (CDFW 2019a); and listed by the California Native Plant Society by California Rare Plant Rank (CRPR; CNPS 2019) as follows:
  - CRPR 1A (presumed extirpated in California and either rare or extinct elsewhere)
  - CRPR 1B (rare, threatened, and endangered in California and elsewhere)
  - CRPR 2A (presumed extirpated in California but common elsewhere)
  - CRPR 2B (rare, threatened, or endangered in California but more common elsewhere)
  - CRPR 3 (plants for which more information is needed [a review list])
  - CRPR 4 (plants of limited distribution [watch list])
- Special-status wildlife species include species designated as rare, candidate, threatened, or endangered by CDFW or USFWS under the federal ESA or CESA; USFWS Birds of Conservation Concern (CDFW 2019a); California species of special concern (CDFW 2019a); CDFW fully protected species (CDFW 2019a); BLM sensitive species (CDFW 2019a); and covered as a state protected furbearing mammal (14 CCR 460).

The following sections summarize the existing biological resource information applicable to the BSA and the proposed Project site.

Sensitive Vegetation Communities

Vegetation mapping was conducted in October 2017 in accordance with the classification system presented in Holland (1986). Two relatively undisturbed native vegetation communities are mapped and present in the BSA: Mojave creosote bush scrub and Mojave desert wash scrub (Figures 3.4-1A through 3.4-1C, Vegetation Communities and Desert Tortoise Sign, and Table 3.4-1, which provides the acreage of vegetation communities and land cover types in the Project area). In upland areas, a Mojave creosote bush scrub

community is dominated by creosote bush (*Larrea tridentata*), white bur-sage (*Ambrosia dumosa*), and brittlebush (*Encelia farinosa*). The upland areas are also interspersed with extensive areas of relatively unvegetated desert pavement. This vegetation community is known as the creosote bush–white bursage scrub (*Larrea tridentata–Ambrosia dumosa–Encelia farinosa* shrubland) alliance in the Manual of California Vegetation (Sawyer et al. 2019) and has a state rarity ranking of S5. Therefore, this is not considered a sensitive vegetation community.

In the areas mapped as Mojave desert wash scrub, species such as cheesebush (*Ambrosia salsola*), sweetbush (*Bebbia juncea* var. *aspera*), and catclaw (*Senegalia greggii*) are also dominants. The flora in the overall area is characterized by fairly short shrubs and wide spaces between plants. Following adequate winter–spring (and occasionally, summer) rainfall, a light cover of annual forbs, wildflowers, and short-lived grasses form within shrub interspaces and beneath shrub canopies in the area. The vegetation in the washes is known as cheesebush–sweetbush scrub (*Ambrosia salsola–Bebbia juncea* shrubland) alliance in the Manual of California Vegetation (Sawyer et al. 2019) and has a state rarity ranking of S4. Therefore, this is not considered a sensitive vegetation community.

Disturbed habitat in the form of existing roads was also mapped in the BSA. BLM-designated open access roads NS0003 and NS00017 and the section of the access road that begins at the turn to the east from BLM-designated open access road NS0003 and extending to the proposed communication site are considered existing disturbed roadway. The communication site is also disturbed; however, the site has the potential to support wildlife. Therefore, for purposes of assessing impacts from these Project components, the proposed communication site is assumed to be Mojave creosote bush scrub in Table 3.4-1.

Table 3.4-1. Acreage of Vegetation Communities and Land Cover Types in the Project Area

Vegetation Community and Land Cover Type	Communication Site ROW Area	Access Road[a]	Access Road[b]	Total Acreage
Mojave creosote bush scrub	0.23	—	0.18	0.41
Mojave desert wash scrub/ waters of the state[c]	—	0.17[d]	—	0.17
Disturbed habitat	—	8.35		8.35
Total	**0.23**	**8.52**	**0.18**	**8.93**

Notes: ROW = right-of-way.
For purposes of this table, the term "Project area" encompasses the communication site ROW area and the proposed access roads (both existing road and new road).

[a] Access road from Route 66 to communication facility site access road off NS0003.
[b] Access road from BLM-designated open access road NS0003 to the proposed communication facility site.
[c] The existing access road crosses the Mojave desert wash scrub, but the road is unvegetated in the areas due to ongoing use of the road as a BLM-designated open access route.
[d] Acreage is solely located within Wash 3 South (see Figure 3.4-1C) and would be graded to repair a portion of an existing access road that has washed out.

Jurisdictional Aquatic Resources

Waters were delineated on the Project site that could be subject to the regulatory authority of CDFW, the U.S. Army Corps of Engineers (USACE), and the State Water Resources Control Board (SWRCB). A Project-specific jurisdictional waters delineation was conducted in December 2022 (Appendix D). Methods used during the delineation followed standard federal and state guidance and procedures, including (1) mapping the ordinary

high water mark, which is used by USACE for determining waters of the United States and indirectly used by the RWQCB for determining waters of the state; and (2) mapping episodic stream activity for CDFW-jurisdictional areas. The study area for jurisdictional waters includes the proposed communications facilities as well as the proposed existing access roads, plus a 25-foot buffer in any direction out from the roads and the communication tower site.

Within the jurisdictional waters study area, there is 0.87 acres of non-wetland waters of the state and 3.845 acres subject to CDFW jurisdiction, for a total of 3,411 linear feet (Table 3.4-2 and Figures 3.4-2A through 3.4-2C, Vegetation Communities and Jurisdictional Features). All the jurisdictional features are considered isolated features and therefore are not regulated by USACE as waters of the United States.

Table 3.4-2. Ephemeral Drainage Features within Jurisdictional Waters Study Area

	Waters of the State		CDFW Streambeds	
Feature	Approximate Width (Across Channel) (feet)	Ordinary High Water Mark (acres)	Top of Bank (acres)	Approximate Width (Across Channel) (feet)
Wash 1	13	0.015	0.078	68
Wash 2	16	0.018	0.020	17
Wash 3 – North	213	0.244	0.978	852
Wash 3 – South	263	0.302	1.833	1,597
Wash 4	3	0.003	0.018	16
Wash 5	5	0.006	0.011	10
Wash 6	15	0.017	0.022	19
Wash 7	9	0.010	0.023	20
Wash 8 – West	119	0.137	0.510	444
Wash 8 – East	39	0.045	0.266	232
Wash 9	3	0.003	0.018	16
Wash 10	3	0.003	0.010	9
Wash 11	50	0.057	0.057	50
Total	**751**	**0.860**	**3.845**	**3,350**

Notes: CDFW = California Department of Fish and Wildlife.
In general, the access road is oriented perpendicular to the washes; linear feet (upstream–downstream) is assumed to be 50 feet (including a 25-foot-buffer on each side).

Special-Status Plants

The potential for rare plants to occur was assessed during October 2017 vegetation mapping and desert tortoise surveys (refer to Appendix C). A rare plant survey was conducted at the Project site in April 2022 (refer to Appendix E). No rare plant surveys were conducted for the existing access roads to the Project site.

Federally and State-Listed Plant Species

No federally or state-listed plant species have the potential to occur in the BSA.

Non-Listed Special-Status Plant Species

Five non-listed special-status plant species were identified in database searches as occurring in the vicinity of the BSA. None of these species were detected during rare plant surveys. Their probability for occurrence within the BSA is discussed in Table 3.4-3.

Table 3.4-3. Probability of Occurrence of Special-Status Plant Species Known from the Vicinity of the BSA

Scientific Name	Common Name	Status	Habitat	Probability of Occurrence
Coryphantha alversonii	foxtail cactus	CRPR 4.3	Mojave and Sonoran desert scrub; 75 to 1,525 meters (250–5,000 feet) amsl. Blooms April–June.	**Footprint:** No suitable habitat present in the disturbed areas of the footprint, but moderate potential within undisturbed creosote bush scrub. **Buffer:** Not detected. Moderate potential. Suitable habitat present in the form of creosote bush scrub.
Eriastrum harwoodii	Harwood's eriastrum	BLM sensitive; CRPR 1B.2	Desert dunes and loose sandy patches between more stable vegetated areas of desert scrub; 125–915 meters (410–3,000 feet) amsl. Blooms March–June.	**Footprint:** No suitable habitat present in the disturbed areas of the footprint, but low potential within undisturbed sandy patches. **Buffer:** Not detected. Low potential, although there are no sand dunes present in the footprint and minimal sandy patches in the buffer.
Funastrum utahense	Utah vine milkweed	CRPR 4.2	Mojave and Sonoran desert scrub; 100 to 1,435 meters (330–4,710 feet) amsl. Blooms primarily April–June. March, September, and October blooms are uncommon.	**Footprint:** No suitable habitat present in the disturbed areas of the footprint, but moderate potential within undisturbed creosote bush scrub. **Buffer:** Not detected but moderate potential due

Table 3.4-3. Probability of Occurrence of Special-Status Plant Species Known from the Vicinity of the BSA

Scientific Name	Common Name	Status	Habitat	Probability of Occurrence
				to suitable habitat present in the form of creosote bush scrub
Mentzelia tricuspis	spiny-hair blazing star	CRPR 2B.1	Creosote brush scrub, sandy or gravelly slopes or washes; 150 to 1,280 meters (490–4,200 feet) amsl. Blooms primarily March–May.	**Footprint:** No suitable habitat present in the disturbed areas of the footprint, but low potential within undisturbed wash habitat. **Buffer:** Not detected. Low potential. Suitable habitat present in the form of wash habitat in the buffer.
Saltugilia latimeri	Latimer's woodland-gilia	BLM sensitive; CRPR 1B.2	Chaparral, Mojave desert scrub; pinyon and juniper woodland; 400–1,900 meters (1,310–6,235 feet) amsl. Blooms March–June.	**Footprint:** No suitable habitat present in the disturbed areas of the footprint, but moderate potential within undisturbed creosote bush scrub. **Buffer:** Not detected. Moderate potential. Suitable habitat present in the form of creosote bush scrub.

Status Key
BLM sensitive = Bureau of Land Management sensitive species.
California Rare Plant Rank (CRPR):
1B = rare, threatened, or endangered in California and elsewhere.
2B = rare, threatened, or endangered in California but more common elsewhere.
4 = plants of limited distribution (watch list).
.1 = seriously endangered in California.
.2 = fairly endangered in California.
.3 = not very endangered in California.
Note: BSA = biological study area.

Invasive, Non-Native Plant Species

Two non-native plant species were detected along the periphery of the proposed access road near Route 66: Mediterranean grass (*Schismus* sp.) and the very invasive Asian mustard (*Brassica tournefortii*; also known as Sahara mustard). No invasive plants were detected in the area proposed for surface disturbance or vehicle travel.

Special-Status Wildlife

Desert tortoise pre-Project surveys were performed in accordance with the most recent USFWS survey protocol in October 2017 (Appendix C). In accordance with the USFWS survey protocol, 100% coverage presence-or-absence surveys were conducted along the proposed access roads using transects spaced approximately 30 feet apart. In addition, surveys were conducted along three belt transects around the proposed access roads at approximately 5 meters (16 feet), 15 meters (50 feet), and 25 meters (82 feet) from the edge of either side of the authorized BLM route. During the rare plant surveys in April 2022, the potential of special-status wildlife to occur within the communication site was reassessed (Appendix E).

Federally and State-Listed Wildlife Species

Sign of one federally and state-listed species, desert tortoise, was detected during biological surveys. No other federally or state-listed species are considered to have potential to occur in the BSA (Table 3.4-4).

Desert Tortoise

Desert tortoise is federally listed by USFWS under the federal ESA and is listed as state threatened, proposed endangered, under CESA. Designated critical habitat for desert tortoise does not occur within the Project area. The nearest critical habitat (Ivanpah Unit of Desert Tortoise Critical Habitat) is designated approximately 20 miles east-northeast of the Project site. The Project site is within a DRECP-designated linkage area for this species (Ord–Rodman to Superior–Cronese to Mojave National Preserve Linkage) but it is not within a Desert Tortoise Conservation Area.

During 2017 desert tortoise pre-Project surveys, the following desert tortoise sign was documented (Figures 3.4-1A through 3.4-1C):

- Burrows/Pallets: three Class 1 burrows (currently active), two Class 2 burrows (good condition, definitely tortoise, no recent use), two Class 4 burrows (deteriorated condition, possibly desert tortoise), and one Class 5 pallet (good condition; possibly desert tortoise)
- Tracks: three locations associated near desert tortoise burrows
- Carcasses: eight Class 5 carcasses (disarticulated)
- Scat: 16 pieces of Class 2 scat (dried with glaze, some odor, dark brown); two pieces of Class 3 scat (dried, no glaze or odor, signs of bleaching, tightly packed material), one piece of Class 4 scat (bleached, or consisting only of plant fiber)

No individual desert tortoise was observed in 2017. None of these observations of desert tortoise sign occurred within the area that would support the communication tower; desert tortoise sign was associated with the buffer surrounding the access road. Habitat conditions at the communication site were similar in 2022.

Non-Listed Special-Status Wildlife Species

Two non-listed special-status wildlife species were detected: loggerhead shrike (*Lanius ludovicianus*) and desert kit fox (*Vulpes macrotis arsipus*). An additional four non-listed special-status wildlife species were identified from the California Natural Diversity Database search as occurring in the vicinity of the BSA. These species and their probability for occurrence within the BSA are discussed in detail in Table 3.4-4.

Table 3.4-4. Probability of Occurrence of Special-Status Wildlife Species Known from the Vicinity of the BSA

Common Name	Scientific Name	Sensitivity Status	Habitat	Probability of Occurrence in Project Area
Reptiles				
Desert tortoise	*Gopherus agassizii*	Federally threatened; state threatened, candidate for endangered	Alluvial fans and plains and rocky slopes with vegetation such as creosote bush (*Larrea tridentate*), blackbrush (*Coleogyne ramosissima*), and Joshua tree (*Yucca brevifolia*) habitat. At higher elevations, the species can be found in juniper woodlands and, at lower elevations, saltbush (*Atriplex* sp.) habitat is suitable. In general, the species prefers creosote bush habitat.	**Detected**. Desert tortoise sign (tracks, scat, carcasses, and burrows) was observed in the survey buffer during 2017 surveys for the species.
Mojave fringe-toed lizard	*Uma scoparia*	BLM sensitive; CDFW species of special concern	Requires fine, loose, windblown sand interspersed with hardpan and widely spaced desert shrubs.	**Not Expected.** Lack of windblown sand dune on site.
Birds				
Western burrowing owl	*Athene cunicularia hypugaea*	BLM Sensitive; CDFW species of special concern	Found mainly in grassland and open scrub from the coast to the foothills. Also found in deserts and scrublands.	**Moderate.** Suitable habitat present in the survey buffer. No burrowing owls or their sign were encountered during the 2010 or 2017 surveys, but no focused survey was conducted. Known location just over 5 miles from the Project area (CDFW 2019a).

Table 3.4-4. Probability of Occurrence of Special-Status Wildlife Species Known from the Vicinity of the BSA

Common Name	Scientific Name	Sensitivity Status	Habitat	Probability of Occurrence in Project Area
Loggerhead shrike	*Lanius ludovicianus*	CDFW species of special concern	Occurs in semi-open country with desert scrub vegetation for nesting. Uses nearby structures (fences, posts, thorny vegetation) for perching and impaling prey items.	**Detected**. Breeding habitat present adjacent to the Project area, but none present within direct impact areas.
Mammals				
American badger	*Taxidea taxus*	CDFW species of special concern	Required habitat includes plains, prairies, deserts, open valleys, woodland edges, and alpine meadows.	**High.** Suitable habitat and potential burrows present in the survey buffer.
Desert kit fox	*Vulpes macrotis arsipus*	California Code of Regulations: protected fur-bearing mammal	Suitable habitat for this fossorial (burrowing) mammal consists of arid open areas, shrub grassland, and desert ecosystems.	**Detected.** Scat and burrows detected during surveys in the survey buffer.
Nelson's bighorn sheep	*Ovis canadensis nelson*	BLM sensitive	Requires a variety of habitat characteristics related to topography, visibility, forage quality and quantity, and water availability. Prefers areas on or near mountainous terrain that are visually open, as well as steep and rocky. Steep, rugged terrain is used for escape and lambing. Alluvial fans and washes in flatter terrain are also used for forage and water and as connectivity habitat between more rugged areas.	**Low.** Marginal habitat available along access road. Could potentially forage in area in wetter seasons or move through the site, but this species prefers steep and rocky terrain.

Notes: BSA = biological study area; BLM = Bureau of Land Management; CDFW = California Department of Fish and Wildlife.

Loggerhead Shrike

Loggerhead shrike is a CDFW species of special concern. Habitat for this species occurs adjacent to the access roads and communication site. This species was detected along the existing access roads and likely breeds within the habitat present adjacent to the roads.

Desert Kit Fox

The desert subspecies of kit fox is a protected fur-bearing mammal. Scat and potential burrows were detected along the existing access roads. Habitat for this species occurs throughout the Project area and vicinity.

Migratory Birds

The Project area supports nesting, foraging, and stopover habitat for a variety of migratory bird species. Most avian species with potential to occupy the BSA are afforded protection under the Migratory Bird Treaty Act. Each of the avian species recorded during biological surveys is protected by the Migratory Bird Treaty Act. These and other migratory birds that nest, forage, or stop over in desert scrub habitats may at least temporarily occupy the Project area and vicinity.

Invasive, Non-Native Wildlife Species

No invasive, non-native wildlife species or sign of such species was observed during biological surveys.

Wildlife Movement Corridors

Wildlife species recorded during biological surveys conducted for the Project are typical of those common in Mojave creosote bush scrub and Mojave desert wash scrub habitats. At the local level, wildlife species are likely to use the Project area and surrounding undeveloped habitat for movement related to dispersal and home range activities. The Project site is within a DRECP-designated linkage area for desert tortoise (Ord–Rodman to Superior–Cronese to Mojave National Preserve Linkage). Regionally, the site is part of linkage that connects the Twentynine Palms and Newberry–Rodman Wilderness to the Mojave National Preserve (Penrod et al. 2012). I-40 presents a major impediment to wildlife species (especially desert tortoise) movement to the north of the Project area and the BNSF railroad and Route 66 forms an impediment to the south, but culverts and bridges provide some limited safe travel corridors for wildlife species.

3.4.2 Impact Analysis

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?

Special-Status Plant Species

Federally and State-Listed Plant Species

No federally or state-listed plant species were detected nor do any have any potential to occur within the Project area or immediate vicinity (within approximately 100 feet of the Project area).

Non-Listed Special-Status Plant Species

Five non-listed special-status plant species have moderate potential to occur primarily in areas adjacent to the existing roads and outside the Project footprint. It not expected that these species would occur within the existing access roads or on the communication site, because these areas consist of disturbed habitat devoid of vegetation and because a rare plant survey of the communication site was conducted in 2022 and did not detect any rare plants (Appendix E). There is the potential for both temporary and permanent indirect impacts to non-listed special-status plant species occurring in the area surrounding the work areas as a result of construction and operation activities. Potential indirect impacts to the five non-listed special-status plant species detected may occur from fugitive dust and the establishment or spread of weedy invasive plant species. Construction and operation-generated fugitive dust can adversely affect plants by reducing the rates of metabolic processes such as photosynthesis and respiration. Exotic species are opportunistic and often occupy disturbed soils such as those created in road alignments and areas of exposed bare ground resulting from ground-disturbing activities within work areas.

To ensure that impacts to non-listed special-status plants within the Project footprint are reduced to a less-than-significant level, the Applicant would implement WEAP training, disturbance area delineation, and biological monitoring to ensure that no work occurs outside the Project impact footprint (MM BIO-11, MM BIO-1, and MM BIO-12). Dust would be controlled by minimizing the impact footprint and speed limits (MM BIO-2). Habitat compensation for desert tortoise and desert wash scrub would also benefit plant species (MM BIO-23 and MM BIO-27). Potential mitigation areas are shown in Figure 3.4-3 and restoration techniques are included as Appendix F to this Initial Study.

Potential direct and indirect impacts to non-listed special-status plant species would be reduced to a less-than-significant level through implementation of MM BIO-1 through MM BIO-3, MM BIO-7, MM BIO-11, MM BIO-12, and MM BIO-23, and MM BIO-27. Impacts would therefore be **less than significant with mitigation incorporated**.

Special-Status Wildlife Species

Federally and State-Listed Wildlife Species

Desert Tortoise

The Project has the potential to result in injury or mortality of desert tortoise during construction and operation. During construction, desert tortoise could collide with heavy equipment (e.g., bulldozers and graders), individuals could be crushed or entombed in their burrows, and noise or vibrations during use of heavy equipment could result in disruption of desert tortoise behaviors or damage to the hearing apparatus of an individual. There is also potential for vehicles to kill or injure desert tortoise individuals accidentally. Desert tortoise can take shelter under parked vehicles and heavy equipment and could be crushed when heavy equipment or vehicles or are moved.

