Appendix A1

2081 Incidental Take Permit Application

APPENDIX A1

2081 ITP APPLICATION

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August 8, 2019

Distributed via E-mail to:
Ali.Aghili@wildlife.ca.gov

Ali Aghili
Senior Environmental Scientist (Supervisor)
California Department of Fish and Wildlife
Region 6 (Inland Deserts Region)
3602 Inland Empire Blvd.
Ontario, CA 91764

Re: InterConnect Ash Hill Communications Site, San Bernardino County, CA; 2081 Incidental Take Permit.

Dear Mr. Aghili:

This letter with enclosures serves as submittal of an application for a 2081 Incidental Take Permit per the California Endangered Species Act. A fee check for $12,785.00 has been provided with this submittal.

The project proponent proposes to construct, operate, and maintain a multi-carrier communication site and ancillary components, including an access road, on Bureau of Land Management (BLM)-administered land. The proposed communication site is generally located in San Bernardino County, California, approximately 7.8 miles east of Ludlow, California, just south of the Interstate 40 (I-40) right-of-way (ROW). The proposed Project is also approximately 340 feet within the boundaries of the Mojave Trails National Monument (MTNM), and is Bureau of Land Management-administered land.

Previous agency coordination has centered around the preparation of a National Environmental Policy Act (NEPA) Environmental Assessment (EA), and subsequent Finding of No Significant Impact (FONSI). The lead federal agency is BLM.

If you have any questions or require additional information, please contact me at Michael.Anguiano@aecom.com or 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

cc: Tom Gammon, InterConnect Towers, LLC
J. Russell Hansen, Bureau of Land Management

Attachments:

Fee check for $12,785.00

Application for
California Endangered Species Act
Section 2081(b) Incidental Take Permit

Ash Hill Communication Site

In Accordance with California Code of Regulations
Title 14, Division 1, Subdivision 3, Chapter 6, Article 1, Section 783.2

Submitted to:
California Department of Fish and Wildlife
Contact:
Ali Aghili
Senior Environmental Scientist (Supervisor)
California Department of Fish and Wildlife
Region 6 (Inland Deserts Region)
3602 Inland Empire Blvd.
Ontario, California 91764

Prepared on behalf of:
InterConnect Towers, LLC
27762 Antonio Parkways, #471
Ladera Ranch, California 92694
Contact:
Tom Gammon

May 2019

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Appendices

Acronyms and Abbreviations

ACEC	Area of Critical Environmental Concern
BLM	U.S. Bureau of Land Management
BMP	best management practice
BNSF	Burlington Northern Santa Fe
CCR	California Code of Regulations
CDCA	California Desert Conservation Act
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
DRECP	Desert Renewable Energy Conservation Plan
FCR	Field Contact Representative
HVAC	heating, ventilation, and air conditioning
I-40	Interstate 40
NCL	National Conservation Lands
O&M	operations and maintenance
OHV	off-highway vehicle
PAR	Property Analysis Record
ROW	right-of-way
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WEAP	Worker Environmental Awareness Program

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CALIFORNIA CODE OF REGULATIONS
TITLE 14, NATURAL RESOURCES, DIVISION 1, FISH AND GAME COMMISSION – DEPARTMENT OF FISH AND GAME

SUBDIVISION 3. GENERAL REGULATIONS

CHAPTER 6. REGULATIONS FOR IMPLEMENTATION OF THE CALIFORNIA ENDANGERED SPECIES ACT

ARTICLE 1. TAKE PROHIBITION; PERMITS FOR INCIDENTAL TAKE OF ENDANGERED SPECIES, THREATENED SPECIES, AND CANDIDATE SPECIES

§ 783.2. Incidental Take Permit Applications.

(a) Permit applications. Applications for permits under this article must be submitted to the Regional Manager.

The following application for incidental take of endangered and threatened species under the California Endangered Species Act is being submitted to:

Ali Aghili
Senior Environmental Scientist (Supervisor)
California Department of Fish and Wildlife
Region 6 (Inland Deserts Region)
3602 Inland Empire Blvd.
Ontario, CA 91764

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1. APPLICANT INFORMATION

14 California Code of Regulations (CCR) § 783.2(a)(1): Applicant's full name, mailing address, and telephone number(s). If the applicant is a corporation, firm, partnership, association, institution, or public or private agency, the name and address of the person responsible for the project or activity requiring the permit, the president or principal officer, and the registered agent for the service of process.

1.1 APPLICANT

InterConnect Towers, LLC
27762 Antonio Parkway, #471
Ladera Ranch, California 92694
Contact: Tom Gammon

InterConnect Towers, LLC (herein "Applicant") is proposing to construct and operate a communication site (hereafter "Project") including a communication tower, equipment shelter, backup generators, solar arrays, and access road with gate on federal lands administered by the Bureau of Land Management (BLM).

1.2 APPLICANT'S REPRESENTATIVES

Principal Officer and Contact Person

Principal Officer: Tom Gammon
Title: CEO

Contact Person: Tom Gammon
Title: CEO
Phone: (202) 255-7777
Email: Tom@ICTowers.com

2. PROJECT LOCATION

14 CCR § 783.2(a)(4): The location where the project or activity is to occur or to be conducted.

The Project would be located within federal land administered by BLM in San Bernardino County, California, south of Interstate 40 (I-40), northeast of National Trails Highway (U.S. Route 66) and north of the east-west–oriented Burlington Northern Santa Fe (BNSF) railroad (Figure 1) (all figures are included in Appendix A). More specifically, the I-40 right- of-way fence is located immediately north of the proposed communications site in Section 11, Range 9 East, Township 7 North of the Ash Hill, California, U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle. Elevations range from approximately 1,760 to 2,060 feet above mean sea level.

Project access would occur along 5.77 miles of existing, unpaved BLM-designated open access routes (BLM Routes NS0017 and NS0003), starting from U.S. Route 66 and crossing under the BNSF railroad, with the final segment terminating at the proposed site. The climate of this desert region is a typical arid desert climate within the Mediterranean climate classification. Summers are hot, winters are cold, and there are strong fluctuations in daily temperatures. Precipitation is generally bimodal, with winter/spring rains in December through March and a spike in precipitation in August during the monsoon season.

3. PROJECT DESCRIPTION

14 CCR § 783.2(a)(3): A complete description of the project or activity for which the permit is sought.

3.1 PROJECT OVERVIEW

The Project would provide improved, consistent, and reliable communication capability along a specific underserved area on I-40, including the area 4 miles west and 6 miles east along I-40, and 3 miles south to cover portions of U.S. Route 66. This segment of I-40 and adjacent lands has been identified as having inadequate cellular transmission coverage, largely due to signal shadowing caused by topographic features, resulting in signal blockage between the line-of-sight signal transmission of the existing communication sites.

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 acre of new access disturbance off of BLM Route NS0003 leading to the proposed communications facility. It should be noted that the 0.18 acre has been previously disturbed from non-Project activities, but because the 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.

As described in Table 1, areas of new, permanent disturbance would include the communication site lease area and the length and width of the new access road as described above. All new disturbances would be considered permanent given the sensitivity of desert ecosystems to ground-disturbing activities. Areas of new disturbance would total approximately 0.41 acre.

Table 1. Acreage of Permanent Impacts

Project Component	Total BLM Lands	New Disturbance	Already Disturbed
Communication Site Right-of-Way Area[1]	0.23	0.23	0.0
Proposed Access Road[2]	8.70	0.18	8.52
TOTAL	**8.93**	**0.41**	**8.52**

[1] Communication site lease area would be 10,000 square feet.
[2] The existing access road along approved BLM routes would not need to be widened although periodic smoothing may be required. The new access road disturbance would be off of BLM Route NS0003, to the proposed communication tower site.

3.2 PROJECT OBJECTIVES

The Applicant seeks to provide improved cellular communication capability within the I-40 transportation corridor and surrounding lands that have been identified as being underserved in terms of cellular coverage, including the area 4 miles west and 6 miles east along I-40, and 3 miles south to over portions of U.S. Route 66. This segment of I-40 and adjacent lands has been identified as having inadequate cellular transmission coverage, largely due to

signal shadowing caused by topographic features, resulting in signal blockage between the line-of-sight signal transmission of the existing communication sites. Wireless telecommunication providers (i.e., Verizon, AT&T, etc.) 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; and
- federal/homeland security demand for coverage.

The proposed communication site 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.

3.3 PROJECT DESCRIPTION

The Project would comprise several permanent components: (1) road access; (2) communication tower; and (3) equipment shelter, backup generators, solar arrays, and supporting elements (Figure 2) Additional information about each of these components is provided below. The following subsections also describe the construction and operation and maintenance (O&M) activities associated with the Project, and potential decommissioning and restoration of the Project.

3.3.1 PROJECT COMPONENTS

Road Access: The access route would primarily utilize two existing BLM-designated open access routes off of U.S. Route 66. The access route would utilize U.S. Route 66 to route NS0017 to route NS0003 to the Project site for a total of approximately 5.77 miles. The section of access route off of NS0003 leading to the communication facility utilizes previously disturbed land but is considered unauthorized disturbance by BLM because that section of route has not been previously authorized with a right-of-way (ROW) grant or designated as an open route.

The access routes 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 disturbance will 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 route NS0017 located 100 feet northeast of the Burlington Northern Santa Fe railroad alignment. Also, light smoothing of routes NS0017 and NS0003 may be necessary following heavy rains. Desert tortoise (*Gopherus agassizii*) exclusionary fencing would not be installed along access road segments. The access route is shown in Figure 3.

Environmental Assessment: Ash Hill Communication Site (hereafter Project EA) (Amec Foster Wheeler 2018) provides additional details on the Project.

Communication Tower: The communication tower would be installed within the 0.23-acre lease area and would be a self-supporting, three-legged, lattice-type galvanized steel structure measuring approximately 196 feet in height. The tower would serve as the structure upon 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 upon 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.

Equipment Shelter, Backup Generators, Solar Arrays, and Supporting Components: An equipment shelter would be installed within the lease area and adjacent to the communication 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 to the site by truck and installed on-site. Regardless of construction method, the structure(s) would be mounted on a concrete foundation sized according to structure dimensions and other design requirements. The shelter would likely 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 open air shelter would be constructed.

A series of solar arrays would be installed within the lease area to provide electrical power to the communication tower. No overhead utility line would be constructed and all necessary electrical power would be generated within the lease area. Solar power would consist of up to three 15-foot by 40-foot photovoltaic panels approximately 8 feet in height that would be mounted on concrete pads. 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 standby generators located within the compound and mounted on concrete pads. The generators would provide electric power in the event of failure of the site's commercial power source. The generators would be powered by up to three 2,000-gallon propane-fed steel tanks located within the compound and would include mufflers on the power units to minimize noise. The propane tanks would also be mounted on concrete pads.

The communication tower, shelter, solar arrays, and propane tanks would be enclosed within a Motorola R56 Design standard chain-link fence measuring 8 to 10 feet in height, with three strands of barbed wire on the top, totaling 9 to 11 feet in height. Galvanized hardware mesh of 1-inch by 2-inch dimensions would be attached to the lower 18 inches of the chain-link fencing and buried to a 12-inch depth, in accordance with standard specifications for exclusion fencing in desert tortoise habitat. A gate would provide access into the compound for

persons and vehicles, and permanent desert tortoise exclusion fencing would be installed along the bottom portion of the gate. A downward-shielded security light would be mounted to the outside of the shelter and would be activated by a motion sensor.

Construction and O&M of the Project are described in the following subsections. Potential decommissioning and restoration are also discussed as the communication site may be removed at some point in the future.

3.3.2 CONSTRUCTION

Construction of the Project would occur within 90 to 120 days of issuance of the ROW grant, preferably within the fall and winter seasons. It is expected that the site would take up to 45 days to construct. This time period could vary depending on the difficulty of construction, availability of work crews, and other factors. The number of workers (excluding biological monitors) at the site on any given day during construction would typically vary from four to six. Following completion of the construction process, all debris and waste materials would be removed from the site and disposed of at an approved facility in accordance with applicable regulations.

3.3.2.1 Access Road

The access route would primarily utilize a series of existing BLM-designated open access routes off of U.S. Route 66. No new disturbance will occur to this existing road 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 route NS0017 located 100 feet northeast of the Burlington Northern Santa Fe railroad alignment. In addition, the section of access route from NS0003 leading to the communication facility utilizes previously disturbed land and will require minimal work to provide access to the communication site.

3.3.2.2 Communication Site

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 single 6- to 8-inch-diameter hole using a hollow boring auger. These tests would only be conducted within the area of the proposed tower 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. In accordance with occupational safety and desert tortoise habitat regulations, the holes would be backfilled immediately following the drilling and analysis processes.

Construction at the communication site would proceed with site preparation and grading occurring first, followed by excavation for tower footings and shelter slabs. The site is generally level, but some grading would need to occur to adequately prepare the site. 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/solar pad 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 foundation would be poured in a single day for both the tower and building/solar pad. It is anticipated that the site would be practically 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.

Construction equipment to be used on-site would vary based upon the type of work currently underway. Vehicle speeds would be limited to 15 miles per hour on the access road to reduce fugitive dust generation and minimize risk of collision with desert tortoise, but the road would not be wetted during construction.

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. Upon completion of the shelter, internal and external equipment would be installed. Propane tanks and generators would be mounted on concrete-bermed foundations to contain spills or leaks that could occur during operation, fuel replenishment, and maintenance.

The surrounding chain-link fence and gate would also be installed. Galvanized hardware mesh of 1-inch by 2-inch dimensions would be attached to the lower 18 inches of the chain-link fencing and buried to a 12-inch depth, in accordance with standard specifications for desert tortoise exclusion fencing (see USFWS 2009). A gate would provide access into the compound for persons and vehicles. A downward-shielded security light would be mounted within the compound and would be activated by a motion sensor.

3.3.3 Operations and Maintenance

Following construction, the facility would operate 24 hours a day, 7 days a week for the duration of the lease period. The lease period would be 30 years with a renewal option up to 50 years. The electronic equipment housed in the shelter(s) and/or equipment cabinets would be temperature controlled by wall-mounted HVAC units. During warmer periods of the year, the cooling units could periodically be in operation 24 hours a day. Security lighting would be installed within the chain-link enclosure and would be controlled by means of a motion sensor.

Maintenance activities at the site would consist of monthly visits by technicians associated with each of the carriers with equipment at the site. While the number of site visits would vary depending upon specific maintenance requirements and other activities, the number of separate visits would likely be six to 10 visits per month, though 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 persons in standard service trucks. A typical monthly visit could be concluded in as little as an hour, but could extend to a full day or multiple days depending upon the task undertaken.

The on-site generators would typically 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. The units would be equipped with sensors to report their operational status and, 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 quarterly, depending on supplemental electric power demand. In the event of a prolonged power outage, more frequent visits would be necessary.

The solar panels would require occasional washing with water to maintain their efficiency. The frequency of washing would be unlikely to exceed more than twice per year. Water would be brought to the site by truck for this purpose.

The access road could require occasional maintenance following heavy rainfall events. Should maintenance be required, BLM would be contacted for approval prior to initiating work. Maintenance activities would likely be limited to minor smoothing using a front-end loader or grader during dry conditions. No road widening would be required during facility operations.

3.3.4 DECOMMISSIONING AND RESTORATION

Upon termination of the ROW grant, the Applicant would restore, under the direction of BLM, the premises and access road as close to original condition as possible. This would entail the following procedure:

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

4. SITE DESCRIPTION

4.1 VEGETATION COMMUNITIES AND LAND COVER TYPES

The proposed Project is generally located in San Bernardino County, California, approximately 7.8 miles east of Ludlow, California, just south of the I-40 ROW. The proposed Project location is in the NW 1/4 of Section 11, Township 7N, Range 9E, San Bernardino Meridian. The proposed Project is also approximately 340 feet within the boundaries of the Mojave Trails National Monument . The proposed Project is located in the Mojave Desert on the south slope of the Bristol Mountains, which consists of a southward-sloping alluvial fan interspersed with outcrops of bedrock.

Vegetation communities were mapped in October 2017 within the Project area and a 100-foot buffer (biological study area) as described in the *Ash Hill Communications Site Access Route Biological Resources Assessment and Desert Tortoise Focused Survey Report* (AMEC Foster Wheeler 2017), and vegetation mapping was refined in January 2019 during a jurisdictional delineation of potentially regulated waters (including wetlands) of the U.S. and state (AECOM 2019). The Project area includes the proposed communication site and the proposed access road. Three vegetation communities and land cover types are present within the Project area and vicinity (Figure 4).

Preexisting site disturbance conditions were observed within the biological study area and consisted of an unpaved dirt access road and railroad bridge. The tower site is located at the terminus of the access road and consists of a largely unvegetated and disturbed area with rubble from a previous disturbance. The access road crosses several ephemeral desert washes along its length. Two relatively undisturbed native vegetation communities are mapped in the vicinity of the Project, including Mojave Creosote Bush Scrub and Mojave Desert Wash Scrub. The 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. In the areas mapped as Mojave Desert Wash Scrub, species such as cheesebush (*Ambrosia salsola*) and sweetbush (*Bebbia juncea* var. *aspera*) are also dominants.

The acreage of the three vegetation communities and land cover types in the Project area is provided in Table 2, below, based on the three Project components.

Table 2. Acreage of Vegetation Communities and Land Cover Types

Vegetation Community and Land Cover Type	Communication Site ROW Area	Proposed Access Road (Existing Road)	Proposed Access Road (New Road)	Total
Mojave Creosote Bush Scrub	0.23		0.18	8.76
Mojave Desert Wash Scrub/Waters of the State[1]		0.17		0.17
Disturbed Habitat		8.35		
TOTAL	**0.23**	**8.52**	**0.18**	**8.93**

[1] 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.

A jurisdictional delineation of potentially regulated waters (including wetlands) of the U.S. was conducted in January 2019 for the Project area. No federally jurisdictional wetlands or waters of the U.S. were identified within the Project area (AECOM 2019). A request for an Approved Jurisdictional Determination was submitted to the U.S. Army Corps of Engineers (USACE); this request seeks to obtain a formal determination that the waters delineated for the Project area are geographically isolated waters and therefore are not regulated by the USACE.

The jurisdictional delineation of arid streams was also conducted in January 2019 to delineate areas of California Department of Fish and Wildlife (CDFW) jurisdiction (AECOM 2019). For this jurisdictional delineation, a 25-foot buffer around Project components was utilized as the study area. Within the jurisdictional delineation study area, the jurisdictional delineation resulted in 0.17 acre of non-wetland waters of the State and CDFW streambeds for a total of 300 linear feet. Complete details of the jurisdictional delineation are provided in *Jurisdictional Delineation of Arid Streams for the Proposed Ash Hill Communication Site, San Bernardino County, CA* (AECOM 2019).

4.2 HABITAT PRESERVATION AND MANAGEMENT

The Project is within the boundary of the Desert Renewable Energy Conservation Plan (DRECP) Land Use Plan Amendment to the California Desert Conservation Act (CDCA) of 1980, as amended. Within the DRECP, the Project site is located within the California Desert National Conservation Lands (NCL) and the Bristol Mountains Area of Critical Environmental Concern (ACEC). The Project site is also within the CDCA-designated Utility Corridor "G." The disturbance caps within the NCL and ACEC are 1.0% and 0.5%, respectively. At this time, BLM has determined the baseline ground disturbance for the NCL and ACEC is 1.4% each, and exceeds the ground disturbance cap for both areas. 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 acre] multiplied by 3) through habitat enhancement and restoration.

The Applicant has identified potential mitigation areas based on data provided by BLM (Figure 5). BLM identified areas of unauthorized disturbance within the ACEC when quantifying baseline ground disturbance for the DRECP. Unauthorized disturbance in the form of undesignated off-highway vehicle (OHV) routes occurs in the vicinity of the Project and these routes will be targeted as potential mitigation areas by the Applicant. The Applicant proposes to mitigate through passive restoration of these undesignated OHV routes (i.e., unauthorized disturbance areas). Restoration would be conducted through vertical mulching, soil decompaction, mechanical ripping, soil/vertical pitting, soil imprinting, raking, rocks, planting vegetation, seeding, or removing manufactured materials and structures. A detailed discussion of each of these techniques along with potential impacts associated with restoration is provided in the Project EA (Amec Foster Wheeler 2018) and included in Appendix B.

Additionally, the Applicant proposes to mitigate for the 0.41 acre of new ground disturbance by purchasing 0.41 acre of compensation lands suitable for the desert tortoise (i.e., a 1:1 ratio). It is anticipated that the 0.41 acre of compensation lands would be in the form of a purchase of habitat credits from a mitigation bank approved by CDFW. The acquisition of the compensation acreage, along with implementation of the general and desert tortoise-specific impact avoidance and minimization measures, outlined herein, would fully mitigate for any Project impacts to the species.

5. COVERED SPECIES

14 CCR § 783.2(a)(2): The common and scientific names of the species to be covered by the permit and the species' status under the California Endangered Species Act (CESA), including whether the species is the subject of rules and guidelines pursuant to Section 2112 and Section 2114 of the Fish and Game Code.

Coverage is requested for the incidental take of the State threatened desert tortoise within the Mojave population.