The Project would result in approximately 0.41 acres of impacts to desert tortoise habitat located at the Project site. Although the communication site is disturbed, desert tortoise has the potential to occur at the site, and for the purposes of impact analysis, Project construction at the site is considered to impact Mojave creosote bush scrub. All habitat disturbance is considered permanent in nature given

the sensitivity of desert ecosystems to ground-disturbing activities. Disturbance to occupied habitat would primarily include compaction of soils and removal of vegetation that may provide forage and cover for the species. During and following construction, desert tortoise would be excluded from the communication site by desert tortoise exclusion fencing designed per USFWS (2009) guidelines. However, while soils would be compacted and vegetation would be removed, desert tortoise would likely continue to occasionally occupy the access road alignments. Construction and operation of the communication site and the access roads would not appreciably reduce connectivity or movement within the Project area. The majority (8.52 of 8.70 acres) of the access roads are existing BLM open access routes, and Project activities would not inhibit movement across the existing roads. Given the small size of the fenced communication site, desert tortoise are expected to move around the fenced barrier with minimal impact to energy expenditure. Disturbance to occupied desert tortoise habitat during construction may also include the destruction of suitable but unoccupied burrows. Loss of suitable burrows in the Project area could result in exposure of individuals to temperature extremes or predation.

Operation of the Project would not result in any additional disturbance to suitable desert tortoise habitat; the communication site and access road would be maintained relatively devoid of vegetation, and soil compaction and exclusion fencing (around the communication site only) would preclude burrow construction in these areas. Indirect effects to desert tortoise could also occur as a result of increased common raven (*Corvus corax*) presence, introduction of invasive non-native plant species, and increased runoff and sedimentation during heavy rain events.

Impacts to desert tortoise would be avoided or minimized through implementation of MM BIO-1 through MM BIO-23. To mitigate for impacts to desert tortoise habitat, ground disturbance would be mitigated at a ratio of 3:1, for a total of approximately 1.23 acres.

Non-Listed Special-Status Wildlife Species

Burrowing Owl

Burrowing owl (*Athene cunicularia*) has a moderate potential to occur in the BSA, primarily in areas adjacent to the existing roads and outside the Project footprint. Direct impacts to habitat would be limited to approximately 0.41 acres of impact to potential foraging habitat. During construction and operation there is potential for accidental collision with equipment or vehicles. Construction is unlikely to impact occupied burrows as none are present or expected to occur within the Project footprint. The existing access roads consist of compacted soils and lack vegetation due to frequent vehicular disturbance. In addition, the communication site is disturbed and does not contain burrows suitable for burrowing owl, and the rocky substrate inhibits ground squirrel burrowing activity. Indirect impacts to burrowing owl could also occur as a result of increased noise levels, increased common raven presence, introduction of invasive non-native plant species, and increased runoff and sedimentation during heavy rain events. These indirect effects have the potential to degrade foraging and movement habitat and alter behaviors.

Impacts to burrowing owl would be avoided or minimized through implementation of MM BIO-1 through MM BIO-6, MM BIO-9, MM BIO-11, MM BIO-12, MM BIO-24, and MM BIO-25. In addition, habitat compensation for desert tortoise (MM BIO-23) would also benefit burrowing owl.

American Badger

The Project would result in approximately 0.41 acre of impacts to American badger (*Taxidea taxus*) habitat. While potential foraging habitat would be removed to allow for construction of the Project, this minimal loss of foraging habitat is not expected to result in a substantial decreased prey availability to the species given the availability of higher-quality foraging habitat surrounding the Project area. Construction of the fenced communication site and the access roads would not permanently impede American badger (badger) movement through the Project area; thus, direct effects to movement habitat would not occur. If present during construction or maintenance activities, badger individuals foraging or moving through the Project area could be directly affected through accidental collisions with vehicles traveling on the access roads. Collisions could result in injury or death to individuals.

Construction is unlikely to impact occupied burrows as none are present or expected to occur in the Project footprint. The existing access roads consist of compacted soils and lack vegetation due to frequent vehicular disturbance. It is unlikely that badgers would burrow within an active road. In addition, the communication site is disturbed and characterized by debris and stacked concrete. Potential indirect impacts to American badger include increased noise levels, airborne dust resulting in respiratory distress, and the potential introduction and proliferation of invasive non-native plant species. These indirect effects have the potential to degrade foraging and movement habitat and alter behaviors.

Impacts to American badger would be avoided or minimized through implementation of MM BIO-1 through MM BIO-6, MM BIO-11, MM BIO-12, and MM BIO-26. In addition, habitat compensation for desert tortoise (MM BIO-23) would also benefit American badger.

Desert Kit Fox

The Project would result in approximately 0.41 acres of impacts to desert kit fox habitat. The impacts are similar in nature to those described for American badger. If present during construction or maintenance activities, kit fox individuals foraging or moving through the Project area could be directly affected through accidental collisions with vehicles traveling on the access roads. Collisions could result in injury or death to individuals. Construction is unlikely to impact occupied burrows as none are present or expected to occur within the Project footprint. The existing access roads consist of compacted soils and lack vegetation due to frequent vehicular disturbance. It is unlikely that desert kit fox would burrow within an active road. In addition, the communication site is located in disturbed habitat devoid of vegetation and with debris and stacked concrete. Construction of the fenced communication site and the access roads would not permanently impede desert kit fox movement through the Project area; thus, direct effects to movement habitat would not occur.

Potential indirect impacts to desert kit fox include increased noise levels, airborne dust resulting in respiratory distress, and the potential introduction and proliferation of invasive non-native plant species. These indirect effects have the potential to degrade foraging and movement habitat and alter behaviors.

Impacts to desert kit fox would be addressed through implementation of MM BIO-1 through MM BIO-6, MM BIO-11, and MM BIO-12, and MM BIO-26. In addition, habitat compensation for desert tortoise (MM BIO-23) would also benefit desert kit fox.

Migratory Birds

Potential direct impacts to migratory birds protected by the Migratory Bird Treaty Act, including the non-listed special-status species loggerhead shrike, which was detected adjacent to the existing access road, would be minimal because there would be limited removal of nesting and foraging habitat during construction. The new disturbance would primarily occur in areas of desert pavement that are sparsely vegetated or in areas that have already been disturbed by unauthorized activities. The degree of impact on individual migratory bird species would vary depending on species-specific behaviors in the Project area and habitat requirements. Potential impacts to migratory bird nest sites would be more detrimental than effects to foraging habitat for such species. Direct impacts to tree or cliff raptor (bird of prey) nest sites are not expected, given that these features are generally absent from the Project area.

Potential direct impacts to migratory birds also include potential injury or mortality. Injury or mortality may occur during construction if individuals are struck by equipment or vehicles. Injury or mortality to avian species resulting from construction most frequently occurs during vegetation clearing and involves eggs, nestlings, and recently fledged young that cannot safely avoid equipment. Injury or mortality may also result from collisions with the communication tower. Avian collisions with communication towers and overhead power lines are a widespread problem with potentially significant impacts on migratory birds, especially night-migrating species (USFWS 2000; CEC 2002). The level of collision risk depends on a combination of biological and physical factors, such as weather, design and placement of structures, and species-specific behavior. Free-standing towers, such as the lattice tower of the proposed Project, generally pose less collision risk to migratory birds than towers requiring guy wires. As recommended by USFWS in their Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning (USFWS 2021), the tower would not be more than 199 feet above ground level; no guy wires would be used; there would be no tower lighting; and security lighting would be downward direct, shielded, and motion sensitive to minimize collision risk to migratory birds. The Project site is not located in an area where there are topographical features funneling birds toward the tower (e.g., not in a canyon), and night-migrating birds would be flying much higher than the tower. Potential impacts associated with collision are expected to be less than significant.

Potential indirect impacts to migratory birds include increased noise levels; the potential for long-term erosion, sedimentation, and stormwater contaminant runoff; and potential introduction and proliferation of invasive non-native plant species. These indirect impacts have the potential to degrade migratory bird habitat and alter breeding, foraging, and migratory behaviors.

Potential direct and indirect impacts to migratory birds would be avoided or minimized through implementation of general measures MM BIO-1 through MM BIO-12, pre-construction nest surveys (MM BIO-24), and noise abatement (MM BIO-25). In addition, habitat compensation for desert tortoise (MM BIO-23) would also benefit migratory birds.

In summary, direct and indirect Project impacts on desert tortoise and other non-listed special-status wildlife species would be reduced to a less-than-significant level through implementation of MM BIO-1 through MM BIO-26. Therefore, impacts would be **less than significant with mitigation incorporated**.

Mitigation Measures:

MM BIO-1 Prior to ground disturbance or vegetation clearing, areas of allowed surface disturbance during construction and operations and maintenance (O&M) shall be delineated and marked with fencing, stakes, or flags. All surface disturbances during construction and O&M shall be limited to the minimum area possible and any disturbance outside the delineated area shall be restricted. This restriction shall apply to the communication site and road alignments as well as temporary staging and parking areas.

MM BIO-2 Vehicle speeds shall be limited to 15 mph on the proposed access roads during construction and operations and maintenance. Prior to the initiation of grading within the lease area, small signs posting this speed limit shall be placed at intervals along the roads.

MM BIO-3 A number of invasive plant species are known to occur in the region, and control measures shall be implemented during construction and operations and maintenance to limit the further spread of these species. Best management practices to be implemented as needed include the following:

a. Prior to the initiation of grading, a monitoring and treatment plan shall be developed for specific species, as appropriate.
b. Weed-free gravel, base materials, and other imported earthen products shall be procured and washed prior to transport to the Project area.
c. A vehicle and equipment wash station shall be located at an off-site area to minimize the inadvertent transport of noxious weed seeds into undisturbed areas. Mud and other material on equipment that could contain noxious weed seeds shall be removed at a location where the equipment washing process itself shall not introduce noxious weeds into unaffected areas.
d. Soil disturbance shall be minimized to include only those areas specifically required for construction and operation of the Project.

MM BIO-4 During grading, construction, operations and maintenance, and decommissioning, workers shall be prohibited from bringing pets (e.g., dogs) to the Project area.

MM BIO-5 Any pipes, poles, culverts, drill holes or similar structures with a diameter greater than 3 inches and less than 8 inches aboveground shall be inspected by the Authorized Biologist(s) and/or Biological Monitor(s) for wildlife before the material is moved, buried, or capped. The Authorized Biologist(s) and/or Biological Monitor(s) shall inspect all open holes and trenches at a minimum of twice a day and just prior to backfilling. At the end of each workday, the Authorized Biologist(s) shall place an escape ramp at each end of trenches to allow any animals that may have become trapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30°. If any worker discovers that wildlife has become trapped, they shall halt nearby work and notify the Biological Monitor(s) and/or Authorized Biologist(s)

immediately. Project workers and the Biological Monitor(s) and/or Authorized Biologist(s) shall allow the wildlife to escape unimpeded if possible, or an Authorized Biologist(s) approved by the California Department of Fish and Wildlife shall move the wildlife in accordance with the associated Incidental Take Permit.

MM BIO-6 Any earthen berms created during road building or other activities shall be rounded off to avoid inhibiting travel by desert tortoise and other wildlife.

MM BIO-7 The following measures shall be undertaken with respect to plant salvage of all cacti and yucca species. A maximum of 30 days prior to construction activities, qualified botanists shall conduct a survey to identify and flag species of yucca and cacti. Those individuals identified shall be transplanted from all areas to be disturbed, including cut and fill construction areas, to locations approved by the Bureau of Land Management (BLM) under the supervision of a qualified botanist and in accordance with the following criteria:

a. Plant salvage shall be conducted in concert with all areas of surface-disturbing activity. The salvaged plants shall be assembled and shaded until surface-disturbing activities are concluded. Prior to removal of these plants, the north-facing side of each plant shall be marked. When transplanted, the plants shall be oriented in their original direction.
b. Suitable sites shall be identified by a qualified botanist for transplanting of the salvaged material within BLM-approved areas. The selection shall be done so that other native plants do not create a competitive situation with in-situ plants. Inspection of the plants shall be made monthly during the first 4 months of transplantation to ensure that the plants are recovering.
c. Each plant or plant cluster shall be identified with a numbered metal tag that is attached to a rod placed in the ground adjacent to the transplanted specimen. A listing of each number and the corresponding plant, by scientific name, shall be prepared.
d. A plotting of the relative locations of the transplanted specimens shall be drafted, as well as a map exhibiting the location of the transplantation itself. These maps and listings of the nursery sites shall be submitted to the BLM Needles Field Office upon preparation.

MM BIO-8 Prior to the initiation of construction, the Applicant shall provide the California Department of Fish and Wildlife proof of a raven management contribution at the current rate per acre of new disturbance for the life of the 30-year Project (i.e., term of the right-of-way grant) to the Desert Managers Group Account established with the National Fish and Wildlife Foundation to contribute to a region-wide raven control plan to help address raven predation on desert tortoise.

MM BIO-9 Prior to any grading or vegetation clearing, the Applicant shall designate a representative (Designated Representative) who shall be responsible for communications with the California Department of Fish and Wildlife (CDFW) overseeing compliance with protective stipulations for the desert tortoise and for coordination on compliance with the Bureau of Land Management. The Applicant shall

notify CDFW in writing before starting Project activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the Project. The Designated Representative shall be on site during all ground-disturbing construction, operations and maintenance (O&M), restoration, and decommissioning activities and shall have the authority to halt all activities that are in violation of protective measures. The Designated Representative shall have a copy of all measures when ground-disturbing construction or O&M activities are being conducted in the Project area. The Designated Representative may be a crew chief or field supervisor, a project manager, any other employee of the Applicant, or a contracted biologist.

MM BIO-10 The Applicant shall designate Authorized Biologists and Biological Monitors, subject to approval by the California Department of Fish and Wildlife (CDFW), to oversee and implement desert tortoise-specific measures. An "Authorized Biologist" is defined as a biologist who is knowledgeable of the biology and natural history of desert tortoise through education, trainings, field experience, and experience as an Authorized Biologist on similar projects, and extensive experience monitoring compliance of projects in desert tortoise habitat. Additionally, the Authorized Biologist shall have extensive experience with excavating burrows; handling and temporarily holding desert tortoises; translocating desert tortoises; reconstructing desert tortoise burrows; locating, identifying, and recording all forms of desert tortoise sign; conducting health assessments; attaching and removing transmitters; handling and moving eggs; and conducting protocol level presence/absence and clearance surveys. A "Biological Monitor" is defined as a biologist who is knowledgeable of the biology and natural history of the covered species through education, trainings, field experience, and/or experience as a biologist on similar projects, and experience monitoring compliance of projects in desert tortoise habitat. The Applicant shall submit the name(s) of proposed Authorized Biologist(s) and Biological Monitor(s) to the U.S. Fish and Wildlife Service and CDFW for review and approval at least 45 days prior to the onset of ground-disturbing construction activities.

MM BIO-11 All construction and operations and maintenance personnel shall participate in a Worker Environmental Awareness Program (WEAP) prior to working on site. The Applicant shall be responsible for ensuring that the education program is developed and presented to the appropriate personnel, and interpretation will be provided for non-English-speaking workers. More than one training may be required to ensure that new employees receive formal training. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project area. At least 15 days prior to the presentation of the WEAP, the WEAP shall be received, reviewed, and approved by the Bureau of Land Management and an

Authorized Biologist approved by the California Department of Fish and Wildlife. The WEAP shall consist of a class presented by an Authorized Biologist. The WEAP shall:

a. Place special emphasis on the natural history of the desert tortoise, including information on physical characteristics, photographs, distribution, behavior, ecology, and sensitivity to human activities.
b. Describe construction activities that may affect the desert tortoise, the required protective measures for the Project, legal protections and penalties, and reporting requirements.
c. Be developed by or in consultation with the Authorized Biologist(s) and consist of a presentation in which supporting written material and electronic media, including photographs of protected species, are made available to all participants.
d. Provide an explanation of the purpose and function of the desert tortoise avoidance and minimization measures and the possible penalties for not adhering to them.
e. Inform workers that the Authorized Biologist(s) and Biological Monitor(s) have the authority to halt work in any area where an unauthorized adverse impact to biological resources may occur if the activities continue.
f. Discuss general safety protocols such as hazardous substance spill prevention and containment measures and fire prevention and protection measures.
g. Provide an explanation of the sensitivity and locations of the vegetation, biological resources, and habitat within and adjacent to work areas, and proper identification of these resources.
h. Provide contact information for the Authorized Biologist(s) and desert tortoise Biological Monitor(s) to handle late comments and questions about the material discussed in the program, as well as notification of any dead or injured wildlife species encountered during Project-related activities.
i. Direct all workers to report all observations of listed species and their sign to an Authorized Biologist for inclusion in the quarterly and/or yearly compliance report, whichever comes first.
j. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.
k. Provide information regarding the effects of predation on the desert tortoise by common ravens and other predators and describe preventive measures that reduce the likelihood that predators will be attracted to the Project area.

MM BIO-12 Prior to construction of the communication site, an Authorized Biologist shall flag the footprint to prohibit Project personnel from driving off road or performing ground-disturbing activities outside of designated areas unless specifically approved to do so by the California Department of Fish and Wildlife, which may require an amendment to the Incidental Take Permit.

MM BIO-13 Prior to construction of the tower communication site area, the entire 17,248-square-foot tower communication site and the temporary staging area shall be fenced with

desert-tortoise-proof fencing and an effective desert-tortoise-proof gate. The fence shall be constructed under the direction of an Authorized Biologist. To the extent possible, the fence shall be placed so that burrows are on the outside of the enclosure. Fence construction shall follow current fence specifications established by the U.S. Fish and Wildlife Service in its 2009 Desert Tortoise Field Manual. Where burial of the fence is not possible, the lower 12 inches shall be folded outward against the ground and fastened to the ground to prevent desert tortoises from entering the communication tower site and staging area. Gate(s) shall be desert tortoise proof and shall remain closed except for the immediate passage of vehicles. Shade structures at regular intervals along fencing shall be provided for desert tortoises that exhibit fence-pacing behavior. The fence shall be checked daily during construction activities and at the end of the workday by the Authorized Biologist(s), and after major rainfall events. Repairs shall be made by the Applicant when necessary to ensure its integrity. Following construction, the desert tortoise fencing surrounding the staging area shall be removed by the Applicant. Permanent desert tortoise fencing shall be attached to the chain-link fence surrounding the communication tower site. Permanent desert tortoise fencing on the chain-link fence shall be checked biannually during operations and maintenance and after major rainfall events, and the date and inspector name logged into a record book to be kept on site and available for review by the California Department of Fish and Wildlife or Bureau of Land Management staff upon request, and repairs shall be made when necessary to ensure its integrity.

MM BIO-14 After the fence installation around the tower communication site and the staging area and prior to the start of construction, the Authorized Biologist(s) shall conduct a thorough clearance survey for desert tortoises within the fenced areas and shall relocate any desert tortoises that are found, in accordance with the U.S. Fish and Wildlife Service's 2009 Desert Tortoise Field Manual and the Incidental Take Permit conditions. Additionally, a clearance survey shall also be performed by the Authorized Biologist(s) within the fenced areas after any fencing repairs to ensure that no desert tortoises entered the area through the compromised fencing. Relocation shall occur at the discretion of the Authorized Biologist(s), but tortoises shall not be moved outside their home range (i.e., more than 1,000 feet).

MM BIO-15 Desert tortoise exclusionary fencing shall not be installed along access road segments. Prior to any initial grubbing and grading that may be required along the access roads, a pre-construction clearance survey shall be conducted to locate and remove desert tortoise found in harm's way. The survey shall be conducted by an Authorized Biologist within 24 hours of the onset of initial grubbing and grading. Pre-construction clearance surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service's 2009 Desert Tortoise Field Manual guidelines. Burrows that cannot be avoided shall be excavated during the clearance survey. Relocation shall occur at the discretion of the Authorized Biologist(s), but tortoises shall not be moved outside their home range (i.e., more than 1,000 feet). The Authorized Biologist(s), and Biological Monitor(s) as needed for complete visual coverage, shall be on site to monitor all construction activities along the access roads. During construction of the communication site and access roads, the Authorized Biologist(s) or Biological Monitor(s) shall escort all Project

personnel to the Project site. The Authorized Biologist(s) or Biological Monitor(s) shall stop the vehicle in areas of low visibility due to terrain and exit the vehicle to review the roadway ahead to confirm no desert tortoise are within the roadway before proceeding. If a desert tortoise is encountered, drivers shall stop (or remain stopped) and wait for the tortoise to move off the road out of harm's way on its own accord, or until the Authorized Biologist(s) has relocated the tortoise.

MM BIO-16 Authorized Biologist(s) and Biological Monitor(s) Authority. To ensure compliance with the Conditions of Approval of the Incidental Take Permit (ITP), the Biological Monitor(s) and/or Authorized Biologist(s) shall have authority and take necessary steps to immediately stop work if any activity does not comply with this ITP and/or Authorized Biologist(s) shall order any reasonable measure to avoid the unauthorized take of an individual desert tortoise. If a Biological Monitor or Authorized Biologist stops work, work shall not resume until an Authorized Biologist determines that all activities are in compliance with the ITP and communicates that determination to the on-site manager. The Applicant shall inform all persons employed or otherwise working in the Project area that the Biological Monitor(s) and Authorized Biologist(s) have the authority described in this subsection.

An appropriate number of Authorized Biologists or Biological Monitors shall be on site to monitor all ground-disturbing construction, operations and maintenance, restoration, and decommissioning activities. The Authorized Biologist(s) shall determine the number of monitors needed to ensure that all areas of construction are covered by biological monitoring. If a desert tortoise is observed, all ground-disturbing activities within 300 feet of the desert tortoise shall be stopped immediately until the Authorized Biologist(s) or Biological Monitor(s) have verified that the individual has moved out of harm's way under its own power. The Authorized Biologist(s) or Biological Monitor(s) shall monitor the desert tortoise until it is confirmed to be out of harm's way. If the Authorized Biologist(s) determines that the desert tortoise is not going to passively relocate (i.e., move from harm's way under its own power within a reasonable period of time), the Authorized Biologist(s) may actively relocate the individual out of harm's way in accordance with the ITP conditions/requirements.

Potential handling of desert tortoise for active relocation shall not occur until an Authorized Biologist is approved by the Bureau of Land Management, U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife. Active relocation of desert tortoise from harm's way shall be conducted in accordance with the 2009 USFWS Desert Tortoise Field Manual and the ITP conditions.

Desert tortoises actively moved from harm's way shall be marked for future identification in the event that a dead desert tortoise is found later within the Project area. An identification number using the acrylic paint/epoxy covering technique shall be placed on the fourth left costal scute. In handling desert tortoises, the Authorized Biologist(s) shall follow the techniques for handling desert tortoises in the 2010 USFWS Desert Tortoise Field Manual and ITP conditions. If a tortoise voids its bladder during handling, the Authorized Biologist(s) shall rehydrate the individual by soaking it in tepid water in accordance with the Desert Tortoise Field Manual.

The Authorized Biologist(s) shall maintain a record of all desert tortoises handled. This information shall include the following for each desert tortoise:

1. The locations (narrative and maps) and dates of observations.
2. General condition and health, including injuries and state of healing and whether the animals voided their bladders.
3. The location from which the animal was collected and the location in which it was released.
4. Diagnostic markings (i.e., identification numbers or marked lateral scutes).
5. Photographs of each handled desert tortoise as described above.
6. Results of ongoing monitoring.

MM BIO-17 Prior to and during all construction, operations and maintenance, restoration, and decommissioning activities, all equipment storage and parking shall be confined to the maximum extent possible to previously disturbed areas that have been fenced and cleared of desert tortoises.

No heavy equipment shall be moved into the fenced area until the area is clear of desert tortoises. An Authorized Biologist or Biological Monitor shall walk in front of equipment during the initial site entry to ensure that no desert tortoises or their burrows are harmed.

Workers shall inspect for desert tortoises under a vehicle prior to moving it. If personnel encounter a desert tortoise, they shall contact an Authorized Biologist. The desert tortoise shall be allowed to move a safe distance away prior to moving the vehicle, or the Authorized Biologist may move the desert tortoise to a safe location to allow for movement of the vehicle. If the tortoise must be moved, the Authorized Biologist shall ensure that the desert tortoise is relocated in accordance with the 2009 U.S. Fish and Wildlife Service Desert Tortoise Field Manual and Incidental Take Permit conditions. All observations of live desert tortoises shall be reported to the Authorized Biologist immediately.

MM BIO-18 During both construction and operations and maintenance, the Applicant shall contain all trash associated with the Project that could provide subsidies to predators in secure, self-closing receptacles. The Applicant shall also remove and dispose of all road-killed animals on the Project site to prevent the introduction of subsidized food resources for common ravens and coyotes.

MM BIO-19 For site water needs during both construction and operations and maintenance, the Applicant shall use closed tanks for water storage to eliminate open water sources.

MM BIO-20 No later than 90 days after completion of construction or termination of construction activities, the Designated Representative and Authorized Biologist shall prepare a report for the Bureau of Land Management, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife documenting the effectiveness and practicality of the avoidance and minimization measures, the number of desert

tortoises excavated from burrows, the number of desert tortoises moved, the number of desert tortoises killed or injured, and the specific information for each desert tortoise, as described previously. The report shall address compliance with all avoidance and minimization measures. The report may make recommendations for modifying the measures to enhance protection of the desert tortoise or to make it more workable during operations and maintenance activities. The report shall provide an estimate of the actual acreage disturbed by construction.

MM BIO-21 Upon locating a dead or injured desert tortoise during construction, operations and maintenance, restoration, or decommissioning, the Applicant shall immediately notify the California Department of Fish and Wildlife (CDFW) and the Bureau of Land Management (BLM). BLM shall then notify the U.S. Fish and Wildlife Service (USFWS) Palm Springs Office by telephone within 3 days of the finding. Written notification shall be made within 5 days of the finding, both to the USFWS Palm Springs Office and to USFWS's Division of Law Enforcement in Torrance. The information provided shall include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death (if known), and other pertinent information.

An injured animal shall be transported to a qualified and CDFW-approved veterinarian for treatment at the expense of the Applicant. If an injured animal recovers, the animal shall be placed at a wildlife rehabilitation facility or placement approved by CDFW and USFWS Palm Springs Office.

BLM shall endeavor to place the remains of intact desert tortoise carcasses with educational or research institutions holding the appropriate state and federal permits according to their instructions. If such institutions are not available or the animal's remains are in poor condition, the information noted above shall be obtained and the carcass shall be left in place. If left in place and sufficient pieces are available, the carcass shall be marked to ensure that it is not reported again. Arrangements for disposition to a museum shall be made prior to removing the carcass from the field.

MM BIO-22 The Applicant shall prepare a Desert Tortoise Translocation Plan (DTTP) and submit it to the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) for approval prior to construction. The DTTP shall include the following sections: procedures, seasonal constraints, temperature restrictions, handling and release, and monitoring and reporting. All USFWS and CDFW change requests or comments shall be incorporated into the DTTP before it is approved and finalized. Project activities are not authorized to start until the DTTP is approved in writing by CDFW. The DTTP shall follow the most current guidelines provided by USFWS and CDFW regarding desert tortoise translocation and requirements of the Incidental Take Permit to minimize potential impacts to desert tortoise. The DTTP shall include methodology the Authorized Biologist(s) shall follow for Project-specific instances of short-distance translocation (i.e., moving individuals out of immediate harm's way). If desert tortoises are to be moved to federal land, private lands, state lands, or any other land governance, landowner consent is necessary.

MM BIO-23 The Applicant shall mitigate for the 0.41 acres of ground disturbance to native habitat by purchasing 1.23 acres of compensation lands suitable for the desert tortoise (i.e., a 3:1 ratio) of equal or higher desert tortoise habitat quality than the lands being impacted. The 1.23 acres of compensation lands is expected to be in the form of a purchase of habitat credits from a mitigation bank approved by the California Department of Fish and Wildlife (CDFW) but may also consist of the acquisition, protection, and perpetual management of occupied desert tortoise habitat. The Applicant shall provide funding or bonding, subject to the review and approval of CDFW, if the 1.23 acres of compensation lands are not acquired, conserved, and endowed prior to initiating Project construction.

MM BIO-24 If construction must occur during the general avian breeding season, no more than 3 days prior to the start of construction in any given area of the Project area a pre-construction nest survey shall be conducted within any areas of ground disturbance and a 500-foot buffer by a Biological Monitor approved by the California Department of Fish and Wildlife. Construction crews shall coordinate with the Biological Monitor at least 3 days prior to the start of construction activity in a given area to ensure that the construction area has been adequately surveyed. If no active nests are discovered, construction may proceed. If active nests are observed that could be disturbed by construction activities, these nests and an appropriately sized buffer (typically a 500-foot buffer for non-raptor nests and at least a 500-foot buffer for raptor nests) shall be avoided until the young have fledged and/or the Biological Monitor determines that no substantial impacts are anticipated to the nesting birds or their young. The Biological Monitor shall be responsible for coordinating with the U.S. Fish and Wildlife Service to determine if construction activities could disturb an active nest, the appropriately sized buffer to avoid active nests, and when nests are no longer active. If construction ceases for 14 or more consecutive days during the nesting season, repeat nesting bird surveys shall be required to ensure that new nesting locations have not been established within the impact area and the defined buffers.

MM BIO-25 During grading and construction, the following measures shall be incorporated to minimize noise generated from construction activities:

a. Heavy equipment shall be repaired as far as practical from habitats where nesting birds may be present. The Biological Monitor shall determine where heavy equipment repair may take place on site.
b. Construction equipment, including generators and compressors, shall be equipped with manufacturers' standard noise-control devices or better (e.g., mufflers, acoustical lagging, and/or engine enclosures).
c. The construction contractor shall maintain all construction vehicles and equipment in proper operating condition and provide mufflers on all equipment.

MM BIO-26 American badger is a species of special concern. Desert kit fox is a protected species and may not be taken at any time pursuant to Title 14 of the California Code of Regulations, Section 460. Project activities may have the potential to result in take of American badger and desert kit fox individuals, and development may result in loss of

habitat and/or foraging habitat. The California Department of Fish and Wildlife recommends inclusion of a pre-construction American badger and desert kit fox survey and suggests the following measure be included in the environmental document.

No more than 30 days prior to the beginning of ground disturbance and/or Project activities, a Qualified Biologist shall conduct a survey to determine if potential desert kit fox or American badger burrows are present in the Project area. If potential burrows are located, they shall be monitored by the Qualified Biologist. If the burrow is determined to be active, the Qualified Biologist shall verify there are suitable burrows outside the Project area prior to undertaking passive relocation actions. If no suitable burrows are located, artificial burrows shall be created at least 14 days prior to passive relocation. The Qualified Biologist shall block the entrance of the active burrow with soil, sticks, and debris for 3 to 5 days to discourage the use of the burrow prior to Project activities. The entrance shall be blocked to an incrementally greater degree over the 3- to 5-day period. After the Qualified Biologist has determined there are no active burrows, the burrows shall be hand-excavated to prevent re-use. No disturbance of active dens shall take place when juvenile desert kit fox and juvenile American badgers may be present and dependent on parental care. A Qualified Biologist shall determine appropriate buffers and maintain connectivity to adjacent habitat should natal burrows be present.

MM BIO-27 Prior to initiating Project activities, Project impacts to 0.172 acres of streams associated with desert wash scrub shall be mitigated by providing compensatory mitigation. Compensatory mitigation is expected to be in the form of a purchase of habitat credits from a mitigation bank approved by the California Department of Fish and Wildlife (CDFW) but may also consist of the acquisition, protection, and perpetual management of Mojave desert wash scrub or habitat of equivalent biological value as approved by CDFW. CDFW will calculate and identify the final amount of required compensatory mitigation as provided by this measure at a minimum 1:1 ratio prior to issuance of the Lake and Streambed Alteration Agreement.

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?

Most of the Project area is within existing roadways and would not result in any vegetation removal in these areas. Although the communication site is disturbed and largely devoid of vegetation, construction of the communication site may result in grading and vegetation removal of up to 0.23 acres of Mojave creosote bush scrub. Additionally, direct impacts to 0.172 acres of Mojave desert wash scrub within Wash 3 South would occur (see Figure 3.4-2C) to repair a portion of the existing access road that has washed out. All habitat disturbance associated with the Project is considered permanent in nature given the sensitivity of desert ecosystems to ground-disturbing activities.

Per standard BLM conditions, individual cacti and yucca plants are to be salvaged prior to ground-disturbing activities and then replanted in a prescribed manner. Implementation of MM BIO-7 would require that all yucca and cacti species be removed from areas to be disturbed, to include cut and fill

construction areas, under the supervision of a qualified botanist and transplanted to locations approved by BLM.

Activities associated with construction and operation of the Project have the potential to introduce non-native plant species, thereby degrading vegetation communities in the Project area. Seeds of non-native plant species may be introduced to the Project area from outside sources on vehicles, people, and equipment. Ground disturbance associated with Project activities could promote the establishment and spread of opportunistic non-native plants introduced to the Project area. Additionally, wildfires caused by construction and operation of communication towers and access roads are rare but may occur, and non-native plant species often become established in burned areas. Implementation of MM BIO-3 would minimize impacts associated with invasive plant species.

Construction and operation of the Project also has the potential to create airborne dust, sedimentation, and erosion, all of which could also degrade vegetation communities in the Project area. Airborne dust may result from grading, vehicle travel on dirt access roads, and other ground-disturbing activities. Airborne dust can affect plants by reducing the rates of metabolic processes such as photosynthesis and respiration. Grading and vegetation clearing associated with construction may also result in increased erosion and sedimentation in the Project area. Implementation of MM BIO-2 and incorporation of APM HWQ-1 through APM HWQ-5(refer to Section 3.10.2) into the Project design would minimize impacts to vegetation communities associated with dust, sedimentation, erosion, and more generally, spills of construction-related materials.

Implementation of MM BIO-1 through MM BIO-3, MM BIO-7, MM BIO-23, and MM BIO-27 and incorporation of APM HWQ-1 through APM HWQ-5 would reduce potential impacts to vegetation communities to less than significant (**less than significant with mitigation incorporated**).

Mitigation Measures: MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-7, MM BIO-23, and MM BIO-27 (refer to Response 3.4.2[a]).

c) Have a substantial adverse effect on state or 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?

Permanent direct impacts to jurisdictional waters subject to RWQCB and CDFW jurisdiction within the Project work areas would result from grading/leveling activities associated with the repair of the existing access road. No wetlands or waters of the United States are within the Project area. Table 3.4-5 summarizes potential impacts to jurisdictional waters of the state within the Project work areas.

Potential indirect impacts may occur to jurisdictional waters where they occur adjacent to the limits of designated work areas. Jurisdictional waters may be indirectly impacted by invasion of exotic species from temporary impact areas and by increased or altered water flow from runoff if site contours are appreciably changed within work areas.

Table 3.4-5. Overview of Anticipated Impacts within the BSA

Feature (Jurisdiction)	Waters of the State – Ordinary High Water Mark (acres)	Streambeds	Total	Linear Feet
Wash 3 – South (RWQCB)	0.151	N/A	0.151	25 (length)/ 263 (width)
Wash 3 – South (CDFW)	NA	0.021	0.021	25 (length)/ 37 (width)
Total	**0.151**	**0.021**	**0.172**	**25 (length)/ 300 (width)**

Notes: BSA = biological study area; RWQCB = Regional Water Quality Control Board; N/A = not applicable; CDFW = California Department of Fish and Wildlife.
The impact to waters of approximately 0.17 acres equates to the impacts to Mojave desert wash scrub vegetation described in Response 3.4.2(b). Impacts include up to a 25-foot linear length (upstream to downstream) and up to 300 feet across the width of the channel.

To ensure that impacts to jurisdictional waters are reduced to a less-than-significant level, the Applicant would implement several mitigation measures. The Applicant would provide compensatory mitigation for the total Project impacts to washes, as detailed in Table 3.4-5 (MM BIO-27). The Applicant also would ensure that all surface disturbances during construction and operation and maintenance be limited to the minimum area possible and any disturbance outside that area be restricted. These areas would be delineated and marked with brush pins every 100 to 300 feet (MM BIO-1). Other measures include incorporating water quality control measures to minimize sediment transport (APM HWQ-1 through APM HWQ-5) and conducting WEAP training and monitoring during all ground-disturbing work activities (MM BIO-9 and MM BIO-11). In addition, impacts would be minimized through best management practices (BMPs) at ephemeral drainage crossings (MM BIO-28 through MM BIO-30).

Prior to initiating Project activities, the Applicant would obtain necessary permits from RWQCB and CDFW to authorize the work within jurisdictional waters.[2] It should be noted that these permits may require additional measures to avoid, minimize, or mitigate impacts to jurisdictional waters.

In summary, impacts on jurisdictional waters would be reduced to a less-than-significant level through implementation of MM BIO-1, MM BIO-9, MM BIO-11, and MM BIO-27 through MM BIO-30 and incorporation of APM HWQ-1 through APM HWQ-5 into the project design, and compliance with the permits from RWQCB and CDFW. Therefore, impacts would be **less than significant with mitigation incorporated**.

Mitigation Measures: MM BIO-1, MM BIO-9, MM BIO-11, and MM BIO-27 (refer to Response 3.4.2[a]).

MM BIO-28 Crews shall limit the amount of surface disturbance to the bed and banks of any channel to the minimum amount necessary for construction.

[2] Potentially federal jurisdictional features within the study area are considered isolated, and thus not under USACE jurisdiction. Because USACE is not expected to regulate project activities under Section 404 of the Clean Water Act (CWA), no application (or associated OHWM Data forms, Preliminary Jurisdictional Determination form) for a USACE CWA Section 404 dredge/fill permit is expected to be required. It is recommended to obtain a letter from USACE confirming that the waters in the study area are isolated and not subject to USACE regulation. The project as proposed would potentially affect waters of the State/streambeds subject to RWQCB and CDFW jurisdiction.

MM BIO-29 Soil shall not be stockpiled within any wash during periods of no work (e.g., overnight if no work is occurring, on holidays).

MM BIO-30 Water containing mud, silt, or other pollutants from grading, excavation, equipment washing, or other activities shall be prevented from entering any washes and shall be placed in locations that are not subjected to high storm flows.

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?

Temporary construction activities would not occur during evening hours. Temporary direct impacts to local wildlife movement because of Project implementation may include elevated noise, vibration, and increased human presence. This may cause some wildlife species to avoid the area, not cross access roads, or alter their behavior while Project personnel and vehicles are in the area.

Wildlife species are likely to use the Project area and surrounding undeveloped habitat for movement related to dispersal and home range activities; however, larger-scale movements are likely hindered by I-40. I-40 presents a significant barrier to terrestrial wildlife movement, but there are several undercrossings associated with desert washes that likely provide a usable corridor.

Project activities may also temporarily affect local movement and dispersal for desert tortoise and other non-listed special-status wildlife species. Although desert tortoise is not a migratory species, opportunities for local movements within their home ranges and juvenile dispersal are important for maintaining viable populations. However, construction and operation of the communication site and the access roads would not appreciably reduce connectivity or movement within the Project area. Given the small size of the fenced communication site, desert tortoise and other non-listed special-status species are expected to move around the fenced barrier during local movements with minimal impact to energy expenditure.

To ensure that impacts to wildlife movement are reduced to a less-than-significant level, all vehicle speeds within the access roads would be limited to 15 mph to reduce the potential for colliding with wildlife (MM BIO-2) and measures would be taken avoid wildlife pitfalls and entrapment (MM BIO-5 and MM BIO-6). Any special-status species observed in the Project area would be permitted to safely move across without harm (or be moved out of harm's way by an Authorized Biologist [for desert tortoise] or qualified biologist) (MM BIO-14 and MM BIO-16). Implementation of a WEAP would ensure that all construction and O&M personnel are familiar with regional wildlife species, legal protections and penalties, reporting requirements, and additional measures to avoid impacts to wildlife (MM BIO-11). In addition, no fencing would be installed along the access road (MM BIO-15). All equipment and storage would be confined to previously disturbed areas that have been fenced and cleared of desert tortoises to the maximum extent possible (MM BIO-17). Implementation of MM BIO-24 and MM BIO-25 would minimize impacts to migratory birds by limiting construction activity to outside the typical avian breeding season and reducing construction noise impacts to nesting migratory birds.

In summary, direct and indirect Project impacts on wildlife movement corridors would be reduced to a less-than-significant level through implementation of MM BIO-2, MM BIO-5, MM BIO-6, MM BIO-11,

MM BIO-14 through MM BIO-17, MM BIO-24, and MM BIO-25. Impacts would therefore be **less than significant with mitigation incorporated**.

Mitigation Measures: MM BIO-2, MM BIO-5, MM BIO-6, MM BIO-11, MM BIO-14 through MM BIO-17, MM BIO-24, and MM BIO-25.

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

The Countywide Plan includes policies that implement the County's habitat conservation and natural resource management plans and support mitigation banking to protect biological resources (San Bernardino County 2019a). Division 8 of the County's Development Code also includes plant protection and management regulations to promote and sustain the health of plants and protect native trees and plants.

The Project would not conflict with any local policies or ordinances protecting biological resources, because the Project work is proposed within an existing utility corridor and would result in minimal ground disturbance. The Project would also conform to the mitigation requirements of the DRECP (BLM 2016). Therefore, **no impact** would occur.

Mitigation Measures: No mitigation is required.

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?

A substantial adverse effect would occur if the Project conflicted with an adopted Habitat Conservation Plan (HCP); Natural Community Conservation Plan (NCCP); or other approved local, regional, or state HCP that the Project Applicant was party to, or impacted a permittee's ability to implement an adopted HCP; NCCP; or other approved local, regional, or state HCP. There are no HCPs or NCCPs in the Project area. However, the Project is within the boundary of the DRECP LUPA to the CDCA of 1980, as amended. Within the DRECP, the Project site is within the National Trails Specific Recreation Management Area, the Lava Hills Extensive Recreation Management Area (ERMA), and the Bristol Mountains ACEC.

The disturbance caps within the ACEC are 0.1% and 1.0%, depending on the location. At this time, BLM has determined that the baseline ground disturbance for the ACEC is 1.4%, which exceeds the ground disturbance cap. The standard mitigation ratio within the ACEC is 3:1. Therefore, to mitigate for impacts to the ground disturbance cap by the development of the communication lease area and access road, ground disturbance will be mitigated at a ratio of 3:1, for a total of approximately 1.23 acres (i.e., impacts in undisturbed areas [0.41 acres] multiplied by 3) through habitat enhancement and restoration (MM BIO-22).

Management direction for the ACEC and ERMA allows for new land use authorization proposals to be analyzed on a case-by-case basis to assess whether they are compatible with the land use designations and their management goals. The overarching goal of the ACEC is to "protect biological values, including habitat quality, populations of sensitive species, and landscape connectivity while providing for compatible public uses." No land use authorizations that may impair wildlife connectivity

will be approved in the ACEC. In line with these goals and disturbance caps, construction of the proposed Project would involve utilizing previously authorized disturbed areas for staging in order to minimize disturbance. MM BIO-1 through MM BIO-27 are intended to minimize potential adverse effects to the environment identified pursuant to the National Environmental Policy Act, and also to comply with the relevant conservation and management actions (CMAs) included in the LUPA. Habitat impacts would be minimal, and mitigation would not result in a significant reduction in any affected territory or wildlife corridor. Thus, the Project is consistent with and supportive of the goals of the ACEC and DRECP. Therefore, any potential conflicts with the DRECP LUPA would be mitigated to a level below significant, and impacts would be **less than significant with mitigation incorporated**.