5.1 DESERT TORTOISE

5.1.1 STATUS

The desert tortoise was listed as threatened under the California Endangered Species Act (CESA) on June 22, 1989 (CFGC 1989). Desert tortoise is also federally listed as threatened under the federal Endangered Species Act, with Critical Habitat designated by the U.S. Fish and Wildlife Service (USFWS 1994a). The listing was initially made on August 4, 1989, by emergency rule (USFWS 1989) and by final rule on April 2, 1990 (USFWS 1990). This listing status applies to the entire population of desert tortoise, except in Arizona south and east of the Colorado River, and in Mexico. An approved recovery plan was published by USFWS (1994b) and revised in 2011 (USFWS 2011).

The Mojave Desert population of desert tortoise has fluctuated range-wide, with population levels varying within regions. The population densities within each of the recovery units are highly variable, but, overall, the desert tortoise population has steadily decreased since monitoring efforts began.

The Project is not located within federally designated critical habitat. The nearest critical habitat (Ivanpah Unit of desert tortoise critical habitat) is designated approximately 20 miles east-northeast of the Project's access road; the communication site lease area is approximately 21 miles from the designated critical habitat. No impacts to designated desert tortoise critical habitat are anticipated; therefore, desert tortoise critical habitat is not discussed further.

5.1.2 CURRENT HABITAT CONDITIONS

As detailed previously under Section 4.1, Vegetation Communities and Land Cover Types, current habitat conditions and desert tortoise surveys indicate the proposed access road is surrounded by primarily Mojave Creosote Bush Scrub that is occupied by desert tortoise. At the time of the most recent desert tortoise surveys in fall 2017 (detailed below), there were signs of existing disturbance along the proposed access road, consistent with past road or pipeline work, soil excavations, and routine travel. The communication site consists of a largely unvegetated and disturbed area with rubble from a previous disturbance.

5.1.3 POTENTIAL FOR OCCURRENCE

Desert tortoise pre-Project surveys were performed in accordance with USFWS (2010) survey protocol in October 2017 (Amec Foster Wheeler 2017). In accordance with the USFWS survey protocol, 100% coverage presence-or-absence surveys were conducted along the proposed access road using transects spaced approximately 30 feet

apart. In addition, surveys were conducted along three belt transects around the proposed access road at approximately 5 meters (16.4 feet), 15 meters (49.2 feet), and 25 meters (82.0 feet) from the edge of either side of the authorized BLM route. Desert tortoise sign (burrows/pallets, carcasses, scat, and tracks) were mapped and classified according to USFWS methods (USFWS 1992) (Figure 4).

During 2017 desert tortoise pre-project surveys, the following desert tortoise sign were documented:

- 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); and
- 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 were observed within the lease area that would support the communication tower; desert tortoise sign was associated with the buffer surrounding the access route.

6. PROJECT EFFECTS AND POTENTIAL FOR TAKE

14 CCR § 783.2(a)(5): An analysis of whether and to what extent the project or activity for which the permit is sought could result in the taking of species to be covered by the permit.

6.1 POTENTIAL FOR SPECIES TAKE

6.1.1 DESERT TORTOISE

Project activities in areas of suitable habitat could result in disturbance to and/or loss of individual desert tortoises. The Project would result in permanent loss of desert tortoise habitat. Due to the length of time for recovery and restoration of impacts to desert tortoise habitat, all impacts to desert tortoise habitat from the Project are considered permanent.

Direct Impacts to Desert Tortoise

Potential direct impacts to desert tortoise associated with the Project include injury or mortality of individuals, burrows, and removal and disturbance to occupied habitat.

Injury and mortality: Injury or mortality of desert tortoise may result during all phases of the Project. Desert tortoise sign was adjacent to the existing access road; therefore, potential exists for the species to transit the access road during construction and O&M. Collisions with equipment (e.g., bulldozers, graders, and Project vehicles) as well as crushing from debris during access road construction may occur. Vehicles travelling within the Project area during construction and operation could also kill or injure desert tortoise individuals. Desert tortoise may take shelter under parked vehicles and heavy equipment and could be crushed when vehicles or heavy equipment are moved. Smaller desert tortoise that are difficult to find are more at risk due to their size and similarity in size and shape to many rocks in the area. Lastly, noise or vibrations created during operation of heavy equipment could result in disruption of desert tortoise behaviors.

Loss of burrows: Disturbance to occupied desert tortoise habitat during construction may also include the destruction of suitable but unoccupied burrows. Several potential desert tortoise burrows were documented along the proposed access road alignment during pre-Project desert tortoise surveys. Loss of suitable burrows in the Project area could result in exposure of individuals to temperature extremes or predation. O&M 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.

Habitat loss and modification: Approximately 0.41 acre of occupied desert tortoise habitat would be permanently disturbed during construction of the Project (Table 3). All habitat disturbance is considered permanent 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. Following construction, desert tortoise would be excluded from the communication site by permanent 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

alignment. Construction and O&M of the communication site and the access road would not appreciably reduce connectivity or movement within the Project. No desert tortoise individual or sign was found immediately around the communication site, likely due to the relative proximity of the communication site to the I-40 highway. There is low potential for desert tortoise to be in this portion of the Project area. If by chance desert tortoise were to traverse this area, 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.

Table 3. Direct Impacts to Occupied Desert Tortoise Habitat

Project Component[1]	Direct Impacts (Acres)
Communication Site Lease ROW Area	0.23
New Access Road	0.18
TOTAL	0.41

[1] The existing access road are already disturbed and, therefore, the Project would not result in any new direct effects to desert tortoise habitat in these areas.

Project measures described in Section 9, Conservation Measures and Mitigation, especially pre-construction desert tortoise surveys, and the presence of qualified and authorized biologists would minimize potential direct impacts to desert tortoise as a result of Project activities. While it is anticipated that few desert tortoise would be present at the Project work area, any desert tortoise found during pre-construction surveys or subsequent biological monitoring would remain in the population by being moved a short distance out of harm's way. Additionally, burrows along the new portion of the access road would be avoided to the extent feasible through micro-siting. Burrows do not occur within the existing access road but are present immediately adjacent to the road and would be avoided to the extent feasible during any routine road maintenance. Implementation of the conservation measures and mitigation are anticipated to reduce and fully mitigate the Project's direct impacts to desert tortoise.

Indirect Impacts to Desert Tortoise

Indirect impacts to desert tortoise may occur from increased presence of the common raven (*Corvus corax*), unauthorized trespass, introduction of invasive nonnative plant species, wildfires, and increased runoff and sedimentation during heavy rain events and flooding. Each of these indirect impacts is addressed in turn below.

Increased Common Raven Presence: The common raven is known to prey on young desert tortoises. Construction, use, and maintenance of the Project could attract common ravens to the Project area, potentially resulting in increased predation pressure on young desert tortoise. Specifically, potential litter left by workers and roadkill along the all-new access road could provide new foraging opportunities, thereby increasing raven presence in the Project area. Additionally, the communication tower would provide a structure where ravens may nest and perch (especially since there are no nearby alternative nesting structures). Common ravens typically forage within approximately 1,870 feet of nest sites (Boarman and Heinrich 1999). Therefore, nesting ravens on the communication tower could increase predation on young desert tortoises within approximately 1,870 feet or more of the Project. While some ravens may be attracted to the site due to increased food subsidies, this is unlikely due to the low volume of maintenance personnel anticipated to regularly visit the site. Additionally, the Project is not expected to significantly increase the number of ravens in the area since only one communication

tower is being constructed and regular maintenance is likely to prevent common ravens from building a nest on the communication tower. If a nest was constructed on the communication tower, it would likely need to be removed to prevent damage and interference with communication devices on the tower. Therefore, the increase in potential predation pressure on young tortoises would likely be negligible compared to existing conditions in the Project.

Unauthorized Trespass: The proposed access route consists of a series of existing BLM-designated open access routes. Therefore, recreational users are already allowed to use the access route and the Project would not cause additional use of the road.

Introduction of Invasive Nonnative Plant Species: Seeds of invasive nonnative plant species may be introduced to the Project via workers or equipment during construction, use, and maintenance of the Project. Ground disturbance could further facilitate the establishment of such species in the Project area. If introduced, these species may outcompete native plants, thereby potentially reducing habitat quality, diminishing valuable forage, and impeding movement of desert tortoise.

Wildfires: Wildfires caused by construction, use, and maintenance of access roads are rare (particularly in desert environments where fuel loads are low) but could occur. Wildfire triggered by the Project could result in desert tortoise injury or mortality and could reduce habitat quality in the Project area and vicinity. Wildfire could also facilitate the introduction and spread of invasive nonnative plant species, which could diminish habitat quality for the desert tortoise.

Increased Erosion, Runoff, and Sedimentation: The proposed access route consists of a series of existing BLM-designated open access routes that already cross desert washes. Therefore, the use of the road is not expected to impact drainage patterns that currently exist along the existing road.

Implementation of the conservation measures and mitigation outlined in Section 9 would reduce and fully mitigate the Project's indirect impacts to desert tortoise.

6.2 EFFECT ON POPULATION VIABILITY OF COVERED SPECIES

It is anticipated that the Project will have no adverse impact on the overall or local population viability of desert tortoise. The Project is located close to I-40 and is connected to high-quality desert tortoise habitat. The Project would impact a small percentage of the overall available desert tortoise habitat in the area and, the existing the access road would only be used infrequently by a low number of maintenance personnel. Access road maintenance would be performed in a way to avoid impeding the movement of desert tortoise across the road. Therefore, the access road is not anticipated to create a barrier to movement or disrupt gene flow within the local desert tortoise population. All Project personnel would have Worker Environmental Awareness Program (WEAP) training, which would highlight measures in place to reduce impacts to desert tortoise. Therefore, the Project is anticipated to have a low to negligible impact on the population viability of desert tortoise in the region.

7. IMPACTS OF PROPOSED TAKE

14 CCR § 783.2(a)(6): An analysis of the impacts of the proposed taking on the species.

The Project would not result in any impacts to desert tortoise critical habitat through the direct removal of approximately 0.41 acre of occupied habitat. However, there is the potential for take of individuals during construction of the small portion of new access road connecting the existing BLM authorized route and the communication tower pad, O&M, and decommissioning due to vehicle strikes, or inadvertent killing or trapping from use of equipment. Potential adverse impacts could also result from construction-related impacts associated with transient increases in noise, fugitive dust, or the attraction of predators; however, measures described in Section 9 would minimize the potential for take.

7.1 DESERT TORTOISE

During desert tortoise surveys conducted in fall 2017, no live desert tortoise were found within or adjacent to the proposed communication site or access road route (Amec Foster Wheeler 2017). However, numerous locations of sign of desert tortoise occupation were documented along the access route and on buffer transects along the access route (Figure 4, and Section 5.1.3).

Any desert tortoise found on the site during Project construction would remain in the population by being moved a short distance (within its home range) out of harm's way by an authorized biologist. During O&M, any desert tortoise observed on the access road by maintenance personnel would be permitted to move out of harm's way on its own accord or moved out of harm's way by an authorized biologist if it does not move on its own. Implementation of measures described in Section 9 would avoid and minimize potential for direct take of desert tortoise during implementation of the Project (including potential for vehicle strikes). Thus, the potential level of take is anticipated to be small. Although the Project will impact desert tortoise habitat, the potential level of direct take resulting from this impact is anticipated to be small and unlikely to have an overall, long-term adverse impact on desert tortoise within the Project vicinity or on the species as a whole.

8. POTENTIAL TO JEOPARDIZE CONTINUED EXISTENCE

14 CCR § 783.2(a)(7): An analysis of whether issuance of the incidental take permit would jeopardize the continued existence of a species. This analysis shall include consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (A) known population trends; (B) known threats to the species; and (C) reasonably foreseeable impacts on the species from other related projects and activities.

As discussed above, measures would reduce potential for take of desert tortoise. Therefore, very few individuals, if any, are likely to be taken, and take of these individuals would not have an overall impact on the species as a whole. Minimal amount of take could result from direct vehicle strikes and permanent impacts to approximately 0.41 acre of desert tortoise habitat. Implementation of Project conservation measures and mitigation of the permanent loss of desert tortoise habitat strongly supports the conclusion that the authorization of take for the Project would neither jeopardize the continued existence of the desert tortoise nor cause significant impacts to the local population. Thus, the level of potential take associated with issuance of an incidental take permit for the Project would not jeopardize the continued existence of desert tortoise. Measures for direct effects to suitable desert tortoise habitat and individual desert tortoises would also serve to avoid and minimize the cumulative effects to the species.

9. CONSERVATION MEASURES AND MITIGATION

14 CCR § 783.2(a)(8): Proposed measures to minimize and fully mitigate the impacts of the proposed taking.

The general measures and species-specific measures described below would be implemented to avoid, minimize, and fully mitigate impacts that could result from implementation of the Project.

9.1 AVOIDANCE AND MINIMIZATION MEASURES

This subsection describes the measures that will be implemented to avoid, minimize, and mitigate the potential impacts on desert tortoise. Measures provided in this section are categorized by general and desert tortoise-specific measures. USFWS, in a November 2016 email, concurred with BLM's use of the 1997 Biological Opinion for Small Projects Affecting Desert Tortoise Habitat in Imperial, Inyo, Kem, Los Angeles, Riverside, and San Bernardino counties, California (6840 CA-063.50) (1-8-97-F-l 7) to cover this Project for the federally threatened desert tortoise (Appendix C). All applicable conservation measures/ stipulations from the 1997 biological opinion as well as additional BLM proposed measures as outlined in the November 2016 email shall be followed.

Measures provided below may be applicable to all phases of the Project, but most specifically to the construction and O&M phases. A full list of all measures that will be implemented above and beyond general and desert tortoise-specific measures is provided in the Project EA (Amec Foster Wheeler 2018).

9.1.1 GENERAL MEASURES

1. Areas of allowed surface disturbance during construction and O&M shall be delineated and marked with centerline brush pins every 100 to 300 feet. All surface disturbances during construction and O&M shall be limited to the minimum area possible and any disturbance outside of that area shall be restricted. This restriction shall apply to the communication site and road alignment, as well as temporary staging and parking areas.
2. Vehicle speeds will be limited to 15 miles per hour on access roads during construction and O&M. Small signs posting this speed limit will be placed at intervals along the access road.
3. A number of invasive plant species are known to occur in the region, and control measures will be implemented during construction and O&M to limit the further spread of these species. Specific requirements will be further detailed in BLM's final conditions of approval, but will likely include the following best management practices (BMPs):
    a. A monitoring and treatment plan will be developed for specific species, as appropriate.
    b. Weed-free gravel, base materials, and other imported earthen products will be procured and washed prior to transport to the Project area.
    c. A vehicle and equipment wash station will 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 will be removed at a location where the act of washing the equipment will not introduce noxious weeds into unaffected areas.

d. Soil disturbance will be minimized to include only those areas specifically required for construction and O&M of the Project.

4. Water quality control measures will be implemented to minimize sediment transport from the Project and to minimize risks associated with contaminants and other impacts to water quality and soils. Specific requirements will be further detailed in BLM's final conditions of approval, but will likely include the following BMPs:

    a. Where erosion and sediment could occur, within disturbed areas, soil loss will be controlled through BMPs such as erosion-control blankets/mats, gravel bags, silt fencing, stabilized construction entrances, and scheduling management. Construction equipment staging and access, and disposal or temporary placement of excess fill within drainages will be prohibited.

    b. Slopes where erosion may occur will be protected with straw wattles or blankets. All straw wattles, straw bales, or hay bales will be certified weed-free.

    c. Whenever possible, grading will be phased to limit soil exposure. Vegetation removed will be used as vertical mulch on adjacent bladed areas.

    d. BMPs will be regularly inspected and repaired. Damaged or worn silt fences, straw wattles, gravel bags, and other BMPs will be replaced prior to rain events.

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

    f. A hazardous fluid spill prevention plan will be implemented during construction and O&M; the plan will require that equipment operators and other personnel be informed of specific measures to be implemented in the event of a detected fluid leak, including the use of spill containment material, which will be carried with the equipment or vehicle.

    g. Approved portable toilets will be utilized during construction activity and will be regularly maintained in a sanitary condition.

5. Workers will be prohibited from bringing firearms and pets (e.g., dogs) to the Project area.

6. All drill holes and other voids in the earth that could entrap wildlife shall be backfilled as soon as practicable or covered if left overnight. During drilling for geotechnical analysis, all drill holes shall be filled immediately following the drilling and analysis processes, and prior to moving to the next boring location.

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

9.1.2 DESERT TORTOISE MEASURES

The following measures will be implemented specific to the desert tortoise.

1. The Applicant shall contribute to the regional raven management program at a rate of $105 per acre of new disturbance for the life of the 30-year Project (i.e., term of the ROW grant).

2. A raven survey/nest removal that focuses on the towers would be conducted twice yearly between March 15 and June 1, separated by at least 30 days.

3. The Applicant shall designate a Field Contact Representative (FCR) who shall be responsible for overseeing compliance with protective stipulations for the desert tortoise and for coordination on compliance with BLM. The FCR shall be on-site during all ground-disturbing construction and O&M activities and shall have the authority to halt all activities that are in violation of protective measures. The FCR shall have a copy of all measures when ground-disturbing construction or O&M activities are being conducted in the Project area. The FCR may be a crew chief or field supervisor, a project manager, any other employee of the Applicant, or a contracted biologist.

4. The Applicant shall designate "qualified biologists" and "authorized biologists" to oversee and implement desert tortoise-specific measures. A "qualified biologist" is defined as a trained wildlife biologist who is knowledgeable about the biology of desert tortoise, their habitat requirements, identification of their sign, and mitigation techniques and survey procedures for the species. An "authorized biologist" is defined as a wildlife biologist who has been authorized by USFWS to handle desert tortoise. The authorized biologist shall be responsible for ensuring that qualified biologists are sufficiently trained to successfully perform any task that he or she is assigned. The Applicant shall submit the name(s) of all proposed authorized and qualified biologist(s) to BLM, CDFW, and USFWS (proposed authorized biologists only) for review and approval at least 30 days prior to the onset of ground-disturbing construction activities.

5. All construction and O&M personnel shall participate in WEAP training prior to working on-site. The Applicant shall be responsible for ensuring that the education program is developed and presented to the appropriate personnel. More than one training session may be required to ensure new employees receive formal training. The WEAP shall be received, reviewed, and approved by BLM at least 15 days prior to the presentation of the program. The WEAP shall consist of a class presented by a qualified biologist or a videotaped presentation. 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) has the authority to halt work in any area where an unauthorized adverse impact to biological resources may occur if the activities continued;
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 biologists 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 yearly compliance report;
j. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines; and
k. Provide information regarding the effects of predation on the desert tortoise by common ravens and other predators (such as coyotes [*Canis latrans*]) and describe preventative measures that reduce the likelihood that predators will be attracted to the Project area.

6. Prior to construction of the all-new access road, qualified and/or authorized biologist(s) will participate in micro-siting of the access route and will flag the proposed route to avoid desert tortoise burrows and to minimize disturbance of vegetation. The Applicant will prohibit Project personnel from driving off-road or performing ground-disturbing activities outside of designated areas unless specifically approved to do so by an authorized biologist.

7. Prior to construction of the communication tower, the entire 65-foot by 96-foot lease area and the temporary staging area will be fenced with desert tortoise-proof fencing with effective desert tortoise-proof gates. The fence will be constructed under the direction of an authorized or qualified biologist. To the extent possible, the fence will be placed so that any desert tortoise burrows are on the outside of the fenced area. Fence construction will follow current fence specifications established by USFWS (2009). Where burial of the fence is not possible, the lower 12 inches will be folded outward against the ground and fastened to the ground to prevent desert tortoise from entering the lease area and temporary staging area. Gate(s) will be desert tortoise-proof and will remain closed except for the immediate passage of vehicles. Shade structures at regular intervals along fencing will be provided for desert tortoise if fence-pacing behavior is observed. The fence will be checked periodically during construction, and repairs will be made when necessary to ensure its integrity. Following construction, the fencing surrounding the temporary staging area will be removed and permanent desert tortoise fencing will remain in place adjacent to the chain-link fence around the lease area. Permanent desert tortoise exclusion fencing on the chain-link fence will be checked periodically during O&M, and repairs will be made when necessary to ensure its integrity.

8. After the fence installation around the lease area and the temporary staging area and prior to the start of construction, the authorized biologist(s) shall conduct a thorough survey for desert tortoise within the

fenced areas and shall relocate any desert tortoise that are found in accordance with *Desert Tortoise Field Manual* (USFWS 2009). Relocation shall occur at the discretion of the authorized biologist, but no tortoise shall not be moved outside its home range (i.e., more than 1,000 feet).

9. Desert tortoise exclusionary fencing shall not be installed along access road segments. Prior to initial grubbing and grading of the all-new access road, 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 qualified and authorized biologists within 24 hours of the onset of initial grubbing and grading. Pre-construction clearance surveys shall be conducted in accordance with USFWS (2009) 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 or a qualified biologist shall be on-site to monitor all construction activities along the all-new access road.