Mitigation Measures: MM BIO-1 through MM BIO-27.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.5 CULTURAL RESOURCES – Would the project:				
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) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

3.5.1 Environmental Setting

This section summarizes the findings of surveys and evaluates the eligibility of the identified resources for the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR).

In 2011, a Project area of potential effects (APE) for cultural resources was developed for the communication site, a staging area, a new access road segment, an existing access road segment, and a power alignment. The APE consisted of a buffer of 50 feet around the communication site, staging area, and on either side of the access road alignments, and 100 feet on either side of the power alignment. The new road alignment from 2011 is no longer being used and neither a staging area nor a power alignment are currently proposed, but results of the surveys are included for context. The Class III archaeological survey previously conducted for the 2011 Ash Hill Communication Site Environmental Assessment (DOI-BLM-CA-2011-0015-EA) identified two new cultural resources (historic) and one isolated find (historic) along a portion of an access road previously considered for use. These cultural resources were assessed as not eligible for the NRHP and would not be

affected by the current road alignments, because the current access roads avoid them (Amec Foster Wheeler 2018a, 2018b).

A Class III archaeological field survey conducted in November 2017 (Amec Foster Wheeler 2018b) for the currently proposed access roads described in Section 2.2, Project Location and Land Uses, identified a railroad berm and associated features (36-031732) as well as four isolated archaeological finds within the APE. Resource 36-031732 consists of a railroad berm and associated bridge abutment and pilings associated with the historic Atchison, Topeka & Santa Fe railroad. Based on previous evaluations of other recorded segments of this railroad, 36-031732 was assumed eligible for listing in the NRHP and CRHR for the purposes of this undertaking. The isolated finds include a prehistoric core (Isolate 36-031734), two oil cans (Isolates 36-031733 and 36-031736, and a metal can (Isolate 36-031735). These were assessed as ineligible for the NRHP and are not considered historic properties. A Class III archaeological field survey conducted in February 2018 on a small portion of the new communication site not previously surveyed did not identify any cultural resources (Amec Foster Wheeler 2018b).

The proposed Project would primarily utilize previously disturbed areas and existing access roads, with no new ground disturbance aside from that created by continued vehicular access and hauling construction equipment to the proposed communication tower site, as well as limited, necessary road repairs of a 300-foot stretch of Road NS0017 located 100 feet northeast of the Atchison, Topeka & Santa Fe railroad alignment and potentially placing material such as gravel over the existing road bed within 15 meters (50 feet) of the isolate (i.e., ISO-002 – lithic cores) identified on the southern road shoulder of NS0017, if road maintenance is required there. Also, light smoothing of Roads NS0017 and NS0003 may be necessary following heavy rains (Amec Foster Wheeler 2018a, 2018b).

3.5.2 Impact Analysis

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

Of the cultural resources identified within the APE, only the railroad alignment and associated features (36-031732) are eligible for listing in the NRHP and CRHR. However, this historical resource will not be altered in any way and will be unconditionally avoided by any activities related to the construction, operation, maintenance, and decommissioning of the communication facility. **No impact** would occur.

Mitigation Measures: No mitigation is required.

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

No impacts to known archaeological resources are anticipated because (1) the railroad alignment (36-031732) would be avoided by Project activities and (2) the isolated finds within the APE are not eligible for the NRHP or CRHR and do not meet the definition of "unique archaeological resources" as defined by CEQA Section 21083.2 (PRC 21000–21189).

Because the Project would result in ground disturbance associated with installation of the Project facilities and repair of the existing access roads, it is possible that buried archaeological resources are present that were not identified during the surveys. Therefore, although minimal ground-disturbing

activities are anticipated, any ground-disturbing activities would potentially impact buried archaeological resources. During construction, the Applicant would implement APM CUL-1, which would entail issuance of a stop work order within 50 feet of an exposed previously unknown cultural resource so that a qualified archaeologist can evaluate the significance of the find. With incorporation of APM CUL-1 into the Project design, potential impacts on archaeological resources would be **less than significant**.

Applicant Proposed Measures:

APM CUL-1 Unanticipated Discovery**.** In the event that previously unknown, pre-contact cultural resources (sites, features, or artifacts) are exposed during grading or other construction activities, all construction work occurring within 50 feet of the find shall immediately stop until a qualified archaeologist can evaluate the significance of the find and determine whether or not additional study is warranted. The Bureau of Land Management (BLM) Needles Field Office archaeologist will be notified immediately to assess the nature of the find. Depending upon the significance of the find, the archaeologist may record the find and allow work to continue. If the discovery proves significant in the independent professional judgment of the archaeologist, including based on the National Register of Historic Places or California Register of Historical Resources list eligibility criteria, a specific resource documentation or recovery shall be implemented, including preparation of an archaeological treatment plan, testing, or data recovery. As part of this evaluation, a representative from the Yuhaaviatam of San Manuel Nation (Yuhaaviatam) will be contacted if any such find occurs and be provided information and permitted/invited to perform a site visit when the qualified archaeologist makes their assessment, in order to provide tribal input including identification of feasible ways to protect the significance and tribal value of the resource. The qualified archaeologist shall also solicit input from other geographically and culturally affiliated tribal representatives as identified by the Native American Heritage Commission. The qualified archaeologist shall complete an isolate/site record for the find and submit this document to BLM for dissemination to the Yuhaaviatam and, upon request, other geographically and culturally affiliated tribes. During the assessment and recovery time, construction work may proceed in other areas outside the 50-foot buffer area around a find.

If eligible pre-contact cultural resources are discovered, and avoidance cannot be ensured, a qualified archaeologist shall be retained to develop a Cultural Resources Treatment Plan and a Discovery and Monitoring Plan. Drafts of said plan shall be provided to the Yuhaaviatam for review and comment. BLM or a designated point of contact shall, in good faith, consult with the Yuhaaviatam on the disposition and treatment of any artifacts or other cultural materials encountered during the Project.

Mitigation Measures: No mitigation is required.

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

There are no known locations of human remains in the APE. However, similar to the description of the process in the case of an unanticipated archaeological discovery in Response 3.5.2(b), if human

remains are encountered during ground-disturbing activity, work will immediately be halted as stated in APM CUL-2, which entails compliance with state law as it relates to treatment of human remains on the Project site. Therefore, with incorporation of APM CUL-2 into the Project design, impacts to human remains would be **less than significant**.

Applicant Proposed Measures:

APM CUL-2 Treatment of Human Remains. In accordance with state law (California Health and Safety Code Section 7050.5; California Public Resources Code, Section 5097.98) and as requested by the Yuhaaviatam of San Manuel Nation, if human remains or funerary objects are encountered during any activities associated with the Project, all ground-disturbing activities shall halt within a 100-foot buffer of the find. The Bureau of Land Management and the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the find or any nearby area reasonably suspected to overlie potential remains shall occur until the County Coroner has determined whether the remains are subject to his or her authority. The County Coroner must make this determination within 2 working days of notification of the discovery (pursuant to California Health and Safety Code Section 7050.5[b]). If the County Coroner determines that the remains do not require an assessment of cause of death and that the remains are, or are believed to be, Native American, the Coroner must notify the Native American Heritage Commission (NAHC) by telephone within 24 hours. NAHC must in turn immediately notify those persons it believes to be the most likely descendants (MLDs) of the deceased Native American. The MLDs shall complete their inspection and make recommendations within 48 hours of being granted access to the site. The MLDs may recommend means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods.

Mitigation Measures: No mitigation is required.

3.6 Energy

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.6 ENERGY – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.6.1 Environmental Setting

The Project site is within the CDCA Plan Utility Corridor G, which permits the expansion of utility facilities for the purpose of telecommunication, electricity, gas, water, and other commodities (BLM 1980). The Project site is also within the boundary of the DRECP LUPA, which identifies areas appropriate for the utility-scale development of wind, solar, and geothermal energy projects, while providing for the long-term conservation and management of covered species, other natural resources, recreational areas, and scenic values (BLM 2016). The Project site is not within a designated renewable energy Development Focus Area or areas where energy variances apply (BLM 2016).

3.6.2 Impact Analysis

a) ***Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

Construction activities would be short in duration and would require minimal construction equipment. Further, electric power would be provided via photovoltaic solar panels. Lighting for the Project would consist of a downward-shielded security light that would be activated by a motion sensor. Maintenance activities during operation would consist of monthly visits by technicians. Therefore, neither construction nor operation of the Project would result in wasteful, inefficient, or unnecessary consumption of energy resources. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

b) ***Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

See Response 3.6.2(a). The Project would be constructed within a designated utility corridor. As discussed previously, the Project site is also within the boundary of the DRECP LUPA. However, the Project site is not within a designated renewable energy Development Focus Area or areas where energy variances apply (BLM 2016). Therefore, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.7 GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the 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 off-site 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 direct or indirect 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 wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

3.7.1 Environmental Setting

The Project site lies within the southeastern Broadwell Valley of the Mojave Desert, along the southwestern perimeter of the Bristol Mountains. The Bristol Mountains cross I-40 between the community of Ludlow and the Old Dad and Granite Mountains, which are northeast of the Project area.

The Project site is underlain by two main geologic units: Qof (older valley sediments) and Qa (surficial sediments; Holocene and latest Pleistocene). Most of the site is situated in an erosional landscape, and a portion is composed of sedimentary deposits.

Several Quaternary-age faults (past 2 million years) are located in the vicinity of the proposed communication site, including the Broadwell Lake Fault, approximately 3 miles to the east; the South Bristol Mountains Fault, approximately 7 miles to the northeast; and the Ludlow Fault, approximately 7 miles to the southwest. The closest Holocene-active faults are the Lavic Lake Fault, approximately 18 miles to the southwest, and an unnamed fault approximately 19 miles to the west (CGS 2022; USGS 2022). Alquist-Priolo Earthquake Fault Zones regulate construction of habitable structures in the vicinity of Holocene-active faults. Alquist-Priolo Earthquake Fault Zones have been designated for both of these Holocene-active faults (DOC 2019).

3.7.2 Impact Analysis

a) Directly or indirectly cause 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.

The Project site is not located on a known fault or within an Alquist-Priolo Earthquake Fault zone (DOC 2019). Construction of the communication tower and ancillary facilities would adhere to all industry safety requirements. Therefore, impacts related to fault rupture would be **less than significant**.

Mitigation Measures: No mitigation is required.

ii) Strong seismic ground shaking?

The Project site is in a low hazard area for earthquake shaking potential because it is distant from known, active faults and would therefore experience lower levels of shaking than sites closer to active faults (San Bernardino County 2019b). Therefore, impacts associated with strong seismic ground shaking would be **less than significant**.

Mitigation Measures: No mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Liquefaction, which occurs when unconsolidated, water-laden soils are shaken and lose cohesion, is most prevalent in areas of alluvial silts or sands and in areas with high groundwater levels. The Project area is not mapped for seismic-related ground failure or liquefaction potential (San Bernardino County 2019a). Therefore, impacts associated with seismic-related ground failure, including liquefaction, would be **less than significant**.

Mitigation Measures: No mitigation is required.

iv) Landslides?

The Project area is not mapped for landslide potential and landslides are not a potential hazard to the proposed site given the low topographic relief of the site area. Evidence of ancient landslides or slope instabilities at this site was not observed during geotechnical investigations, and the potential for landslides is considered negligible (GeoTek, Inc. 2019). Therefore, impacts associated with landslides would be **less than significant**.

Mitigation Measures: No mitigation is required.

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

As described previously, grading and leveling would be required to construct the communication tower. Minor grading would occur along the existing access roads and could result in erosion-induced sedimentation of downstream drainages, which in turn could result in adverse impacts. As well as using a small portion of the existing, previously disturbed access roads, the Project would use a previously disturbed area for staging. Use of these existing disturbed areas would minimize increased erosion potential.

Because the Project would involve construction on an area greater than 1 acre, it would require compliance with the National Pollutant Discharge Elimination System (NPDES) (No. CAS000002), which requires the construction contractor to prepare and comply with erosion control measures detailed in a stormwater pollution prevention plan (SWPPP). In addition, the Applicant would implement APM HWQ-1 through APM HWQ-5, which include the installation and maintenance of erosion control BMPs (APM HWQ-1, APM HWQ-2, and APM HWQ-3), inspection of equipment to minimize fluid leaks, proper storage of lubricants and other fluids (APM HWQ-4), and use and regular maintenance of approved portable toilets (APM HWQ-5). Incorporation of the above-referenced APMs (refer to Section 3.10.2) into the Project design would reduce potential impacts to erosion and water quality.

The Project site is in an area designated for medium wind erosion potential. As discussed in Section 3.3, appropriate dust control methods required for compliance with MDAQMD Rule 403 – Fugitive Dust Control would reduce fugitive dust generation.

Therefore, the Project would not result in substantial soil erosion or the loss of topsoil; impacts would be **less than significant**.

Applicant Proposed Measures: APM HWQ-1 through APM HWQ-5 (refer to Section 3.10.2)

Mitigation Measures: No mitigation is required.

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 off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

See Response 3.7.2(a). The Project would not increase the potential for unstable soils, on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Incorporation of APM HWQ-1 through APM HWQ-3 into the Project design would reduce impacts associated with landslides. As such,

with implementation of standard BMPs included in APM HWQ-1 through APM HWQ-3, impacts would be **less than significant**.

Applicant Proposed Measures: APM HWQ-1 through APM HWQ-3 (refer to Section 3.10.2)

Mitigation Measures: No mitigation is required.

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

Expansive soils are typically characterized by clayey material that shrinks as it dries and swells as it becomes wet. The Project area is underlain with Nickel–Bittler–Arizo association and Upspring–Sparkhule–rock outcrop soils. According to the Jurisdictional Delineation, the soils are alluvial, sandy, and gravelly and well drained, sometimes with desert pavement. Therefore, the soils are not expansive soils and would not create a substantial direct or indirect risk to life or property. Regardless, the Project would be built in accordance with California Building Code industry safety standards. Therefore, expansive soil impacts would be **less than significant**.

Mitigation Measures: No mitigation is required.

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 wastewater?

The Project would improve communication coverage in the Project area through the construction and operation of a community tower, ancillary facilities, and new/improved access roads. There are no plans or need for subsurface infrastructure, such as sewer or septic. Therefore, **no impacts** would occur with respect to wastewater disposal.

Mitigation Measures: No mitigation is required.

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

A paleontological records search was requested and a literature review was conducted in September 2019 by AECOM. The paleontological analysis of existing data included a geologic map review, a literature search, and institutional records search. The institutional records search was conducted by the National History Museum of Los Angeles County. A pedestrian survey of the Project site was also conducted in October 2019. These efforts are reported in the Paleontological Resources Survey for the Interconnect Towers Ash Hill Project San Bernardino County, California, which is included as Appendix G of this Initial Study. This section summarizes the findings of these analyses and evaluates the potential for resources.

The records search returned no documented paleontological localities within the boundaries of the Project area, and there are no known pertinent paleontological sites nearby.

The paleontological pedestrian survey resulted in the detection of no paleontological resources, and the sediments encountered are judged to have little paleontological potential. While resources are not anticipated, an unexpected discovery plan has been prepared and would be implemented prior to the initiation of construction activity (refer to APM GEO-1). Therefore, with an unexpected

discovery plan in place prior to initiation of construction, impacts to paleontological resources would be **less than significant.**

Applicant Proposed Measures:

APM GEO-1 If potential paleontological resources are discovered, all ground disturbance shall immediately cease within a 25-foot radius of the discovery until a qualified paleontologist can mobilize to the site to examine the discovery, evaluate its significance, and make further recommendations as appropriate. A qualified paleontologist is as defined in the 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources prepared by the Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. The evaluation and, if applicable, salvage and curation shall also be conducted in accordance with these standard procedures.

Mitigation Measures: No mitigation is required.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.8 GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 Environmental Setting

Global climate change refers to changes in average climatic conditions on the earth as a whole, including temperature, wind patterns, precipitation, and storms. Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors, including natural and anthropogenic, can cause changes in Earth's energy balance. The greenhouse effect is the way in which heat is trapped close to the surface of Earth by greenhouse gases (GHGs). GHGs play a critical role in determining Earth's surface temperature and create a livable environment on Earth. GHGs are present in the atmosphere naturally, and are released by natural sources, such as the respiration of humans, animals, and plants; decomposition of organic matter; and evaporation from the oceans. However, in the last century, anthropogenic activities, such as the combustion of fossil fuels, waste treatment, and agricultural processes, have emitted additional GHGs to the atmosphere, thus enhancing the greenhouse effect and causing Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental

contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized as cumulative impacts (CAPCOA 2008).

As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (14 CCR 15364.5). Global warming potential is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. The global warming potential of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The concept of CO_2 equivalents (CO_2e) is used to account for the different global warming potentials of GHGs to absorb infrared radiation.

In March 2015, the County updated its GHG Emissions Development Review Processes and established a review standard of 3,000 metric tons (MT) CO_2e per year. Projects that do not exceed 3,000 MT CO2e per year are considered consistent with the San Bernardino County GHG Reduction Plan (discussed in Section 3.8.2[b]) and determined to have a less-than-significant individual and cumulative impact for GHG emissions. The San Bernardino County standard review threshold of 3,000 MT CO_2e is based on an emission capture rate of 90% based on a sample of primarily commercial, residential, and mixed-use projects to identify projects that would be required to implement GHG reduction measures (San Bernardino County 2015). The threshold methodology also amortized construction period GHG emissions over the 30-year lifetime of the Project. In addition, MDAQMD's CEQA Air and Federal Conformity Guidelines (MDAQMD 2016) sets forth a quantitative emission significance threshold for GHG emissions of 100,000 tons of CO_2e. Although this project type is closest to an industrial project (i.e., does not contain residential or commercial land uses), this analysis compares the Project emissions to the more conservative San Bernardino County standard review threshold. It is not the intent of this CEQA document to cause the adoption of this threshold as a mass emissions limit for this or other projects, but rather provide this additional information to put the Project-generated GHG emissions in the appropriate statewide context.

3.8.2 Impact Analysis

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

Construction-related GHG exhaust emissions are generated by sources such as heavy-duty off-road equipment, employee travel, and material-delivery truck trips. As described previously, following construction, the Project would entail mostly minor maintenance activities throughout the lease duration. Maintenance activities at the site would primarily consist of monthly visits by technicians at the site. As such, operational GHG emissions associated with operations would be primarily mobile source emissions (worker, fuel truck, and water truck trips) from monthly visits by technicians and stationary source emissions from the backup emergency generators. Total construction-related and operational GHG emissions were estimated using the same methodology discussed in Section 3.3, Air Quality, of this Initial Study. Table 3.8-1 shows the GHG emissions associated with construction and operation of the proposed Project.

Table 3.8-1. Greenhouse Gas Emissions

Source	GHG Emissions (MT CO2e)
Construction GHG emissions	50
Amortized construction[a]	2
Operational GHG emissions	15
Total GHG emissions	17
San Bernardino County threshold[b]	3,000
MDAQMD threshold[c]	100,000
Exceeds significance?	No

Source: Appendix B.
Notes: GHG = greenhouse gas; MT = metric tons; CO_2e = carbon dioxide equivalents; MDAQMD = Mojave Desert Air Quality Management District.
Totals may not sum precisely due to rounding after summation.
[a] Based on a Project lease period of 30 years.
[b] San Bernardino County Development Review Processes (San Bernardino County 2015).
[c] MDAQMD CEQA Guidelines Significant Emissions Thresholds (MDAQMD 2016).

Total GHG emissions associated with construction of the proposed Project were estimated to be 50 MT CO_2e. Construction emissions amortized over the assumed lifetime of the Project (i.e., 30 years) and operational emissions would total 17 MT CO_2e per year. Activities associated with decommissioning are anticipated to be similar to construction activities. As such, due to advancements in engine technology and turnover in equipment fleet, emissions related to decommissioning are anticipated to be similar to or less than those determined for the construction phase of the Project. Thus, both the construction and operational GHG emissions would be less than the MDAQMD and San Bernardino County annual thresholds. Therefore, impacts related to GHG emissions would be **less than significant**.

Mitigation Measures: No mitigation is required.

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

In September 2011, San Bernardino County adopted a GHG Reduction Plan to establish a set of actions to reduce County GHG emissions to 15% below current levels by 2020, consistent with the AB 32 Scoping Plan (San Bernardino County 2015). Strategies and measures include GHG emissions reduction from the following sectors: transportation and land use, building energy, stationary source, water, solid waste, and agriculture and resource conservation. The Project would be confined to the BLM-designated utility corridor; as such, none of the actions listed in the GHG Reduction Plan would be applicable to the Project, and the Project would not conflict with the County GHG Reduction Plan.

In December 2008, CARB adopted the Climate Change Scoping Plan (Scoping Plan), which contains the main strategies California will implement to achieve the required GHG reductions required by AB 32 (CARB 2008). CARB approved the first update to the Scoping Plan, First Update to the Climate Change Scoping Plan: Building on the Framework (Scoping Plan update), in June 2014 (CARB 2014). The Scoping Plan update includes the status of the 2008 Scoping Plan measures and other federal, state, and local efforts to reduce GHG emissions in California, as well as potential actions to further reduce GHG emissions by 2020. In response to Senate Bill (SB) 32 and the companion legislation of AB 197, CARB approved California's 2017 Climate Change Scoping Plan: The Strategy for Achieving

California's 2030 Greenhouse Gas Target in November 2017. The 2017 Scoping Plan draws from the previous plans to present strategies to reaching California's 2030 GHG reduction target (CARB 2017).