10. An appropriate number of authorized biologists or qualified biologists shall be on-site to monitor all ground-disturbing construction and O&M activities. Biological monitoring activities will be conducted by either qualified or approved biologists. If a desert tortoise is observed, and may be adversely affected by activities, ground-disturbing activities shall be stopped until the biologist has verified that the individual has moved from harm's way under its own power. The determination of which activities may adversely affect the desert tortoise shall be made in the field by the authorized biologist. The authorized biologist or qualified biologist shall monitor the desert tortoise until it is confirmed to be out of harm's way. If the authorized biologist determines that the desert tortoise will not passively relocate (i.e., move from harm's way under its own power within a reasonable period of time), the authorized biologist may actively relocate the individual out of harm's way.

    Potential handling of desert tortoise for active relocation shall not occur until an authorized biologist is approved by BLM, CDFW, and USFWS. Active relocation of desert tortoise from harm's way shall be conducted in accordance with *Desert Tortoise Field Manual* (USFWS 2009). The authorized biologist shall be allowed some judgment and discretion to ensure that the survival of the desert tortoise is likely.

    Desert tortoise individuals 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 tortoise, the authorized biologist shall follow the techniques for handling desert tortoise in *Guidelines for Handling Desert Tortoises during Construction Projects* (The Desert Tortoise Council 1994, revised 1999). If a tortoise voids its bladder during handling, the authorized biologist shall rehydrate the individual by soaking it in tepid water in accordance with *Desert Tortoise Field Manual* (USFWS 2009).

    The authorized biologist shall maintain a record of all desert tortoise handled. This information shall include the following for each desert tortoise:

    a. the locations (narrative and maps) and dates of observations;

b. general condition and health, including injuries and state of healing and whether each animal has voided its bladder;
c. the location from which the animal was collected and the location in which it was released;
d. diagnostic markings (i.e., identification numbers or marked lateral scutes); and
e. photographs of each handled desert tortoise as described above.

11. Prior to, and during all construction and O&M 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 tortoise.

    No heavy equipment shall be moved into the fenced area until the area is clear of desert tortoise. A qualified or authorized biologist shall walk in front of equipment during the initial site entry to ensure that no desert tortoise or their burrows are harmed.

    Workers shall inspect for desert tortoise under all vehicles and equipment prior to movement. 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/equipment, or the authorized biologist may move the desert tortoise to a safe location to allow for movement of the vehicle/equipment. If the tortoise must be moved, the authorized biologist shall ensure that the desert tortoise is relocated in accordance with *Desert Tortoise Field Manual* (USFWS 2009). All observations of desert tortoise and their sign shall be reported to the authorized biologist as soon as possible.

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

13. For site water needs, the Applicant shall use closed tanks for water storage to eliminate open water sources and shall apply any water used for dust suppression in a manner that does not result in puddling.

14. No later than 90 days after completion of construction or termination of construction activities, the FCR and authorized biologist shall prepare a report for BLM, CDFW, and USFWS documenting the effectiveness and practicality of the avoidance and minimization measures, the number of desert tortoise excavated from burrows, the number of desert tortoise moved, the number of desert tortoise 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 O&M activities. The report shall provide an estimate of the actual acreage disturbed by construction.

15. Upon locating a dead or injured desert tortoise during construction or O&M, the Applicant shall immediately notify CDFW and BLM. BLM shall then notify USFWS's Palm Springs Fish and Wildlife Office by telephone within 3 days of the finding. Written notification shall be made within 5 days of the

finding, to the CDFW Inland Deserts Region (Region 6) office, Palm Springs Fish and Wildlife Office, and 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 veterinarian for treatment at the expense of the Applicant. If an injured animal recovers, the Palm Springs Fish and Wildlife Office shall be contacted for final disposition of the animal.

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 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.

16. As agreed upon by BLM, the Applicant shall mitigate for disturbance to desert tortoise habitat resulting from construction of the Project through passive restoration at a 3:1 rate (i.e., 3 acres of passive restoration for each acre disturbed). Final mitigation acreage shall be based on the impact totals of as-built conditions. A land disturbance survey shall be conducted within 90 days following construction completion. To compensate for desert tortoise habitat loss, the Applicant proposes to mitigate through restoration of these undesignated OHV routes (i.e., unauthorized disturbance areas). The Applicant shall work closely with BLM in selecting lands most beneficial to the conservation and recovery efforts. Potential mitigation areas are shown in Figure 5 and restoration techniques can be found in Appendix B.

17. The Applicant proposes to mitigate for the 0.41 acre of ground disturbance by purchasing 0.41 acre of compensation lands suitable for the desert tortoise (i.e., a 1:1 ratio). The 0.41 acre of compensation lands is expected to be in the form of a purchase of habitat credits from a mitigation bank approved by CDFW. The acquisition of the compensation acreage, along with implementation of the general and desert tortoise-specific impact avoidance and minimization measures outlined herein, would fully mitigate for any Project impacts to the species. The Applicant is in discussions with the Black Mountain Conservation Bank to determine availability of compensation acreage and determine associated costs of acquisition and management.

10. MONITORING AND MANAGEMENT

14 CCR § 783.2(a)(9): A proposed plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures.

Several plans are proposed as detailed in the Project EA (Amec Foster Wheeler 2018). These include:

1. A monitoring and treatment plan to be developed for specific invasive plant species, as appropriate.

2. A hazardous fluid spill prevention plan to be implemented during construction. This plan will require that equipment operators and other personnel be informed of specific measures to be implemented in the event of a detected fluid leak, including the use of spill containment material, which will be carried with the equipment or vehicle.

3. A decommissioning plan will be prepared and provide detail for the following procedures:

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

Additionally, no later than 90 days after completion of construction or termination of construction activities, the FCR and authorized biologist shall prepare a report for BLM, CDFW, and USFWS documenting the effectiveness and practicality of the avoidance and minimization measures, the number of desert tortoise excavated from burrows, the number of desert tortoise moved, the number of desert tortoise 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 O&M activities. The report shall provide an estimate of the actual acreage disturbed by construction.

Finally, the FCR shall be responsible to submit annual compliance reports to BLM, CDFW, and USFWS. These annual compliance reports shall include all observations of listed species and their sign that are detected by personnel in the field and the authorized and qualified biologist(s) as well as any additional permit stipulations.

11. FUNDING

14 CCR § 783.2(a)(10): A description of the funding source and the level of funding available for implementation of the minimization and mitigation measures.

11.1 LONG-TERM FUNDING

The Applicant will provide financial assurances to guarantee that an adequate level of funding is available to implement all conservation measures and mitigation identified in the CESA Section 2081 permit. These funds will be used solely for implementation of the measures associated with the Project. It is the intent of the Applicant to purchase Compensation Lands at a CDFW-approved mitigation bank as compensation for all associated biological impacts from the Project. The Compensation Lands, in conjunction with the implementation of the Project's impact avoidance and minimization measures described herein, would serve to fully mitigate incidental take of covered species. The Applicant also intends that the Compensation Lands would be managed in perpetuity by a third party. The Compensation Lands would be purchased by the Applicant prior to any ground-disturbing Project activities, unless financial assurance is provided to CDFW in the form of an irrevocable letter of credit, a pledged savings account, or another form of security ("Security") approved by the Department Office of the General Counsel to ensure funding in the amount of $5,330.00.

The amount of the Security is calculated as follows:

1. Costs of establishing an endowment for long-term management of Compensation Lands is calculated at $13,000 per 1 acre (based on preliminary discussion with Wildlands for acquisition of habitat credits at the Black Mountain Conservation Bank) for 0.41 acre: $5,330.

If Security is provided, InterConnect Towers, LLC; CDFW; or a third-party entity approved by CDFW shall complete the proposed Compensation Lands acquisition within 18 months after the start of Project ground-disturbing activities. A minimum of 1 month prior to Project ground-disturbing activities, InterConnect Towers, LLC or a third-party entity approved by CDFW will submit to CDFW for approval a formal proposal identifying the specific properties comprising the acres that will be conserved. CDFW will approve all of the mitigation bank parcels comprising the Compensation Lands. Compensation Lands are expected to promote conservation of desert tortoise and will be subject to the conditions listed in the section below. In the event that the Compensation Lands within the proposed mitigation bank are not approved for mitigation, InterConnect Towers, LLC will identify and propose an alternative mitigation site for approval by CDFW.

11.2 ADDITIONAL FUNDING AND AGREEMENTS

In conjunction with the funding obligations related to the Compensation Lands actions and following CDFW's field review and approval of the proposed Compensation Lands, InterConnect Towers, LLC; CDFW; or a third-party entity approved by CDFW will comply with the following conditions:

a. Preliminary Report: Provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary documents for the proposed Compensation Lands (and/or

conservation easement). All documents conveying or conserving Compensation Lands and all conditions of title/easement are subject to the approval of CDFW, the California Department of General Services, and, if applicable, the Fish and Game Commission.

b. Title/Conveyance: Transfer fee title of the Compensation Lands to CDFW or an organization approved by CDFW under terms approved by CDFW for in-perpetuity management of the lands. Convey a conservation easement on the 1.23 acres of Compensation Lands to CDFW or an organization approved by CDFW under terms approved by CDFW and InterConnect Towers, LLC.

c. Enhancement Fund (as necessary): Fund the initial protection and enhancement of the Compensation Lands by providing to CDFW, or a third-party entity approved by CDFW, an appropriate amount as determined by CDFW and InterConnect Towers, LLC for field review of the land, as discussed above.

d. Endowment Fund: Prior to ground-disturbing Project activities, provide to CDFW or a third-party entity approved by CDFW a permanent capital endowment in the amount determined through the Property Analysis Record (PAR) or PAR-like analysis that will be conducted for the Compensation Lands. Interest from this amount will be available for reinvestment into the principal and for the long-term operation, management, and protection of the Compensation Lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action designed to protect or improve the habitat values of the Compensation Lands. The endowment principal will not be drawn upon unless such withdrawal is deemed necessary by CDFW or a third-party entity approved by CDFW to ensure the continued viability of the species on the Compensation Lands. Monies received by CDFW pursuant to this provision will be deposited in a special deposit account established pursuant to Government Code §16370. CDFW may pool the endowment with other endowments for the operation, management, and protection of the Compensation Lands for local populations of the covered species.

e. Security Deposit: InterConnect Towers, LLC may proceed with ground-disturbing Project activities before fully performing its duties and obligations as set forth above only if InterConnect Towers, LLC secures its performance by providing to CDFW funding or, if CDFW approves, administrative proof of funding, necessary to cover easement costs; fencing/cleanup costs; and, as necessary, initial protection and enhancement of the Compensation Lands. If the Security is provided to allow the commencement of Project disturbance prior to completion of compensation actions, InterConnect Towers, LLC; CDFW; or a third-party entity approved by CDFW must complete the required actions no later than 18 months after the start of the ground-disturbing activities. The Security will provide that CDFW or a third-party entity approved by CDFW may draw on the principal sum if it is determined that InterConnect Towers, LLC has failed to comply with the Conditions of Approval of the CESA Section 2081 permit. The Security will be returned to InterConnect Towers, LLC upon completion of the legal transfer of the Compensation Lands to CDFW or approved third-party entity, or upon completion of an implementation agreement with a third-party mitigation banking entity acceptable to CDFW, to acquire and/or manage the Compensation Lands.

f. Reimbursement Fund: Provide reimbursement to CDFW for reasonable expenses incurred during title, easement, and documentation review; expenses incurred from other state agency reviews; and overhead related to providing Compensation Lands to CDFW.