Although the Scoping Plan updates do include measures that would indirectly address GHG emissions associated with construction and operational activities, including the phasing in of cleaner technology for diesel engine fleets (including construction equipment) and the Low Carbon Fuel Standard, successful implementation of these measures predominantly depends on the development of laws and policies at the state level. As such, none of these statewide plans or policies constitute a regulation to adopt or implement a regional or local plan for reduction or mitigation of GHG emissions. Thus, it is assumed that any requirements or policies formulated under the mandate of AB 32 and SB 32 that would be applicable to the Project, either directly or indirectly, would be implemented in a manner consistent with statewide policies and laws. In addition, electric power to the site would be provided via photovoltaic solar panels; as such, the Project would not generate indirect GHG emissions from electricity consumption. Therefore, it is assumed that Project construction and operation would not conflict with the Scoping Plan updates. In addition, because the proposed Project would not generate construction emissions that would exceed the MDAQMD or County GHG emission thresholds, and because operational emissions would be minimal, the proposed Project would not impede attainment of the statewide GHG reduction goals for 2030 or 2050 identified in Executive Order S-3-05 and SB 32.

The proposed Project would not conflict with the County GHG Reduction Plan, the Scoping Plan updates or any other plans, policies, or regulations for the purpose of reducing GHG emissions. The proposed Project would also not generate GHG emissions that would have a significant impact on the environment. Therefore, the proposed Project would not conflict with any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. This impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.9 HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.9 HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
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 two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☒	☐	☐

3.9.1 Environmental Setting

Existing and past land use activities are used as potential indicators of hazardous material storage and use. For example, many sites, historic and current, have soil or groundwater contamination as a result of spills of hazardous substances and petroleum products. Other hazardous materials sources include leaking underground storage tanks (USTs). Land uses within the Project area generally consist of undeveloped land, including designated open space and rural desert land, and dispersed residential and industrial (mining) uses. Based on a review of the following sources, no active hazardous materials sites are within 1,000 feet of the Project site: the California Department of Toxic Substances Control's EnviroStor database (DTSC 2019), which consists of federal National Priorities List sites, state response sites, military evaluation sites, voluntary cleanup sites, and school cleanup sites; the California Environmental Protection Agency's Cortese List Data Resources (CalEPA 2019); and the SWRCB's GeoTracker database (SWRCB 2019a), which consists of leaking UST cleanup sites, Department of Defense sites, other cleanup program sites, irrigated lands, oil and gas production, operating permitted USTs, and land disposal sites.

The two nearest cleanup sites are approximately 7 miles south of the Project site in the community of Siberia and approximately 7 miles west of the Project site in the community of Ludlow. The sites are permitted USTs that have a current case status of closed. The permitted UST site to the south had contaminants including gasoline and other fuels, but at levels that did not require further action. The case has been closed since 2004. Additionally, the UST site to the west was located at a gas station and had contaminants including benzene, ethylbenzene, and gasoline. This case was also considered closed as of 2019 (SWRCB 2019a).

3.9.2 Impact Analysis

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

Project construction activities would potentially include the use of small quantities of hazardous materials such as chemical agents, solvents, or paints. In addition, petroleum products (e.g., gasoline, diesel fuel, crankcase oil, lubricants, and cleaning solvents) would be present on the Project site during construction and operation. Incidental spills of these fluids could seep into on-site soils and nearby drainages, resulting in potentially significant water quality impacts.

Although small amounts of hazardous materials may be used during the course of Project construction and operation, any hazardous waste generated by the Project would be disposed of in accordance with applicable federal, state, and local regulations. Petroleum products, which would be used to fuel, lubricate, and clean vehicles and equipment, would be transported in containerized trucks or in other approved containers. Hazardous materials would be properly stored in centralized locations and in secondary containment to prevent spills into on-site soils and nearby water bodies. These materials would not be drained onto the ground or into drainage areas. All construction waste, including trash and litter, garbage, other solid wastes, concrete washout, petroleum products, and other potentially hazardous materials, would be removed to a disposal facility authorized to accept such materials. No additional hazardous materials would be transported to the Project area or handled as part of Project construction or operation. Lastly, the Applicant would implement APMs that require compliance with all federal and state regulations pertaining to the transport, use, storage, and disposal of hazardous materials as defined by the California Health and Safety Code, Division 20, Chapter 6.5 and the California Code of Regulations Title 22 (APM HAZ-1) and timely disposal of construction debris and waste materials at an approved facility (APM HAZ-2). Further, APM HAZ-1 includes the implementation of a hazardous fluid spill prevention plan (as applicable) during construction, O&M, and decommissioning activities. The spill prevention plan would include specifications for measures to be implemented in the event of a detected hazardous material fluid leak, required daily inspection of equipment and proper storage of equipment fluids, and proper siting of generators and propane tanks to ensure containment of fluid spills or leaks. Therefore, with implementation of Project features and incorporation of APM HAZ-1 and APM HAZ-2 into the Project design, impacts would be **less than significant**.

Applicant Proposed Measures:

APM HAZ-1 Project construction, operations and maintenance (O&M), and decommissioning shall be in compliance with all federal and state regulations pertaining to the transport, use, storage and disposal of hazardous materials as defined by the California Health and Safety Code, Division 20, Chapter 6.5 and the California Code of Regulations Title 22.

As applicable, a Risk Management Plan and associated hazardous fluid spill prevention plan shall be prepared in accordance with the California Accidental Release Program (Chapter 6.95, 2). As applicable, the hazardous fluid spill prevention plan shall be implemented during construction, O&M, and decommissioning activities, and shall require the following:

1. Equipment operators and other personnel shall be informed of specific measures to be implemented in the event of a detected fluid leak, including the use of spill containment material, which shall be carried with the equipment or vehicle.
2. Equipment shall be inspected daily to ensure proper functioning condition and to minimize the potential for fluid leaks. Fluids shall be stored in appropriate containers on pallets, inside rubber berms, indoors, or under a cover, as shall other materials that could impact stormwater runoff. Equipment maintenance activities shall be prohibited within the Project area.
3. Propane tanks and generators shall be mounted on concrete-bermed foundations to contain spills or generator oil leaks that could occur during operation, fuel replenishment, and maintenance.

APM HAZ-2 All non-vegetative construction debris and waste materials shall be removed from the site within 2 weeks of the completion of construction activities and be transported and disposed of at an approved facility in accordance with applicable regulations, such as California Code of Regulations, Title 22, Division 4.5. Operations and maintenance and decommissioning activities shall also comply with California Code of Regulations, Title 22, Division 4.5.

Mitigation Measures: No mitigation is required.

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?

See Response 3.9.2(a). Project construction activities would potentially include the use of small quantities of hazardous materials such as chemical agents, solvents, or paints. In addition, petroleum products (e.g., gasoline, diesel fuel, crankcase oil, lubricants, and cleaning solvents) would be present on the Project site during Project construction and operational activities. Incidental spills of these fluids could potentially seep into on-site soils and nearby drainages, resulting in potentially significant water quality impacts. However, APM HAZ-1 would require compliance with all state and federal regulations pertaining to the transport, use, storage, and disposal of hazardous materials as defined by the California Health and Safety Code, Division 20, Chapter 6.5 and the California Code of Regulations Title 22 and would include implementation of a hazardous fluid spill prevention plan. Also, APM HAZ-2 would be implemented and would ensure the timely disposal of construction debris and waste materials at an approved facility. Therefore, with incorporation of APM HAZ-1 and APM HAZ-2 into Project design, impacts would be **less than significant**.

Applicant Proposed Measures: APM HAZ-1 and APM HAZ-2.

Mitigation Measures: No mitigation is required.

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

The Project would not involve handling hazardous materials within 0.25 miles of a school. The closest schools to the Project area are in the communities of Newberry Springs and Yermo, approximately 37 miles northwest of the Project site. **No impact** would occur.

Mitigation Measures: No mitigation is required.

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?

As previously discussed, based on a review of the California Department of Toxic Substances Control's EnviroStor database, the California Environmental Protection Agency's Cortese List Data Resources, and SWRCB's GeoTracker database, no hazardous materials sites are within 1,000 feet of the Project site. As a result, the potential for soil contamination within the Project site that could adversely affect workers or the public is considered low. Therefore, the Project would not be located on a hazardous materials site that would have the potential to cause a significant hazard to the public or environment. **No impact** would occur.

Mitigation Measures: No mitigation is required.

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

No public or private airports are within 2 miles of the Project site. The nearest public use airport is the Barstow–Daggett Airport, approximately 47 miles northwest of the Project site (San Bernardino County 2019c). The nearest private use airport is the Ludlow Airport, approximately 11 miles northwest of the Project site (Toll Free Airline 2019). **No impact** would occur.

Mitigation Measures: No mitigation is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

I-40 is a County evacuation route, according to the Draft Environmental Impact Report for the San Bernardino Countywide Plan (San Bernardino County 2019b). Project activities would be limited to the communication site and access roads off Route 66; no activities would cross I-40 or disrupt operations of emergency service providers. The Project itself would enhance communication coverage in the Project area, including coverage for emergency response. No decrease in emergency access would result from implementation of the Project; therefore, **no impact** would occur.

Mitigation Measures: No mitigation is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Construction activities have the potential to result in activation of wildfires as a result of hot vehicle mufflers. As required in MM BIO-11 (refer to Section 3.4.2[a]), during construction, general safety protocols such as fire prevention and protection measures would be conveyed to contractors as part of the WEAP. With implementation of MM BIO-11, impacts would be less than significant. Therefore, impacts would be **less than significant with mitigation incorporated**.

Mitigation Measures: MM BIO-11 (refer to Section 3.4.2[a]).

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.10 HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) 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; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

3.10.1 Environmental Setting

The Project site lies within the Southern Mojave watershed in the subwatershed units of Lava Hills and Bristol Mountains Wash. In general, the subwatersheds are isolated inland desert systems, with flows originating in the Bristol Mountains, a small mountain range in the central Mojave Desert. From here, the flows continue down to and across the Mojave Desert floor, where the majority, if not all, of the surface water typically dissipates prior to reaching the dry playa Bristol Lake, the subwatershed's terminal water body (approximately 23 miles southeast of the Project site). The Lava Hills Subwatershed is internally drained, with no outlet to coastal areas or navigable waterways. None of the drainages within the Lava Hills Subwatershed have any connection to interstate or foreign commerce. Therefore, all tributaries within this watershed are considered isolated and therefore are not regulated by USACE as waters of the United States (refer to Appendix D).

A Jurisdictional Delineation Report was prepared to identify ephemeral streams within the proposed Project area (see Appendix D). The study area for jurisdictional waters includes the proposed communications facilities plus a 100-foot buffer as well as the proposed existing access roads plus a 25-foot buffer in any direction out from the roads and the communication tower site. Eleven ephemeral drainages, all unnamed, and several small, unnamed non-jurisdictional features south of I-40 were observed.

3.10.2 Impact Analysis

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Incidental spills or disposal of potentially harmful materials used during construction could occur during equipment refueling or maintenance. Small amounts of liquids, including oil, fuel, coolants, and lubricants, could potentially wash into and pollute surface waters or groundwater. Exposed soils could become subject to the effects of wind and water erosion. However, incorporation of APM HWQ-1 through APM HWQ-5 into the Project design would minimize sediment transport from the site and minimize risk associated with contaminants and other impacts to water quality and soils. Further, implementation of APM HAZ-1, listed in Section 3.9.2, would minimize the probability of a spill adversely impacting water quality in the Project vicinity during operation. The Project would also be required to adhere to NPDES drainage-control requirements during construction and operation as well as to County drainage-control requirements.

The communication site is generally level, but some grading would be required to adequately prepare the site. The section of access road leading from NS0003 to the communication facility utilizes previously disturbed land and would not require significant improvement (i.e., no widening). Any minor grading proposed would be performed to smooth out the existing dirt road, similar to road maintenance following heavy rains. Although minor, such grading could result in erosion-induced sedimentation of ephemeral desert washes, adversely affecting water quality. The existing access road crosses several ephemeral washes. Implementation of APM HWQ-1 through APM HWQ-5 would ensure that BMPs are implemented during repair of the road and after construction to minimize sediment transport and protect water quality.

With incorporation of spill prevention/control measures (APM HWQ-1 through APM HWQ-5 and APM HAZ-1) and the Project-specific SWPPP that includes erosion control measures, impacts concerning potential violation of water quality standards or waste discharge requirements would be **less than significant**.

Applicant Proposed Measures: APM HAZ-1 (refer to Section 3.9.2).

APM HWQ-1 Where ground disturbances will occur, soil loss from erosion shall be controlled through implementation of best management practices (BMPs) such as erosion-control blankets/mats, gravel bags, silt fencing, stabilized construction entrances, and scheduling management consistent with National Pollutant Discharge Elimination System Construction General Permit requirements. Construction equipment staging and access and disposal or temporary placement of excess fill within drainages shall be prohibited.

APM HWQ-2 Slopes where erosion occurs shall be protected with straw wattles or blankets. All straw wattles, straw bales, or hay bales shall be certified weed-free and shall not be made of materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar materials. To reduce entanglement risks to wildlife, fiber rolls or erosion control mesh shall be made of loose weave mesh that is not fused at the intersections of the weave, such as jute or coconut (coir) fiber, which allows animals to push through the weave because it expands when spread.

APM HWQ-3 During construction prior to forecasted rain events, best management practices (BMPs) shall be inspected and repaired. Damaged or worn silt fences, straw wattles, gravel bags, and other BMPs shall be replaced prior to rain events.

APM HWQ-4 Equipment shall be inspected daily to ensure proper functioning condition and to minimize the potential for fluid leaks. Fluids shall be stored in appropriate containers on pallets, inside rubber berms, indoors, or under a cover, as shall other materials that could impact stormwater runoff. Equipment maintenance activities shall be prohibited within the Project area.

APM HWQ-5 Approved portable toilets shall be utilized during construction activity and shall be regularly maintained in a sanitary condition.

Mitigation Measures: No mitigation is required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Minimal water use would be required for construction activities and would be limited to vehicle washing. Project operations would entail limited water use for solar panel washing, anticipated at twice a year, for the duration of the grant lease. The water used for such activities would be obtained off site from local water purveyors that are responsible for groundwater management and would not deplete groundwater resources substantially or impact groundwater recharge.

The Project would result in a minor amount of new impervious surface. The communication site would be approximately 0.23 acres, which would entail a 20-foot by 40-foot concrete slab foundation for the tower. The Project's solar panels would be mounted on concrete pads. The Project's standby generators and propane tanks would also be mounted on concrete pads. The Project would also entail repairs to the existing access roads. Runoff would be directed to pervious areas adjacent to the concrete pads. As such, the Project would not result in the construction of large impervious surface areas that would reduce groundwater infiltration. Impacts would be **less than significant**.

Mitigation Measures: No mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

As described in Response 3.10.2(a), ground-disturbing activities could temporarily affect the potential for erosion during construction. Implementation of APM HWQ-1 through APM HWQ-4 would minimize sediment transport from the site. A Project-specific SWPPP and associated BMPs would also be implemented to further reduce erosion and sedimentation. Additionally, as discussed in Response 3.4.2(c), prior to initiation of Project activities, authorization would be obtained from CDFW and RWQCB for work in an ephemeral drainage. It should be noted that this authorization may require additional measures to avoid, minimize, or mitigate impacts related to erosion. With incorporation of APM HWQ-1 through APM HWQ-4 into the Project design and the required Project-specific SWPPP, impacts would be **less than significant**.

Applicant Proposed Measures: APM HWQ-1 through APM HWQ-4.

Mitigation Measures: No mitigation is required.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

See Response 3.10.2(b). The Project would result in a relatively small amount of new impervious surfaces, which would be unlikely to result in substantive increases in the rate or amount of surface runoff; therefore, the potential for flooding on or off site would be **less than significant**.

Mitigation Measures: No mitigation is required.

iii) 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; or

There is no existing or planned stormwater drainage infrastructure at or near the proposed improvements. Thus, no impacts would occur related to the capacities of drainage systems. See also Responses 3.10.2(c)(i) and 3.10.2(c)(ii). APM HWQ-1 through APM HWQ-5 would be implemented during and after Project construction to ensure that runoff from the site does not substantially increase compared to existing conditions or otherwise result in the transport of polluted runoff. With incorporation of APM HWQ-1 through APM HWQ-5 into the Project design, impacts would be **less than significant**.

Applicant Proposed Measures: APM HWQ-1 through APM HWQ-5.

Mitigation Measures: No mitigation is required.

iv) Impede or redirect flood flows?

See Responses 3.10.2(a), 3.10.2(c)(i), and 3.10.2(c)(ii). As discussed above, the existing access road would cross ephemeral drainages. However, prior to initiating Project activities, authorization would be obtained from CDFW and RWQCB for work in ephemeral drainages. It should be noted that this authorization may require additional measures to avoid, minimize, or mitigate impacts to flows. Also as discussed above, the Project would entail minor amounts of new impervious surfaces associated with concrete foundations and pads for the communication tower, ancillary facilities, and solar panels. Implementation of APM HWQ-1 through APM HWQ-4 would ensure that BMPs are implemented during and after construction to minimize sediment transport and to ensure that runoff from the site does not impede or redirect flood flows. With incorporation of APM HWQ-1 through APM HWQ-4 into the Project design, impacts would be **less than significant**.

Applicant Proposed Measures: APM HWQ-1 through APM HWQ-4.

Mitigation Measures: No mitigation is required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The Project site is not in a 100- or 500-year Federal Emergency Management Agency (FEMA) flood zone or in a 100-year Department of Water Resources Flood Awareness area (San Bernardino County 2019b). Therefore, **no impacts** would occur with respect to flooding.

The potential risk of inundation from a tsunami would not occur because the Project site is approximately 180 miles northeast of the Pacific Ocean, at its closest point. **No impacts** would occur with respect to tsunamis.

Seiches can be generated in lakes or partially enclosed bodies of water by seismic events or wind. Flooding associated with seiches typically only occurs immediately adjacent to the water bodies, due to sloshing of the water. The nearest bodies of water to the Project site are the Salton Sea and Havasu Lake, approximately 84 to 90 miles southeast and east of the Project site, respectively. Due to the distance of the water bodies from the Project site, **no impacts** would occur as a result of seiches.

Mitigation Measures: No mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project is subject to the water quality standards and control measures for surface and ground waters contained within the Water Quality Control Plan for the Colorado River Basin Region (SWRCB 2019b). As noted above, the Project would be required to adhere to NPDES drainage control requirements during construction and operation as well as to County drainage control requirements. Incorporation of APM HWQ-1 through APM HWQ-5 into the Project design would also minimize risk associated with impacts to water quality. The Project would not affect groundwater resources, because it entails enhancing communication coverage, which does not involve installation of a well. **No impacts** would occur with respect to conflicting with a water quality control plan or sustainable groundwater management plan.

Applicant Proposed Measures: APM HWQ-1 through APM HWQ-5.

Mitigation Measures: No mitigation is required.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.11 Land Use and Planning – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐

3.11.1 Environmental Setting

The Project site is within unincorporated San Bernardino County. Land uses surrounding the Project area generally consist of open space and rural desert land. The Project site is entirely on federal land, located within the Mojave Trails National Monument. The Countywide Plan designates the Project area as open space, which is designated to provide and preserve publicly owned land for parks and open space; and manage, preserve, and protect natural areas, habitats, and wildlife corridors.

3.11.2 Impact Analysis

a) Physically divide an established community?

The Project would entail constructing and operating a communication tower and ancillary facilities and using existing access roads. The communication tower and ancillary facilities would be located within an existing BLM-designated utility corridor (see Figure 2-2) adjacent to I-40 and are proposed to improve communication coverage. No change in land use on adjoining properties would result from implementation of the Project. Additionally, the Project would not disrupt the community, because the Project would not displace or affect existing housing in the area. Therefore, implementation of the Project would not divide an established community, and **no impact** would occur.

Mitigation Measures: No mitigation is required.

b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Project would not conflict with a specific plan, local coastal program, or the Countywide Plan (San Bernardino County 2019a). The existing land use designations and zoning for the Project site would not be modified as a result of the Project, nor would the land use or operation on the site change from existing conditions.

The Project area is within a region covered by several regional plans and policies related to habitat conservation and resource management, including the CDCA Plan and associated plan amendments (NEMO and the DRECP). The following analysis is performed to determine whether implementation of the Project would affect the implementing agencies' ability to implement these plans as envisioned.

California Desert Conservation Area Plan

The CDCA Plan provides a framework for multiple-use resource management in the CDCA, which covers all BLM lands in the California Desert region (BLM 1980). The CDCA Plan established direction on uses and management actions on BLM lands addressing a range of plan elements, including Cultural, Native American, Wildlife, Vegetation, Wilderness, Wild Horse and Burro, Livestock Grazing, Recreation, Motorized-Vehicle Access, Geology, Energy and Mineral Resources, Energy Production and Utility Corridors, and Land Tenure Adjustment. The CDCA Plan also established multiple-use classes and ACECs on BLM lands in the CDCA.