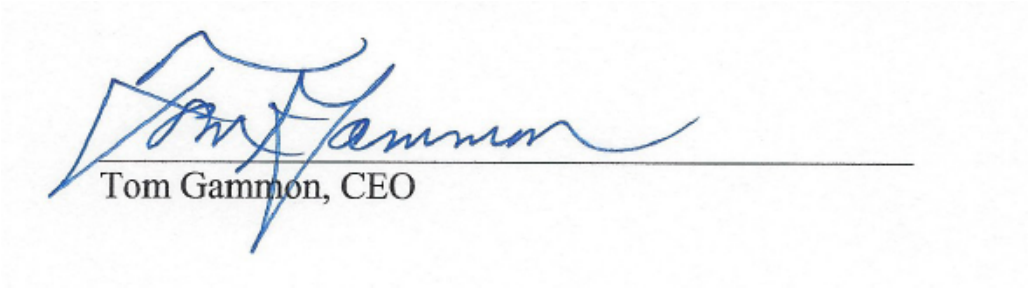
If all actions for Compensation Lands described above are not completed within 18 months of initial ground-disturbing activity, InterConnect Towers, LLC shall consult with CDFW to develop alternate compensation land proposals subject to the above requirements.

InterConnect Towers, LLC is responsible for all Compensation Lands acquisition/easement costs, including title and document review costs and expenses incurred from other state agency reviews and overhead related to providing Compensation Lands to CDFW, escrow fees or costs, toxic waste clearance, and other site cleanup measures.

12. CERTIFICATION

14 CCR § 783.2(a)(11): Certification

I certify that the information submitted in this application is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to suspension or revocation of this permit and to civil and criminal penalties under the laws of the State of California.



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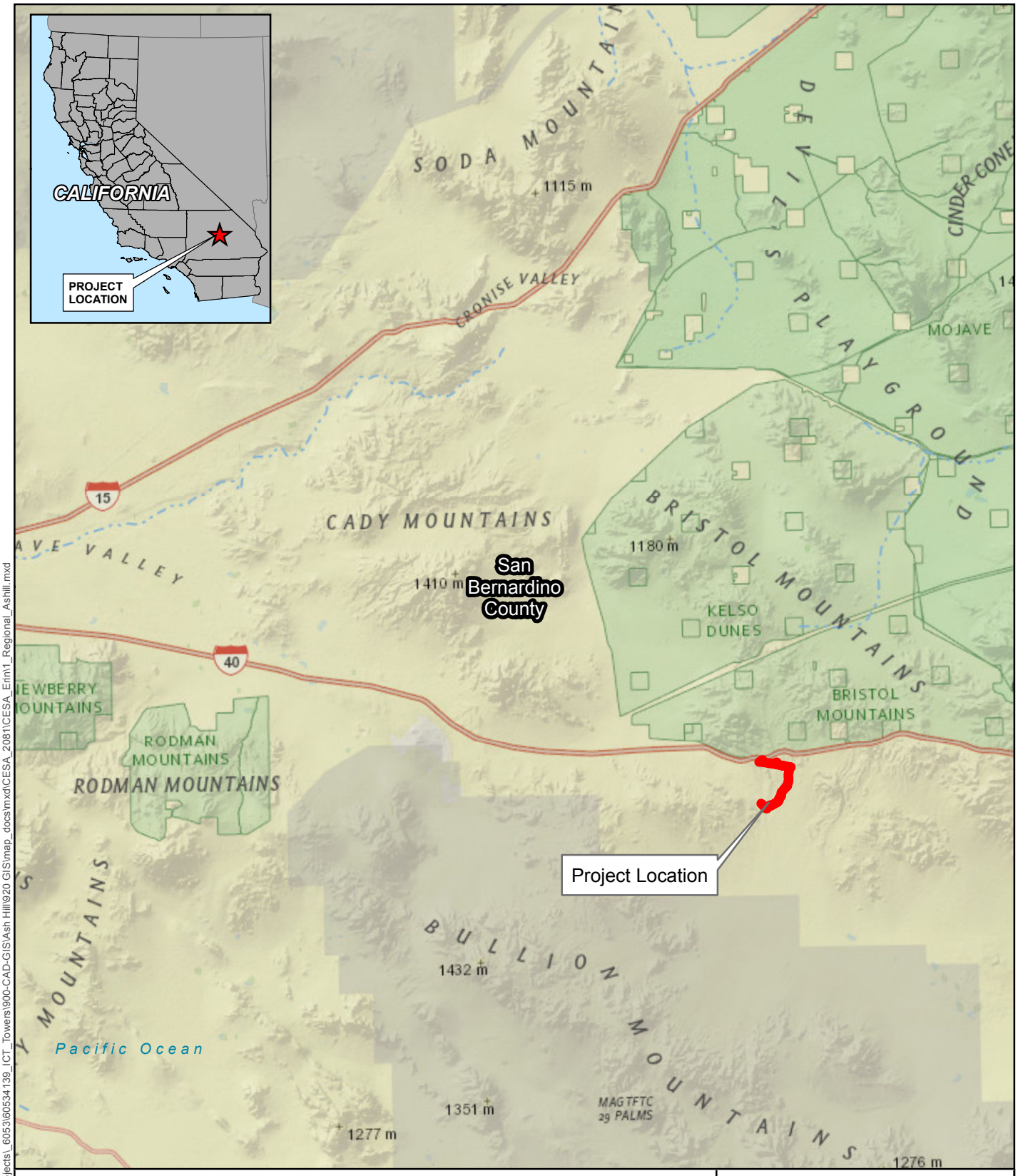
APPENDIX A
FIGURES



Legend

Project Location

0 5 10 Miles

Base Map Source:
ESRI, ArcGIS Online
National Geographic World Map

FIGURE 1
REGIONAL MAP

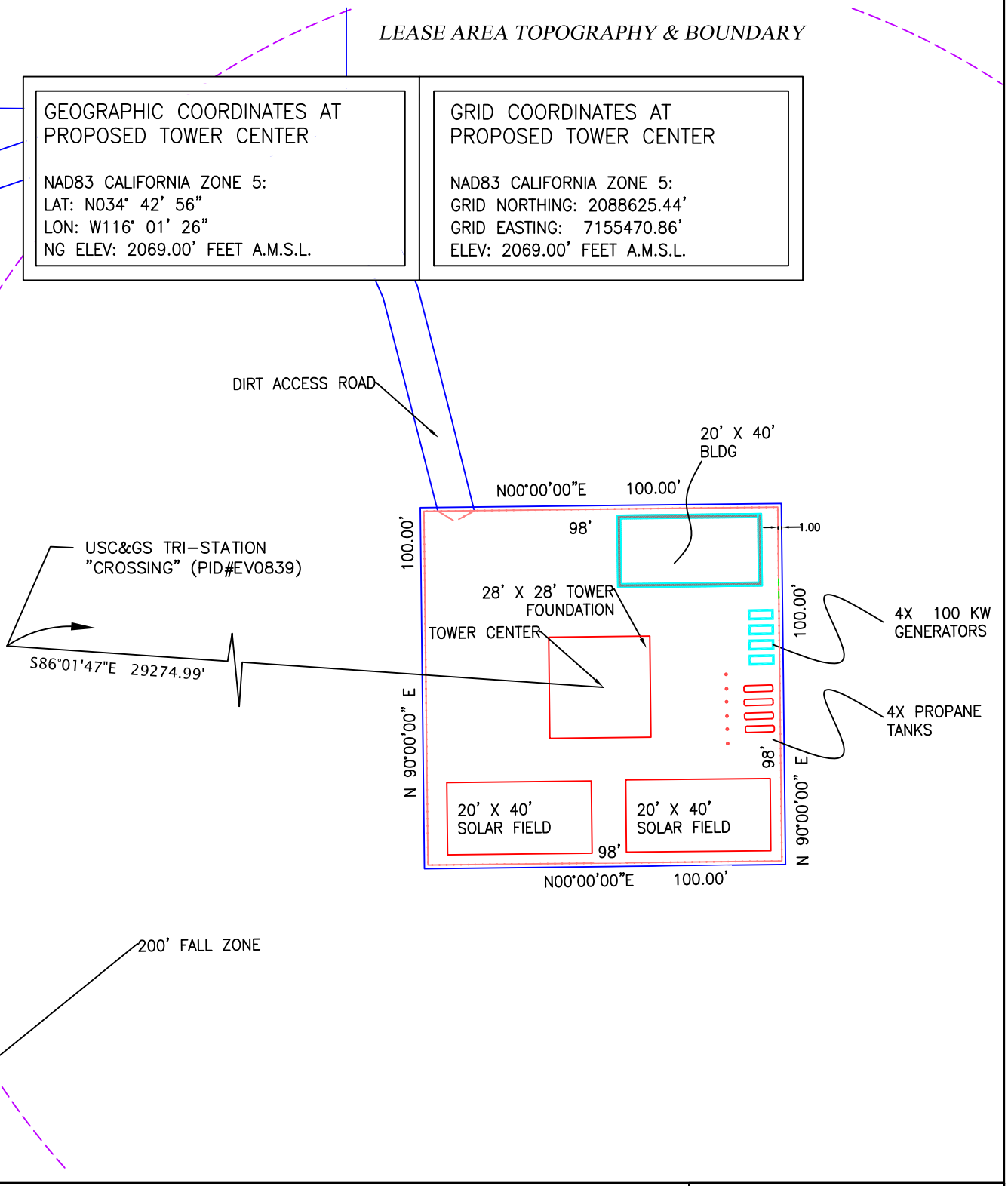
InterConnect Towers
Ash Hill Communication Site

AECOM

\\ussdg1fp001.na.aecomnet.com\DATA\projects_60530\60534139_ICT_Towers\900-CAD-GIS\Ash Hill\920 GIS\map_docs\mxd\CESA_20811\CESA_Erin\1_Regional_Ashill.mxd

LEASE AREA TOPOGRAPHY & BOUNDARY

GEOGRAPHIC COORDINATES AT PROPOSED TOWER CENTER	GRID COORDINATES AT PROPOSED TOWER CENTER
NAD83 CALIFORNIA ZONE 5: LAT: N034° 42' 56" LON: W116° 01' 26" NG ELEV: 2069.00' FEET A.M.S.L.	NAD83 CALIFORNIA ZONE 5: GRID NORTHING: 2088625.44' GRID EASTING: 7155470.86' ELEV: 2069.00' FEET A.M.S.L.