The CDCA Plan has been amended several times, including major land use plan amendments in the Project area referred to as NEMO (BLM 2002) and DRECP (BLM 2016). NEMO amended the CDCA Plan to provide updated management direction for BLM lands in the northern and eastern Mojave Desert region. The Project site overlaps with the Northern and Eastern Colorado Desert Plan (NECO) plan area. Further discussion regarding NECO is provided below.

In 2016, BLM made a major amendment to the CDCA Plan referred to as the DRECP LUPA. The DRECP LUPA made substantial changes to the CDCA Plan framework and superseded many previous decisions and amendments for BLM lands in the California Desert region, including NEMO. The DRECP LUPA eliminated multiple-use classes and replaced them with conservation and management actions,

established new National Conservation Lands, revised and added ACECs, and established other designations on BLM lands for renewable energy and recreation, among other changes. The Project site is within the DRECP LUPA area. Further discussion regarding the DRECP is provided below.

As it pertains to the proposed Project, the ROW to be granted is within a CDCA Plan-designated utility corridor (Corridor G). Therefore, although the CDCA Plan was amended by NEMO and later by the DRECP LUPA, the proposed Project would be considered consistent with the allowed and designated uses that the CDCA Plan established. Furthermore, the proposed Project requires a BLM notice to proceed to be implemented on BLM lands. Therefore, implementation of the proposed Project would not prevent or preclude BLM from implementing the CDCA Plan; see discussion below for an evaluation of the proposed Project relative to the relevant major CDCA Plan amendments: NEMO and DRECP LUPA.

Northern and Eastern Mojave Desert Management Plan

The Project site overlaps with the NEMO plan area. NEMO is a landscape-scale, multi-agency planning effort envisioned to protect and conserve natural resources on federal lands while simultaneously balancing human uses in the northeastern CDCA Plan area, primarily the eastern Mojave Desert and western basin and rangelands surrounding Death Valley National Park (BLM 2002). NECO amended the CDCA Plan on BLM lands in this portion of the CDCA Plan area. NECO provided subregional resource management direction for BLM lands in this portion of the CDCA, including new land designations referred to as Desert Wildlife Management Areas and Wildlife Habitat Management Areas, and revised management decisions and strategies (BLM and CDFG 2001). As noted above under the CDCA discussion, the DRECP LUPA (discussed below) amended the CDCA Plan in 2016 and superseded NEMO.

As it pertains to the Project, the Project is within a CDCA Plan-designated utility corridor, which was an existing designation at the time of NEMO approval. Therefore, although NEMO was later amended by the DRECP LUPA, the Project would be considered consistent with the allowed and designated uses of NEMO. Furthermore, the Project would require a lease from BLM for the Project to be implemented on BLM lands. Therefore, implementation of the Project would not prevent or preclude BLM from implementing NEMO; see discussion below for an evaluation of the Project relative to the DRECP LUPA.

Desert Renewable Energy Conservation Plan

The DRECP was originally envisioned as an interagency landscape-scale plan designed to facilitate renewable energy development through streamlined permitting while conserving sensitive desert resources. In 2016, BLM approved the DRECP LUPA, which amended the CDCA Plan and superseded many previous CDCA Plan amendments (including NEMO) and resource management decisions in the California Desert. The DRECP LUPA established new and revised conservation designations (National Conservation Lands and ACECs), established other designations on BLM lands for renewable energy and recreation (Development Focus Area, Special Recreation Management Areas, and Extensive Recreation Management Areas), and replaced multiple-use classes with conservation and management actions (CMAs). The Project site is within the DRECP LUPA area.

The Project site is within a CDCA Plan-designated utility corridor, which was an existing designation at the time of DRECP LUPA decisions. Therefore, the Project would be considered consistent with the allowed and designated uses of the DRECP LUPA. Furthermore, the Project would require a lease from BLM for the

Project to be implemented on BLM lands. Therefore, once implemented, the Project would be within a valid ROW grant in an existing designated utility corridor that is consistent with the DRECP LUPA.

Because BLM approval would be required for implementation of the Project, the discussion below evaluates whether implementation of the Project would prevent or preclude BLM from implementing the current resource management directives applicable to BLM lands in this area, as specified by the DRECP LUPA.

The Project is within the following DRECP LUPA land designations applicable to BLM lands:

- Bristol Mountains ACEC, which protects biological values, including habitat quality, populations of sensitive species, and landscape connectivity while providing for compatible public uses. Appropriate multiple uses for this ACEC are allowed, consistent with the goals of the ACEC and the CMAs in the LUPA. Management direction for this ACEC allows for new land use authorization proposals to be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.
- National Trails Specific Recreation Management Area, managed for the outstanding scenic and historic recreational opportunities that are found through back country travel of the Mojave Adventure Trails.
- Lava Hills ERMA, managed for outstanding views and disbursed recreational use. The ERMA encompasses vast lands that provide the northern viewshed for the National Trails Specific Recreation Management Area or Route 66 Corridor. The ERMA also provides the viewshed for the Bristol Mountains and I-40 Corridor.

As described in Section 3.4, Biological Resources, implementation of the Project would result in temporary and permanent impacts that have the potential to affect special-status plant and wildlife species, sensitive vegetation communities, jurisdictional waters and wetlands, and wildlife movement corridors. To avoid, minimize, and compensate for the effects of the Project's impacts on these resources, MM BIO-1 through MM BIO-30 would be implemented (see Section 3.4.2).

These mitigation measures include the avoidance, minimization, and compensation actions considered necessary to reduce the potential impacts of the proposed Project below a level of significance pursuant to CEQA. The DRECP LUPA established CMAs that apply to various actions and land designations on BLM lands within the California Deserts. Based on a review of the DRECP LUPA CMAs, the biological resources mitigation measures listed above are consistent with the purpose and intent of the DRECP LUPA CMAs. Implementation of the Project, with the required MM BIO-1 through MM BIO-30, would be considered consistent with the purpose and intent of the DRECP LUPA and would not preclude BLM from implementing the DRECP LUPA. Therefore, any potential conflicts with the DRECP LUPA would be mitigated to a level below significance. Impacts would therefore be **less than significant with mitigation incorporated**.

Mitigation Measures: MM BIO-1 through MM BIO-30 (refer to Section 3.4.2).

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.12 MINERAL RESOURCES – Would the project:				
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.12.1 Environmental Setting

The Project site is not designated within a Mineral Resource Zone (MRZ) (San Bernardino County 2019a). Areas to the north of the Project area, north of I-40, are designated as MRZ-2 (areas that contain identified mineral resources) and MRZ-3 (areas of undetermined mineral resource significance). The U.S. Geological Survey Mineral Resource Resources Data System indicates that one mineral resource site is within 0.5 miles of the Project site. This resource site is an unnamed sand and gravel pit used for mining aggregate used for construction (USGS 2019).

3.12.2 Impact Analysis

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?***

As stated above, the Project site is not within a designated MRZ. There are no known or recorded mineral resources within the Project site. Therefore, **no impact** would occur due to implementation of the proposed Project.

Mitigation Measures: No mitigation is required.

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?***

See Response 3.12.2(a). **No impact** would occur.

Mitigation Measures: No mitigation is required.

3.13 Noise

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.13. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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?	☐	☐	☐	☒

3.13.1 Environmental Setting

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise. General noise sources surrounding the Project site include automobile traffic and industrial traffic associated with the nearby aggregate mining operation. Noise-sensitive receptors near the Project site generally include scattered rural residences approximately 8 miles west of the Project site in the community of Ludlow.

The Project site is in a region of San Bernardino County characterized as rural desert. Proximity to roadway traffic noise from I-40 is the primary influence on the existing outdoor ambient sound environment. Federal Transit Administration (FTA 2006) guidance suggests that for proximity to an interstate highway, the estimated day/night sound level aggregated over a 24-hour period (L_{dn}) can range from 75 A-weighted decibels (dBA) L_{dn} to 55 dBA L_{dn} for distances ranging from 10 feet to 800 feet. For “other roadways,” such as busy urban streets or parkways with vehicle speeds of only 55 mph, the L_{dn} would be about 5 decibels (dB) less.

3.13.2 Impact Analysis

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction Noise

As discussed in Section 3.13.1, the Project site is located in rural desert open space, adjacent to I-40. The nearest property with the potential to be occupied is approximately 8 miles west of the Project site in the community of Ludlow. Project activities during construction would require four to six workers per day during the 45-day construction time frame and use the equipment listed in Table 2-2, Construction Equipment. Due to the distance from the Project site to the nearest residences, construction is not anticipated to increase noise levels in excess of standards. Further, all construction would occur during daytime hours. Implementation of MM BIO-25 would ensure that all construction equipment including generators and compressors would be equipped with standard or better noise-control devices (e.g., mufflers, acoustical lagging, and/or engine enclosures). The impact would be mitigated to a level below significance. Impacts would therefore be **less than significant with mitigation incorporated**.

Mitigation Measure (Construction Noise): MM BIO-25 (refer to Section 3.4.2).

Operational Noise

The Project would not result in substantial operational noise. Potential noise created by Project operation would be limited to noise created during routine inspections and maintenance from standard road vehicle traffic and operation of on-site generators in the event of failure of the site's solar power source. Implementation of APM NOI-1 would require the installation of factory-approved sound-attenuating weather enclosures and accompanying combustion exhaust mufflers on the power units of on-site generators for noise attenuation. Therefore, APM NOI-1 would be incorporated into Project design and impacts would be **less than significant**.

Applicant Proposed Measures:

APM NOI-1 The Project construction plans shall demonstrate that all on-site generators shall include factory-approved sound-attenuating weather enclosures and accompanying combustion exhaust mufflers on the power units to minimize noise.

Mitigation Measures (Operational Noise): No mitigation is required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Heavy trucks transporting materials to and from the site have the potential to generate groundborne vibration. However, heavy trucks would generally operate at very low speeds on site, and groundborne vibration induced by heavy truck traffic is not anticipated to be perceptible at distances greater than 25 feet. As discussed above, the Project site is 8 miles or more from noise- and vibration-sensitive land uses. In addition, groundborne vibration associated with construction equipment would be temporary and would occur only during daytime hours. More importantly, pickup trucks and other light-

and medium-duty road vehicles are anticipated for construction. Other types of heavy equipment necessary for construction are listed in Table 2-2, and their use would be limited to the Project site during the duration of construction. Therefore, vibration-related impacts would be **less than significant**.

Mitigation Measures: No mitigation is required.

c) ***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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 public or private airports are within 2 miles of the Project site. The nearest public use airport is the Barstow– Daggett Airport, approximately 47 miles northwest of the Project site (San Bernardino County 2019c). The nearest private use airport is the Ludlow Airport, approximately 11 miles northwest of the Project site (Toll Free Airline 2019). Therefore, **no impact** would occur.

Mitigation Measures: No mitigation is required.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.14 POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 Environmental Setting

The Project site is located entirely on BLM-administered land within unincorporated San Bernardino County. Land uses within the Project area consist of rural desert land. The nearest residential areas are the community of Ludlow (approximately 8 miles west of the Project site), the City of Needles (approximately 100 miles east of the Project site), and the City of Barstow (approximately 61 miles northwest of the Project site). No residential structures exist within the Project site.

3.14.2 Impact Analysis

a) Induce substantial unplanned 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)?

The Project would improve communication coverage in the Project area through the construction and operation of a community tower and ancillary facilities and would use existing access roads. The Project would not entail the construction of new homes or businesses and therefore would not directly induce substantial unplanned population growth. Although the Project would provide improved communication coverage in the area, the Project is unlikely to result in substantial population growth because the strengthening of communication coverage is not a main factor that induces population growth.

Project activities during construction would require four to six workers per day during the 45-day construction time frame. Project activities during operation would require one to three workers for 6 to 10 visits per month for the duration of the 30-year lease. Due to the limited number of workers required and the fact that all workers would be from Southern California and would not be relocating to the surrounding area, their presence would not result in substantial population growth. Therefore, the impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Project would improve communication coverage in the Project area through the construction and operation of a community tower and ancillary facilities and would use existing access roads. There is no existing housing at the Project site. Therefore, the Project would not displace existing people or housing and would not necessitate the construction of replacement housing. **No impact** would occur.

Mitigation Measures: No mitigation is required.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.15 PUBLIC SERVICES – Would the project:				
a) 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?	☐	☐	☐	☒

3.15.1 Environmental Setting

The Project site is located entirely on BLM-administered land within unincorporated San Bernardino County. Land uses within the Project area consist of rural desert land and highly dispersed residences. County public services that would be provided during Project construction would come from within San Bernardino County. The nearest residential areas are the community of Ludlow (approximately 8 miles west of the Project site), the City of Needles (approximately 100 miles east of the Project site), and the City of Barstow (approximately 66 miles northwest of the Project site). No residential structures exist within the Project site.

The San Bernardino County Fire Department provides fire and emergency services to residents of unincorporated areas of San Bernardino County and to more than 60 communities and cities (San Bernardino County 2019d). The nearest fire station to the Project site is at 39059 Kathy Lane in the community of Newberry Springs, approximately 52 miles northwest of the Project site.

The San Bernardino County Sheriff's Department provides law enforcement services to the region via 15 patrol stations (San Bernardino County 2019e). The nearest patrol station to the Project site is at 220 East Mountain View Street B in the City of Barstow.

The Silver Valley Unified School District serves the Project area; all schools are in the communities of Yermo and Newberry Springs (SVUSD 2019).

The San Bernardino County Regional Parks Department maintains nine regional parks totaling approximately 9,200 acres, which provide areas for camping, fishing, group events, and picnicking, and contain swim complexes with water slides, water play parks, and playgrounds (San Bernardino County 2019f). Mojave Trails offers other recreational opportunities such as camping.

The San Bernardino County Library System operates and maintains 32 libraries throughout the County (San Bernardino County 2019g). The nearest library to the Project site is at 304 East Buena Vista Street in the City of Barstow.

3.15.2 Impact Analysis

a) ***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?

This response applies to all services listed.

The proposed Project would entail the construction and operation of a communication tower and ancillary facilities, using existing access roads, to provide increased signal coverage for customers and emergency response and law enforcement agencies. The Project would be built to all applicable standards and codes to ensure safety, and the tower would be enclosed by an 8-foot-tall chain-link fence with three strands of barbed wire at the top to deter trespassers. As discussed in Section 3.14, Population and Housing, the Project would not induce population growth. Therefore, the Project would not require new or physically altered fire protection, police protection, schools, parks, or other public facilities. **No impact** would occur.

Mitigation Measures: No mitigation is required.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.16 RECREATION				
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

3.16.1 Environmental Setting

The San Bernardino County Regional Parks Department manages and maintains parks and recreation facilities within San Bernardino County. The San Bernardino County Regional Parks Department maintains nine regional parks totaling approximately 9,200 acres. Regional parks provide areas for camping, fishing, group events, and picnicking, and contain swim complexes with water slides, water play parks, and playgrounds. The nearest regional park to the Project site is the Calico Ghost Town, approximately 75 miles southeast of the Project site (San Bernardino County 2019f).

Wilderness areas near the Project site include the Bristol Mountain Wilderness (approximately 6 miles northwest of the Project site) and Horsethief Camp (approximately 7 miles north of the Project site). Parks near the Project site include the Mojave Trails National Monument, which the Project site is in, along Route 66 (San Bernardino County 2019a).

3.16.2 Impact Analysis

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?

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?

This response applies to Questions 3.16.2(a) and 3.16.2(b).

The Project would improve communication coverage in a remote desert area and would not directly increase use of or demand for neighborhood parks, regional parks, or other recreation facilities. The Project has the potential to indirectly increase the use of the surrounding recreational facilities due to

improved communication coverage. However, it is not likely that any increased use would contribute to substantial physical deterioration of existing facilities or require new facilities because the area is remote with little to no accommodations nearby. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.17 TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☐	☒

3.17.1 Environmental Setting

The regional routes within the Project vicinity are I-40 and Route 66, which are under the jurisdiction of the California Department of Transportation (Caltrans) and are north and south of the Project site, respectively. I-40 has an average daily traffic volume of approximately 13,000 (Caltrans 2019a) at its junction with Kelbaker Road. Most of the roadways in the Project area are owned and maintained by the County and are generally two-lane, undivided roadways.

3.17.2 Impact Analysis

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Project would entail construction and operation of a communication tower and ancillary facilities and the use of existing access roads, which would generate a limited number of trips during the 45-day construction time frame. Operation of the Project would also generate a limited number of trips for maintenance and repairs over the course of the 30-year lease and renewal of up to a 50-year lease.

Therefore, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

b) Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

The Project site is in rural northeastern San Bernardino County. Construction of the Project would occur for 45 days and approximately four to six construction workers would be present on site each day. Table 2-2 shows the equipment that would be used for construction. There would be no import or export of soil needed during construction; therefore, no associated trips would occur. This impact would be temporary during construction.

Operation of the Project would entail communication carriers accessing the site approximately three times per month total. It is likely that these communication carrier staff would visit other communication towers in the region and would not undertake entirely separate trips to access this communication site. Regardless, the number of trips is low and would not result in a transportation impact. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

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

As discussed in 3.17.2(b), vehicle and equipment trips during construction and operation would be limited and there would be no hauling trips associated with import or export of soil. All vehicles and equipment would access the site via Route 66 directly using Road NS0017 to Road NS0003, because there is no dedicated exit or turn lane to reach the site access road. Due to the Project's limited amount of trips, vehicles and equipment turning off Route 66 to access the site would not substantially increase hazards associated with slowing on Route 66. Vehicles and equipment would also obey all traffic laws, such as signaling and speed limits, to ensure safe movement. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

d) Result in inadequate emergency access?

I-40 is a County evacuation route; however, all Project access would be from Route 66. Project activities would be limited to the communication site and access roads; there would be no activities that would cross I-40 and disrupt operations of emergency service providers. The Project itself would enhance communication coverage in the Project area, including coverage for emergency response. No decrease in emergency access would result from implementation of the Project. **No impact** would occur.

Mitigation Measures: No mitigation is required.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.18 TRIBAL CULTURAL RESOURCES				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:				
i) 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	☐	☐	☒	☐
ii) 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

3.18.1 Environmental Setting

NAHC conducted a search of the Sacred Lands File for the Project vicinity in 2017 (Amec Foster Wheeler 2018b). The search revealed no sacred sites that would potentially be affected by the Project. Additionally, pursuant to PRC Section 21080.3, CDFW as the lead agency will consult with tribal entities identified by NAHC as having traditional ties to the area to identify and mitigate or avoid significant effects on tribal cultural resources.

3.18.2 Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

i) 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

Of the cultural resources identified within the APE, only the railroad alignment and associated features (36-031732) are eligible for listing in the NRHP and CRHR. However, this historical resource would not be altered in any way and would be unconditionally avoided by any activities related to the construction, operation, maintenance, and decommissioning of the facility. No additional historic resources were identified during consultation between CDFW and geographically and culturally affiliated tribes.

Although ground-disturbing activities anticipated during Project construction would be minimal, any ground-disturbing activities would potentially impact buried archaeological resources, including sites and/or features. However, with implementation of APM CUL-1 (refer to Section 3.5.2), potential impacts on archaeological resources and tribal cultural resources would be **less than significant**.

Applicant Proposed Measures: APM CUL-1 (refer to Section 3.5.2).

Mitigation Measures: No mitigation is required.

ii) 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Although ground-disturbing activities anticipated during Project construction would be minimal, any ground-disturbing activities would potentially impact buried archaeological resources, including sites and/or features. However, with implementation of APM CUL-1 (which includes input from the Yuhaaviatam of San Manuel Nation that was provided during the AB 52 tribal consultation process; refer to Section 3.5.2), potential impacts on archaeological resources and tribal cultural resources would be **less than significant**.

Applicant Proposed Measures: APM CUL-1 (refer to Section 3.5.2).

Mitigation Measures: No mitigation is required.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.19 UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒	☐	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the waste water 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?	☐	☐	☒	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 Environmental Setting

The Project site is entirely on BLM-administered land within unincorporated San Bernardino County. The Project site is limited to a portion of an existing designated utility corridor and is bounded on all sides by existing transmission, distribution, pipeline, and fiber-optic infrastructure. However, no utilities or public service systems currently serve the Project site.

3.19.2 Impact Analysis

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The Project would entail construction and operation of a communication tower and ancillary facilities, using existing access roads, for a lease period of 30 years, with a renewal option of up to 50 years.

Power for the Project would be solely via solar panels. The Project would also include two 100 kW standby generators that would provide electric power in the event of failure of the site's solar power source. During construction, portable toilets would be used. The Project would not require any other utilities or public services. Because the Project would include construction and operation of a communication tower and ancillary facilities, appropriate mitigation measures from Section 3.4, Biological Resources, of this Initial Study would be implemented to reduce the Project's environmental effects related to biological resources, particularly the desert tortoise. In addition, implementation of APMs related to hazards and hazardous materials, land use and planning, and noise would reduce the potential for significant environmental effects. With implementation of MM BIO-1 through MM BIO-30, and APMs HAZ-1, HAZ-2, HWQ-1 through HWQ-5, and NOI-1, these impacts would be reduced to a level below significance. Therefore, impacts would be **less than significant with mitigation incorporated**.

Applicant Proposed Measures: APM HAZ-1, APM HAZ-2, APM HWQ-1 through APM HWQ-5, and APM NOI-1 (refer to Sections 3.9.2, 3.10.2, and 3.13.2).

Mitigation Measures: MM BIO-1 through MM BIO-30 (refer to Section 3.4.2).