Legend

Not to Scale

FIGURE 2
COMMUNICATION SITE PLAN

InterConnect Towers
Ash Hill Communication Site

AECOM

\\ussdg1fp001.na.aecomnet.com\DATA\projects_60536\60534139_ICT_Towers\900-CAD-GIS\Ash Hill\930 Graphics\Communications Site Plan.ai dbrady

Legend

Access Road

0 2,300 4,600 Feet

Base Map Source:
ESRI, ArcGIS Online
Bing Maps Hybrid

FIGURE 3
ACCESS ROAD

InterConnect Towers
Ash Hill Communication Site

AECOM

P:\ 60534139 ICT Towers\900-CAD-GIS\Ash Hill\920 GIS\map docs\mxd\CESA 2081\CESA Erin\3 Access Road AshHill.mxd Job No.60545193 Date: 5/2/2019 Created By: Paul Moreno

Created By: Jason Sokol Job No.60545193 Date: 5/3/2019

Legend

- Tower Location
- Access Road 100ft Buffer

Vegetation Communities and Drainages

- Mojave Creosote Bush Scrub
- Mojave Desert Wash Scrub
- Disturbed Habitat

Desert Tortoise Survey Results

- Carcass
- Pallet
- Scat

0 550 1,100 Feet

Base Map Source:
ESRI, ArcGIS Online
Bing Maps Hybrid

FIGURE 4A
VEGETATION COMMUNITIES AND DESERT TORTOISE SIGN

InterConnect Towers
Ash Hill Communication Site

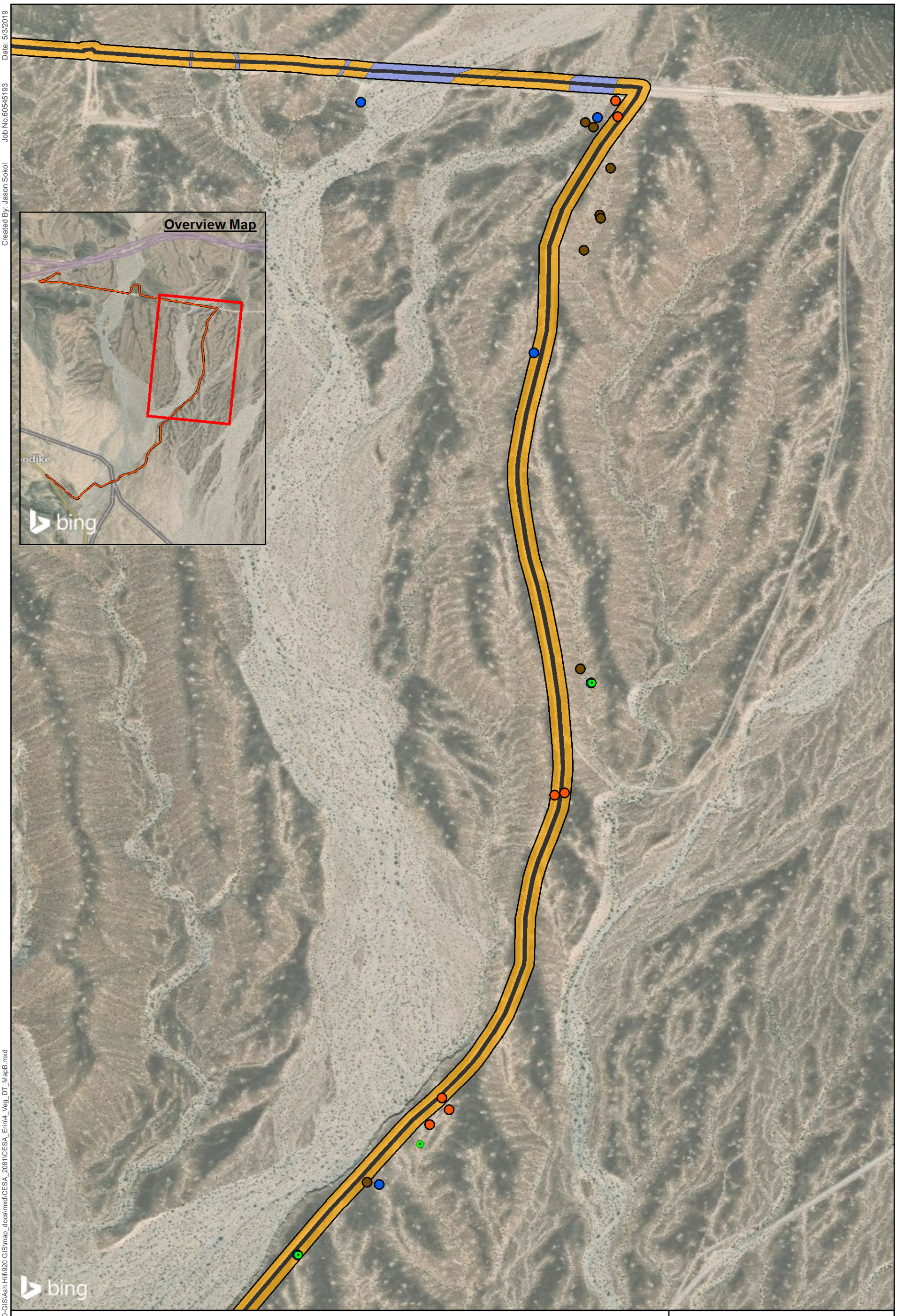
AECOM

P:_6053\60534139_ICT_Towers\900-CAD-GIS\Ash Hill\920 GIS\map_docs\mxd\CESA_2081\CESA_Erin\4_Veg_DT_MapA.mxd

Date: 5/3/2019

Job No.60545193

Created By: Jason Sokol



Legend

- Access Road 100ft Buffer

Vegetation Communities and Drainages

- Mojave Creosote Bush Scrub
- Mojave Desert Wash Scrub
- Disturbed Habitat

Desert Tortoise Survey Results

- Burrow
- Carcass
- Scat
- Track

0 550 1,100 Feet

Base Map Source:
ESRI, ArcGIS Online
Bing Maps Hybrid

FIGURE 4B
VEGETATION COMMUNITIES AND DESERT TORTOISE SIGN

InterConnect Towers
Ash Hill Communication Site

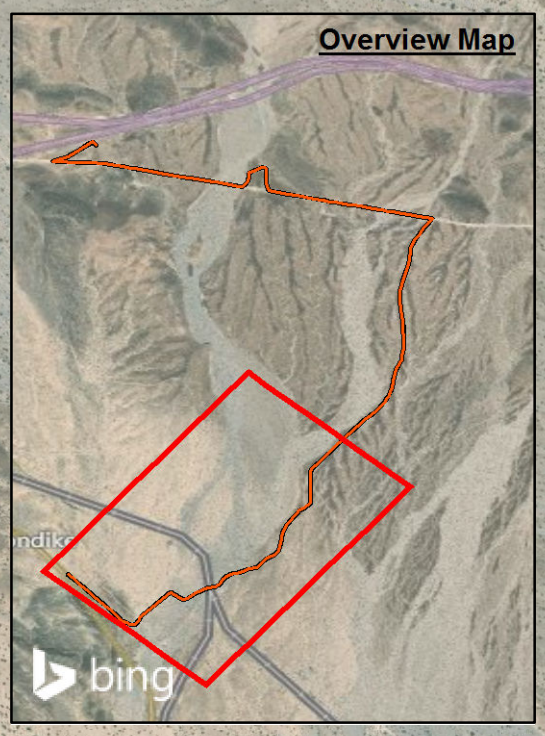
AECOM

P:_6053\60534139_ICT_Towers\900-CAD-GIS\Ash Hill\920 GIS\map_docs\mxd\CESA_20811\CESA_Erin\4_Veg_DT_MapB.mxd

Date: 5/3/2019

Job No.60545193

Created By: Jason Sokol



bing

Legend

- Access Road 100ft Buffer

Vegetation Communities and Drainages

- Mojave Creosote Bush Scrub
- Mojave Desert Wash Scrub
- Disturbed Habitat

Desert Tortoise Survey Results

- Burrow
- Track

0 550 1,100 Feet

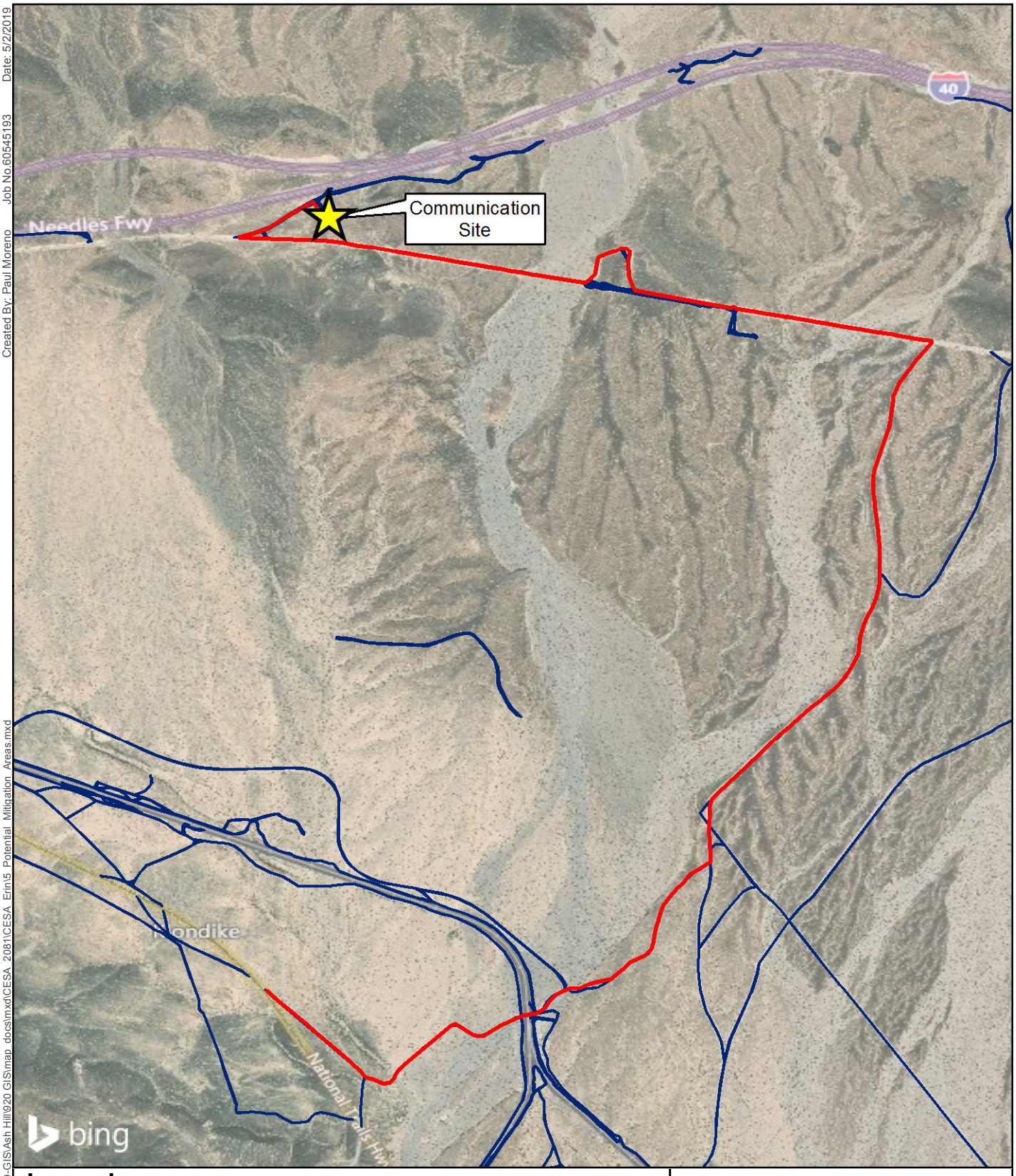
Base Map Source:
ESRI, ArcGIS Online
Bing Maps Hybrid