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Construction of the Project also has the potential to require water for use in a batch concrete mixing station should the Project site not be accessible by concrete trucks. However, this demand would be considered temporary and likely to require relatively small quantities of water. During operation, limited amounts of water would be trucked to the site and used to periodically (approximately twice a year) wash the solar panels to maintain their efficiency. Therefore, the Project would have sufficient water supplies. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

c) Result in a determination by the waste water 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?

Wastewater generated during construction would result only from portable restroom facilities, which would be required for the duration of construction. Wastewater generated during operation would consist of occasional washing of solar panels to maintain their efficiency. The frequency of washing is estimated at twice per year but would not be collected for treatment at any wastewater treatment plant. Therefore, the Project would not interfere with any wastewater treatment provider's service capacity. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Project activities would generate a limited amount of construction waste, such as trash, oil, fuel, coolants, lubricants, and batteries. Implementation of APM HAZ-2 would ensure that all solid waste is

removed from the site and appropriately disposed of in accordance with applicable regulations. With incorporation of APM HAZ-2 into the Project design, the impact would be **less than significant.**

Applicant Proposed Measures: APM HAZ-2 (refer to Section 3.9.2).

Mitigation Measures: No mitigation is required.

*e) **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

The Project would comply with all federal, state, and local statutes and regulations related to solid waste. The work would not generate a substantial increase in the amount of solid waste or require the transport of substantial amounts of solid or hazardous waste. As described in Response 3.19.2(c), solid waste would be removed from the site and appropriately disposed of in accordance with applicable regulations (APM HAZ-2). With incorporation of APM HAZ-2 into the Project design, the impact would be **less than significant.**

Applicant Proposed Measures: APM HAZ-2 (refer to Section 3.9.2).

Mitigation Measures: No mitigation is required.

3.20 Wildfire

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.20 WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

3.20.1 Environmental Setting

The Project site is within a federal responsibility area and the area is classified as a moderate fire hazard severity zone (CAL FIRE 2019).

3.20.2 Impact Analysis

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The Project site is within a federal responsibility area classified as a moderate fire hazard severity zone (CAL FIRE 2007). As stated in Response 3.9.2(f), the Project would not impair an adopted emergency response plan or emergency evacuation plan. The Project is expected to enhance communication coverage in the area, which would benefit emergency response coverage demand. The impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The Project site is within a federal responsibility area that is classified as a moderate fire hazard severity zone (CAL FIRE 2007). The communication tower would be located at the top of a hill and would be built to the most current safety standards and codes at the time of design to consider soil conditions, wind loads, and seismic zones, and would not directly exacerbate wildfire risks. In addition, consistent with APM WF-1, Project construction (as well as O&M and decommissioning activities) would comply with all applicable federal, state, and local fire codes and standard procedures to minimize potential ignition incidents would be implemented. All safety standards would also be observed during operation when conducting monthly visits to maintain and repair equipment. Therefore, the Project would not expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The impact would be **less than significant**.

Applicant Proposed Measures:

APM WF-1 Project construction, operations and maintenance (O&M), and decommissioning shall comply with all applicable federal, state and local fire codes, including but not limited to the San Bernardino County Fire Protection District Fire Code and the California Fire Code. Prior to the start of construction, the Bureau of Land Management and San Bernardino County Fire Protection District shall be consulted to ensure all requirements are met. The procedures that shall be implemented for minimizing potential ignition during construction, O&M and decommissioning activities, including, but not limited to:

- Vegetation and debris clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, and hot work restrictions.
- Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days.

- Equipment and personnel shall stay within the Project footprint.
- All internal combustion engines used at the Project site shall be equipped with spark arrestors and kept in good working condition.
- Construction and maintenance trucks shall be equipped with fire extinguishers or other firefighting equipment.
- A fire watch personnel shall be designated during construction activities.

Mitigation Measures: No mitigation is required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Project entails construction and operation of a communication tower and ancillary facilities, using existing access roads, for a 30-year period. However, the Project would provide much needed communication coverage in the area, which currently lacks coverage largely due to signal shadowing caused by topographic features. Use of the access road would be limited to carriers and maintenance crews and would be at the direction of BLM. As specified in APM WF-1, during construction, general safety protocols such as fire prevention and protection measures would be conveyed to contractors.

Upon termination of the ROW grant, the Project site would be restored under the direction of BLM. Restoration would ensure that all structures, towers, fencing, and buildings would be deconstructed and removed from the site, cement foundations would be covered over with local soils from within the compound, any access gates would be removed, and revegetation would be allowed to occur naturally to blend with the surrounding area. As discussed above, the Project would observe all safety standards during operation when conducting monthly visits to maintain and repair equipment. Therefore, the Project would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. The impact would be mitigated to a level below significance. Therefore, impacts would be **less than significant**.

Applicant Proposed Measures: APM WF-1 (see Response 3.20.2[b]).

Mitigation Measures: No mitigation is required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Project entails construction and operation of a communication tower and ancillary facilities, using existing access roads, for a 30-year period. Prior to construction of the tower, the soils and substrate at the site would be sampled and tested to assist in tower foundation design. Construction at the Project site would proceed with site preparation and grading first, followed by excavation for tower footings. The site is generally level, but some grading would be needed to adequately prepare the site. Depending on tower foundation design, auguring could be required for the placement of caissons. Spoils or excess soil materials resulting from excavations or borings would be distributed evenly across the site. As discussed in Section 3.10.2, BMPs would be implemented to minimize sediment transport from the site and minimize other impacts to water quality and soils (APM HWQ-1 through APM HWQ-4).

As stated in Response 3.20.2(c), the Project would entail use of existing access roads that would not be paved and would be maintained throughout the duration of the 30-year lease. Routine road maintenance would consist of minor smoothing. Occasionally, following heavy rainfall events, the roads may require further maintenance, which would be coordinated and authorized by BLM. Therefore, the Project would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be **less than significant**.

Applicant Proposed Measures: APM HWQ-1 through APM HWQ-4 (refer to Section 3.10.2).

Mitigation Measures: No mitigation is required.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.21 MANDATORY FINDINGS OF SIGNIFICANCE				
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, substantially 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?	☐	☐	☒	☐

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, substantially 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?

As documented in Section 3.4, Biological Resources, the Project has the potential to result in impacts to sensitive species and habitat. All potential impacts to species and habitat would be mitigated through implementation of MM BIO-1 through MM BIO-30. Therefore, impacts from the proposed Project on biological resources would be **less than significant with mitigation incorporated**.

Additionally, as documented in Section 3.5, Cultural Resources, the Project has the potential to result in impacts to archaeological resources and human remains. These potential impacts would be reduced to a less-than-significant level through implementation of APM CUL-1 and APM CUL-2. Therefore, impacts from the proposed Project on cultural resources would be **less than significant**.

Applicant Proposed Measures: APM CUL-1 and APM CUL-2 (refer to Section 3.5.2).

Mitigation Measures: MM BIO-1 through MM BIO-30 (refer to Section 3.4.2).

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)?

As discussed in Sections 3.1 through 3.20, the majority of the potential impacts from the Project would occur during construction, with few lasting operational effects. Because the construction-related impacts of the Project would be temporary and localized to the Project site, they would only have the potential to combine with similar impacts of other projects if they occur at the same time and in proximity. Construction impacts caused by the Project (primarily related to biological resources) could combine with similar effects of other projects being built in the Project area at the same time. However, the Project area is remote and there are no current or future projects within a 5-mile radius of the Project site (Caltrans 2019a; San Bernardino County 2019h, 2019i).

As discussed in Sections 3.1 through 3.20, impacts from the Project are less than significant or no impact after incorporation of mitigation measures. The Project's incremental effects on biological resources, when combined with other projects in the Project area, may have a cumulative impact. However, there are no cumulative projects in the Project area; therefore, the impact would be **less than significant**.

Mitigation Measures: No mitigation is required.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The purpose of the Project is to provide improved cellular communication capability within I-40 northeast of Route 66 and north of the east–west-oriented BNSF railroad. The Project area is within an existing utility corridor. Project activities would entail constructing and operating a communication

tower and ancillary facilities including solar panels, backup generators, and equipment cabinets, as well as use of existing access roads. Based on the preceding analysis, the potential for adverse direct or indirect impacts on human beings was considered in the response to certain threshold questions in Sections 3.1 through 3.20. With the Applicant's commitment to incorporate APMs as part of the Project, as described in each respective resource section, Project impacts would be less than significant. Furthermore, compliance with applicable federal, state, and local regulations would result in the Project having no substantial adverse effects on human beings. Therefore, CDFW's issuance of the permits and its broader approval of the whole of the action under CEQA, including incorporation of APMs, would result in **less-than-significant impacts**.

Applicant Proposed Measures: All APMs described in Sections 3.1 through 3.20 (refer also to Table 2-3).

Mitigation Measures: No mitigation is required.

4 List of Preparers

Preparation of CEQA documents is an interdisciplinary team effort. In addition, internal review of the document occurs throughout preparation at multiple levels. CDFW is the CEQA lead agency, supported by their environmental contractor, Dudek, during the CEQA review process. On behalf of the Applicant, AECOM prepared the Administrative Draft CEQA document for CDFW review. The CDFW team and Dudek list of preparers are presented in Table 4-1.

Table 4-1. Initial Study Team of Preparers

Preparer	Title
CDFW	
Alisa Ellsworth	Environmental Program Manager
Brandy Wood	Unit Supervisor
Julia Karo	Project Lead
Dudek	
Sarah Lozano	Project Director
Josh Saunders	Project Manager
Mike Howard	Biologist
Callie Amoaku	Biologist
Matthew Morales	Air Quality Specialist
Angela Pham	Archaeologist
Perry Russel	Geologist
Eric Schniewind	Geologist
Sarah Siren	Paleontologist
Jonathan Leech	Noise Specialist
Sabita Tewani	Transportation Planner
Dana Link-Herrera	Wildfire Planner
Andrew Greis	GIS
Laurel Porter	Technical Editor
Laura Reed	Formatting Specialist

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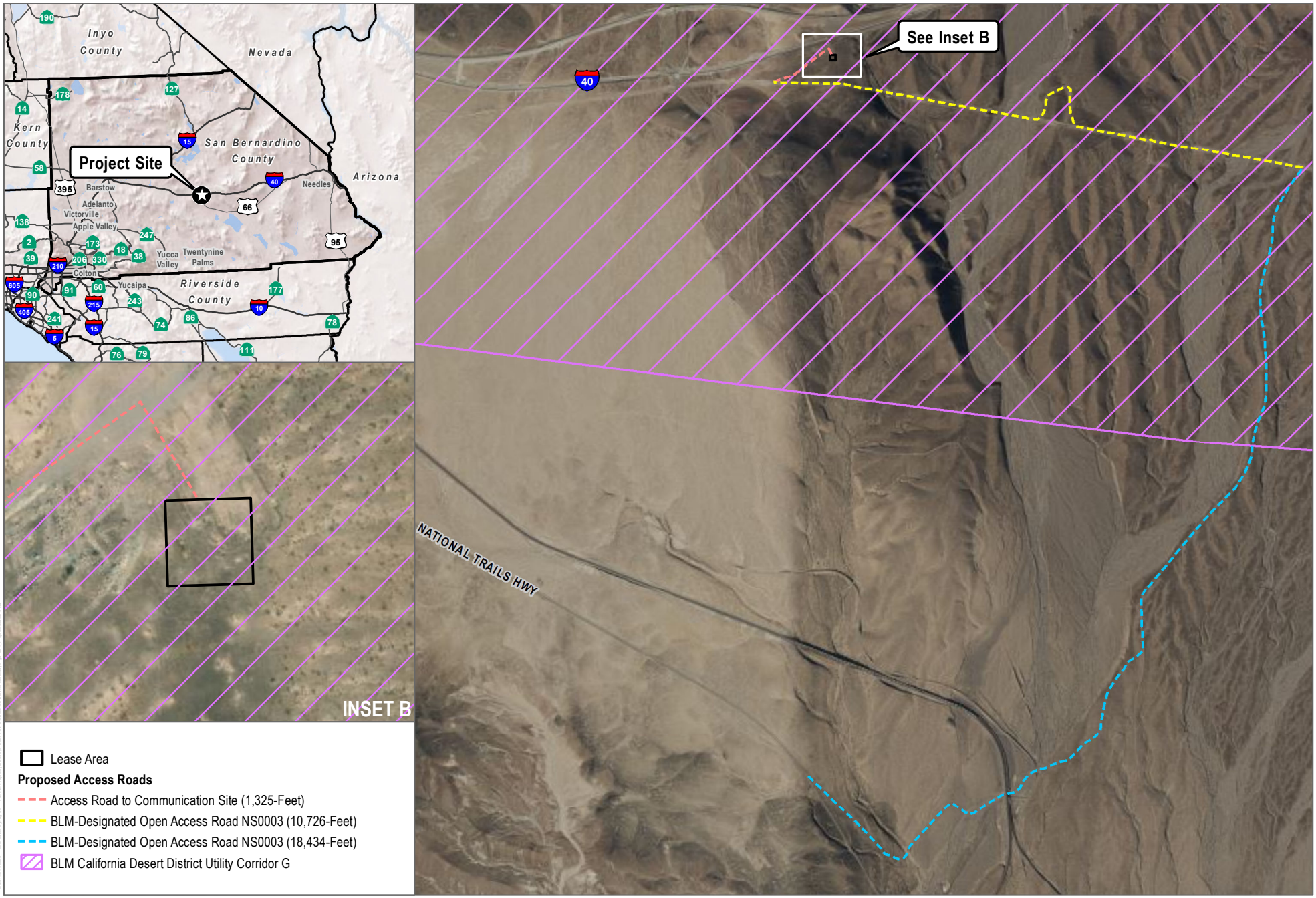

SOURCE: AECOM 2022; County of San Bernardino; Bing Maps

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FIGURE 2-1

Project Location

Ash Hill Communication Site Project

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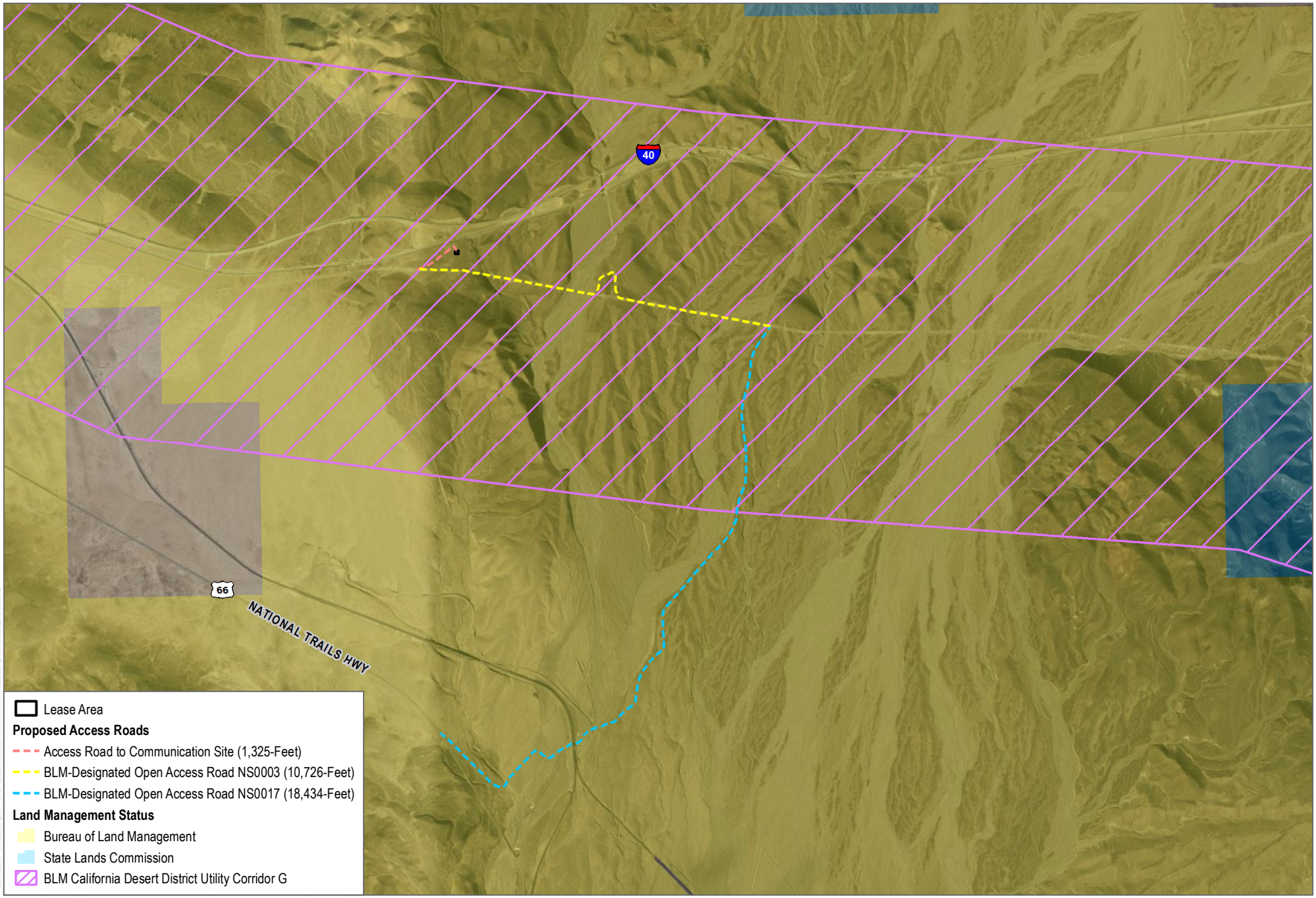

SOURCE: AECOM 2022; County of San Bernardino; BLM; Bing Maps

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FIGURE 2-2

Land Management Status

Ash Hill Communication Site Project

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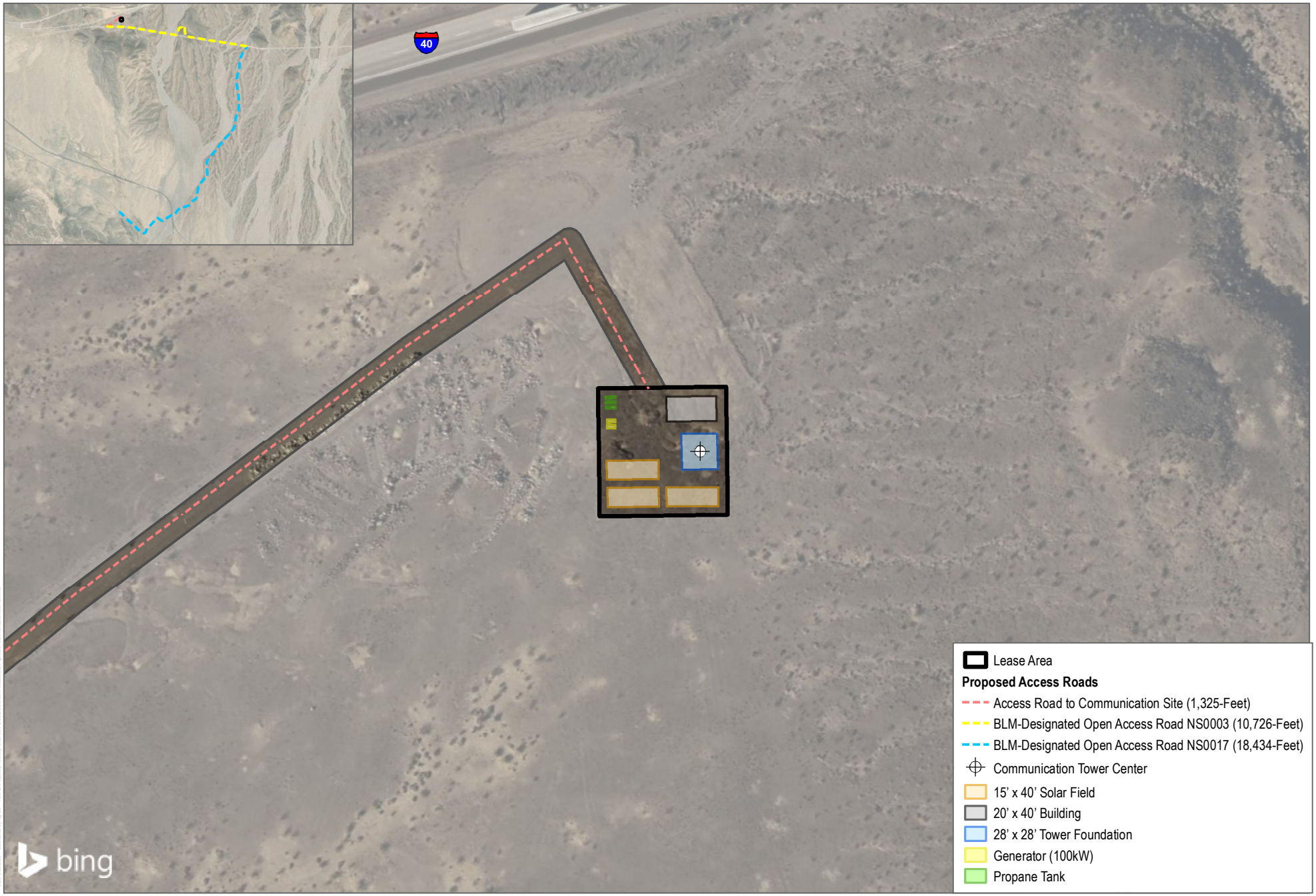

SOURCE: AECOM 2022; Bing Maps

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FIGURE 2-3

Communication Site Plan

Ash Hill Communication Site Project

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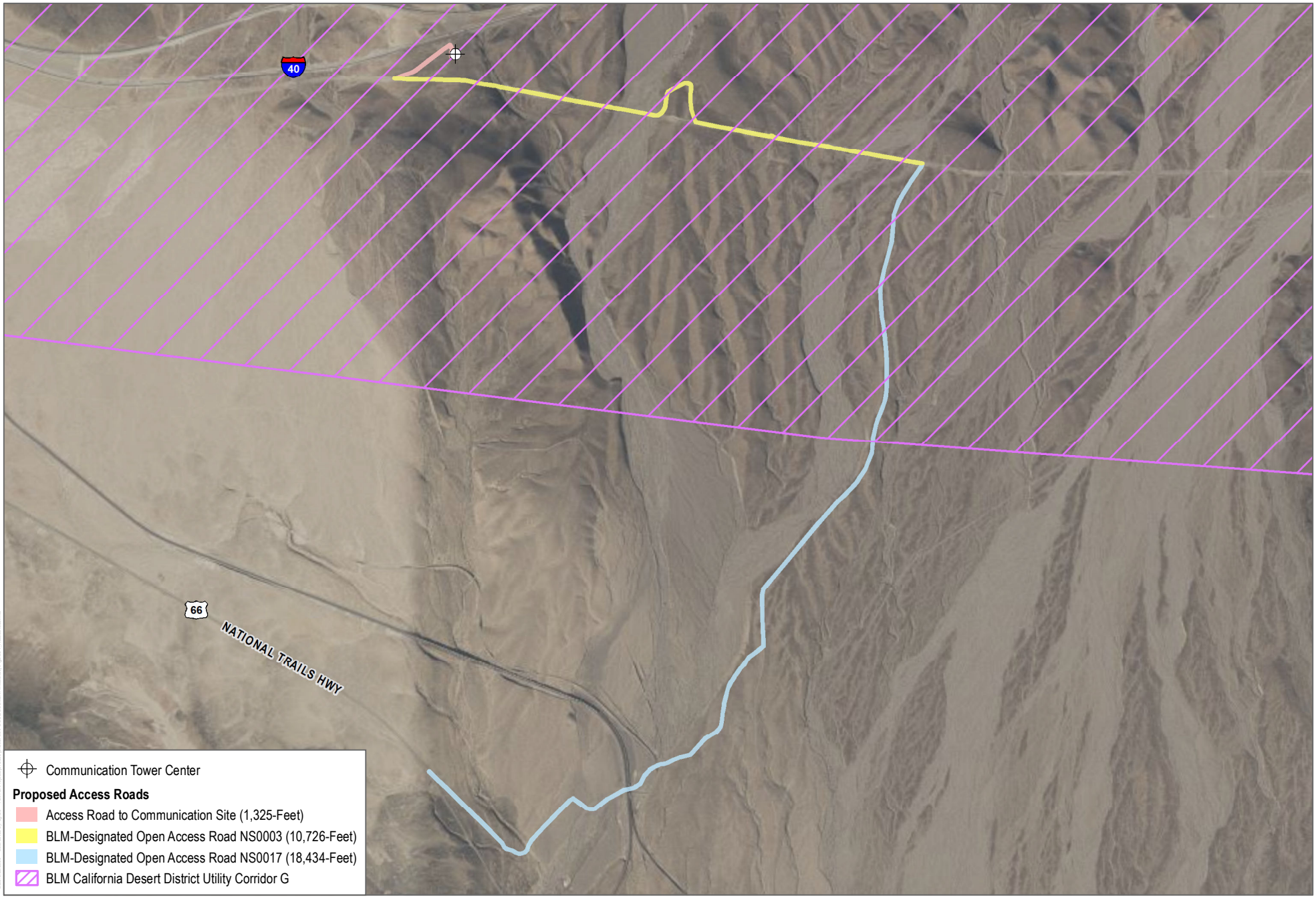

SOURCE: AECOM 2022; Bing Maps

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FIGURE 2-4

Alignment of Access Roads

Ash Hill Communication Site Project

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Existing View from WB I-40 towards Project site (approximately 0.15-mile away)

Visual simulation of proposed lattice tower (196' tall)

SOURCE: Leja Surveying Corp 2022

FIGURE 3.1-1

KOP 1: Westbound I-40

Ash Hill Communication Site Project

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Existing View from EB Route 66 towards Project site (approximately 2.8 miles away)

Visual simulation of proposed lattice tower (not visible)

SOURCE: Leja Surveying Corp 2022

FIGURE 3.1-2

KOP2a: Eastbound Route 66

Ash Hill Communication Site Project

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Existing View from EB Route 66 towards Project site (approximately 2.3 miles away)

Visual simulation of proposed lattice tower (not visible)

SOURCE: Leja Surveying Corp 2022

FIGURE 3.1-3

KOP2b: Eastbound Route 66

Ash Hill Communication Site Project

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SOURCE: AECOM 2022; County of San Bernardino; Bing Maps

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FIGURE 3.4-1A

Vegetation Communities and Desert Tortoise Sign

Ash Hill Communication Site Project

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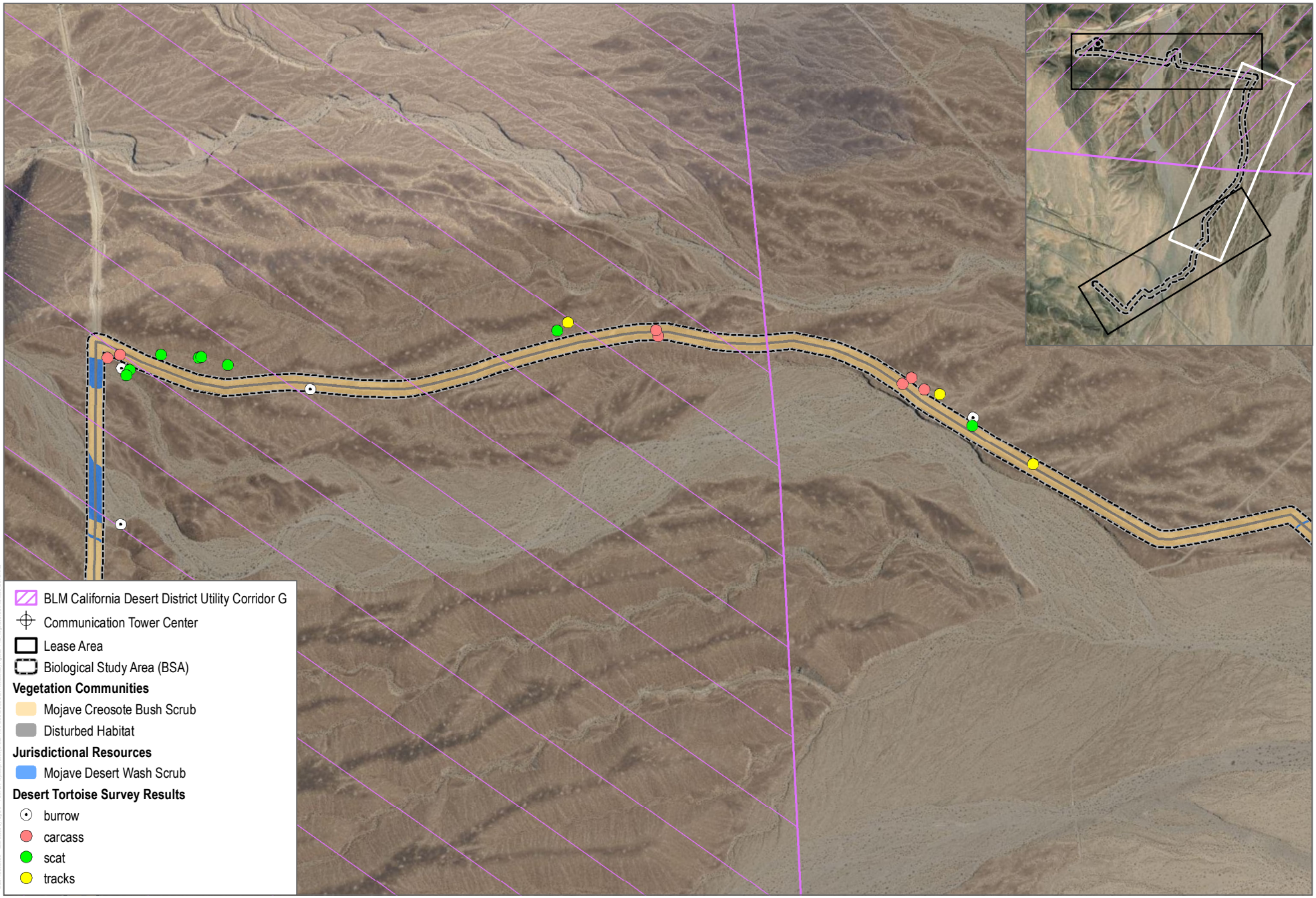

SOURCE: AECOM 2022; County of San Bernardino; Bing Maps

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FIGURE 3.4-1B

Vegetation Communities and Desert Tortoise Sign

Ash Hill Communication Site Project

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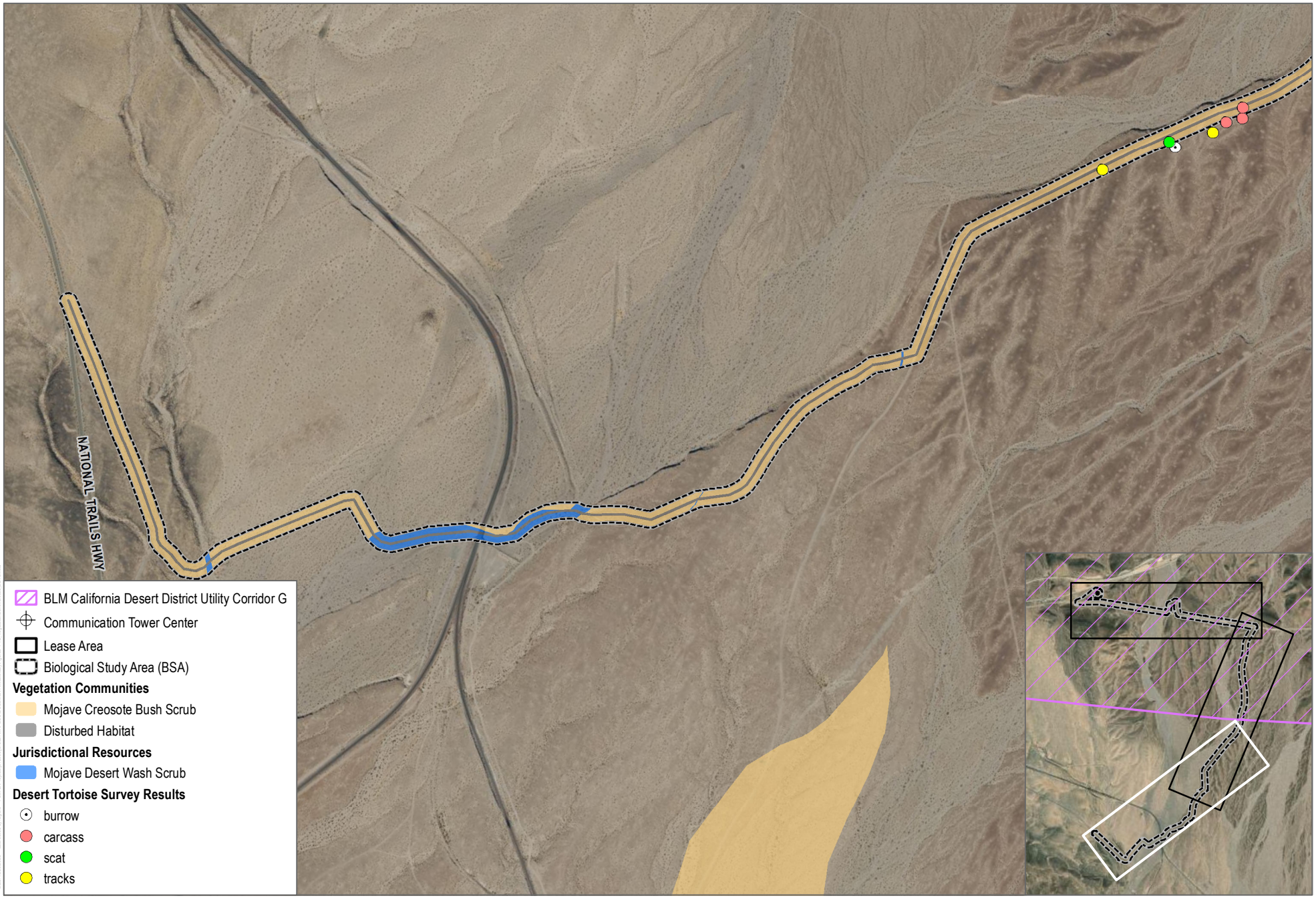

SOURCE: AECOM 2022; County of San Bernardino; Bing Maps

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FIGURE 3.4-1C

Vegetation Communities and Desert Tortoise Sign

Ash Hill Communication Site Project

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SOURCE: AECOM 2022; County of San Bernardino; Bing Maps

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FIGURE 3.4-2A

Vegetation Communities and Jurisdictional Features

Ash Hill Communication Site Project

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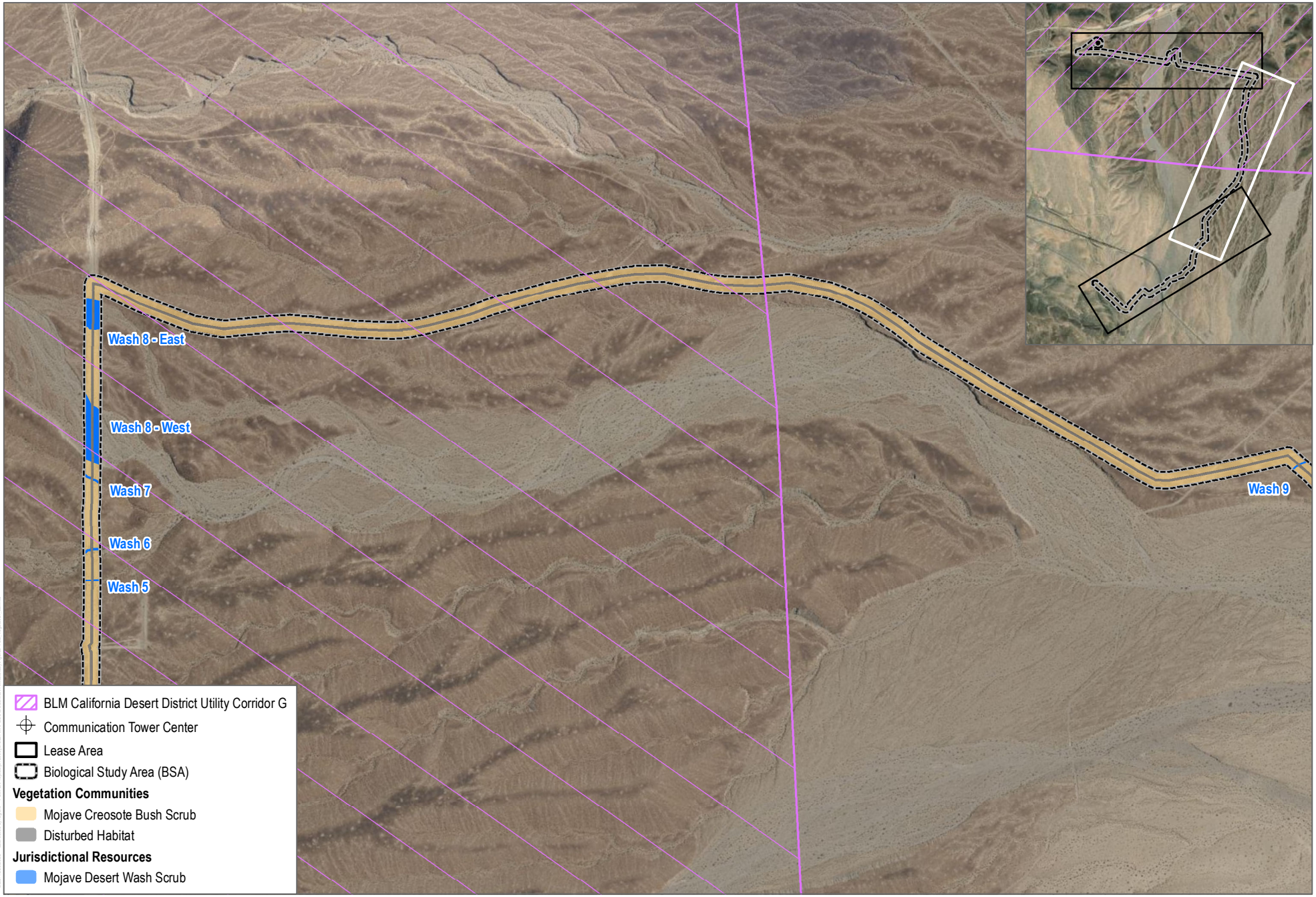

SOURCE: AECOM 2022; County of San Bernardino; Bing Maps

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FIGURE 3.4-2B

Vegetation Communities and Jurisdictional Features

Ash Hill Communication Site Project

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SOURCE: AECOM 2022; County of San Bernardino; Bing Maps

DUDEK

0 500 1,000 Feet

FIGURE 3.4-2C

Vegetation Communities and Jurisdictional Features

Ash Hill Communication Site Project

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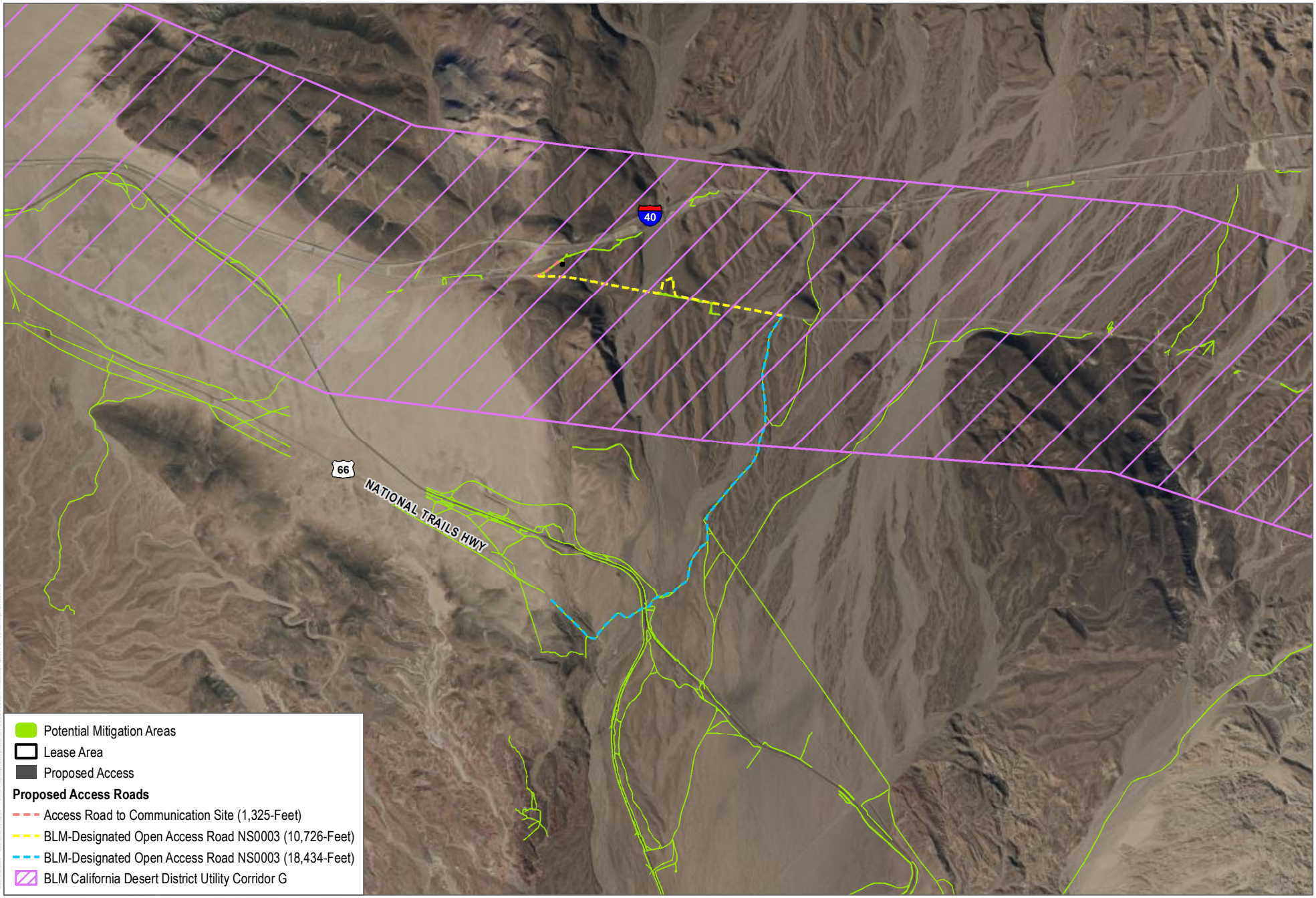

SOURCE: AECOM 2022; County of San Bernardino; Bing Maps

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FIGURE 3.4-3

Potential Mitigation Areas

Ash Hill Communication Site Project

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