FIGURE 4C
VEGETATION COMMUNITIES AND DESERT TORTOISE SIGN

InterConnect Towers
Ash Hill Communication Site

AECOM

P:_6053\60534139_ICT_Towers\900-CAD-GIS\Ash Hill\920 GIS\map_docs\mxd\CESA_20811\CESA_Erin\4_Veg_DT_MapC.mxd



Legend

- Access Road
- Potential Mitigation Areas

0 2,300 4,600 Feet

Base Map Source:
ESRI, ArcGIS Online
Bing Maps Hybrid

FIGURE 5
POTENTIAL MITIGATION AREAS

InterConnect Towers
Ash Hill Communication Site

AECOM

P:\ 60534139 ICT Towers\900-CAD-GIS\Ash Hill\920 GIS\map docs\mxd\CESA 2081\CESA Erin\5 Potential Mitigation Areas.mxd
Created By: Paul Moreno Job No.60545193 Date: 5/2/2019

APPENDIX B
RESTORATION TECHNIQUES

Appendix B
Ash Hill Communication Site
Restoration Techniques

To mitigate for impacts to the ground disturbance cap by the development of the communication lease area and use of an existing undesignated route for access, ground disturbance will be mitigated at a ratio of 3: I, for a total of 1.23 acres, through one or more of the following techniques. These techniques are intended to help reduce the occurrences of inappropriate route use by restoring and camouflaging undesignated routes. Restoration would be conducted on the first 100-150 feet of the routes.

- **Vertical Mulching***:* Dead plant material would be placed at the beginning of illegal routes in the line-of-sight off of BLM-designated routes to disguise the routes and deter additional illicit OHV traffic. Large dead pieces of plants (e.g., nearby trees, including Joshua trees, shrubs, and materials cleared from the communication site and access road) and rocks placed on the soil surface can act as barricades. Similarly, shrubs or branches planted upright in the soil make the trail blend in with surrounding vegetation. Mulch would be placed in a naturally appearing random pattern, with some scattered on the surface of the soil, and some vertically planted back into the soil. Vertical mulch also benefits restoration by trapping wind-blown seeds and lessening wind erosion just above the ground surface. This work would be primarily accomplished with hand tools. Little soil disturbance would occur, except where mulch is "planted" and thus requires a small hole to anchor the material.

- **Soil Decompaction***:* Undesignated routes with repeated OHV traffic may require soil decompaction to increase water infiltration and facilitate seed germination. Improving water infiltration also allows burrowing wildlife, such as desert tortoise, to inhabit the soil again. Workers would preferably use hand tools such as soil spades, spading forks, and shovels to loosen the top 2 to 6 inches of soil.

- **Mechanical Ripping:** Routes too compacted or wide for use of hand tools may require mechanical ripping to a depth of 6 to 10 inches. A trail bulldozer or grader would pull an attachment to mechanically rip the soil. After ripping, hand tools would be used to camouflage bulldozer tracks. Ripping may provide conditions for germinating nonnative invasive plant species. Therefore, weed control measures would be implemented to limit the spread of these species.

- **Soil/Vertical Pitting***:* Soil/vertical pitting of the soil surface would be applied in key areas to create depressions for windblown seeds, provide for local water collection and increased infiltration, reduce surface erosion, discourage vehicular traffic, and create a visual texture to the surface that blends with surrounding undisturbed areas. Soil/vertical pitting contours the soil to direct water flow and draw windblown seeds to focal spots on

the ground. Pits would be approximately 1 to 2 feet wide, 6 inches deep, and spaced 1 to 2 feet apart in order to provide the estimated amount of water that may be needed for a plant to naturally germinate and grow in an arid environment. Pitting would create suitable microsites to increase seed germination rates and to promote higher survival and growth rates of small plants. This work would be done by shovel, spade, or power auger. Vertical mulch would be added as needed to some of the vertical pits.

- **Soil Imprinting***:* Soil imprinting would entail raking small trenches to roughen the texture on surface soil and to collect windblown seed. Hand tools such as shovels and rakes would be used in sites with fragile soils or steep slopes.

- **Raking***:* On undesignated routes formed from a single trespass (one person on one vehicle at one time) or on routes with scarce vegetation, work crews would rake or sweep, usually with a broom, the top 1 inch of soil to hide evidence of tracks. Soil surfaces may also be contoured to match surrounding land. Hand tools would be the primary method used for this work.

- **Rocks**: A row of large rocks and boulders would be used as barriers to deter use in especially fragile areas. Placement of small rocks would require no equipment and little or no soil disturbance. Large rocks may also be used through the use of dump trucks, trailers, and loaders. Large rocks and boulders removed to the side of the disturbance shall be placed back with the darkened/naturally varnished side facing up in a natural appearing pattern. To help ensure that rock placement appears natural, several rocks would be partially buried into the soil surface (similar to original conditions), rather than being set only on top of the surface.

- **Planting Vegetation***:* Revegetating would involve directly planting native species in the line-of-sight from a BLM-designated OHV trail to accelerate improvements to soil stability, vegetation cover and diversity, and wildlife habitat. Eventually revegetation would disguise routes. Planting would make use of hand tools (shovels) and some mechanized equipment (augers) to dig holes up to 2 feet deep and 1 foot wide, for the largest transplants. In extraordinary cases, transplantation of larger plants would require somewhat larger holes potentially up to 3 feet deep and 3 feet wide. After planting, work can contour soil to direct the flow of rainwater or irrigation water to plant roots.

- **Seeding:** Seeding would require rakes to collect seed from seed banks in the soil or from dried seedpods still attached on plants. Hand sowing would be used to spread seeds across the soil surface. Raking would disturb, at most, the top 1 inch of soil. Hand seeding also may be concurrent with soil pitting (see above) to improve seed germination rates. Several methods described herein provide a seedbed for seed already onsite.

- **Removing Manufactured Materials and Structures:** A restoration team would remove litter and other unsightly or potentially dangerous manufactured materials or structures

less than 50 years old. If the restoration team discovered materials more than 50 years old, they would consult with the BLM archaeologist. The archaeologist would assess whether removing any materials older than 50 years is appropriate and what archeological documentation is required. Removal would include large structures and materials of nonhistorical value such as abandoned automobiles, fences, and buildings, including those built in trespass.

Impacts of route restoration are expected to be less than the communication site due to the limited ground disturbance of restoration techniques and the brief and temporary use of personnel and equipment. The same Applicant proposed measures/design features as described for the communication facility would be followed, except for installation of desert tortoise fencing

Limited pollutant emissions would occur during route restoration, principally from the use of equipment where rehabilitation is taking place, additional vehicle travel by rehabilitation crews, and the surface disturbance caused by the rehabilitation process. Typically, only one or two pieces of equipment would be in use at any one time, and the duration of use would be temporary and brief. Overall, there would be a long-term positive effect to air quality from the reduction of undesignated routes and revegetation of the surface. These actions would reduce particulates introduced to the air through vehicle travel and wind.

Wildlife would benefit from the decrease in vehicle traffic through their habitat. Routes would grow over and reseed, creating new forage and undisturbed habitat. Native vegetation in the restored areas would be allowed to proliferate undisturbed.

Route restoration could result in a perceived limitation on opportunities for motorized vehicle use and related recreational activities. There would be a negligible effect on OHV riding in the restoration areas because the routes that would be restored are undesignated and not legally available for riding on now. The proposed route restoration does not affect the existing legal riding opportunities. There would be positive benefits to travel in the area because the route restoration would clarify the open route network. Open routes provide a sufficient network to access the restoration areas for recreation purposes. The restoration effort would cause the undesignated routes to be less noticeable.

Restoring the surface contour and vegetation cover in the bed and side banks of undesignated routes to a natural contour can improve soil conservation. Steep terrain is particularly vulnerable to losing soil crusts and mineral soils after OHV impact. Decompaction would increase water infiltration and facilitate seed germination. Improving water infiltration also allows burrowing animals, such as ants and rodents, to inhabit the soil again. Decompaction may promote seed germination of nonnative invasive species.

APPENDIX C
2016 USFWS CONCURRENCE WITH BLM 1997 BIOLOGICAL OPINION FOR SMALL PROJECTS AFFECTING DESERT TORTOISE HABITAT

Massar, Mark <mmassar@blm.gov>

Fwd: Nipton BA--USFWS Concurrence on Ash Hill, 40/95 & Halloran Below

Tom Gammon <Tom@ictowers.com> Wed, Jan 24, 2018 at 10:21 AM
To: Mark Massar <mmassar@blm.gov>
Cc: Bill Graham <Bill.Graham@aecom.com>, "Christ, Nancy" <nancy.christ@woodplc.com>, Bill Webster <wwebster@blm.gov>, Greg Miller <GMiller@blm.gov>, Mike Ahrens <MAhrens@blm.gov>

See Email from Brian Croft FWS 11/15/16 at bottom below.

Let me know if anything additional is needed from FWS for the 3 sites of Ash Hill, 40/95 & Halloran.

Mark, when you have “Nipton" FWS "Concurrence Timeline" please email group above.

Thanks,

Tom

Begin forwarded message:

From: Tom Gammon <Tom@ICTowers.Com>
Subject: Nipton BA
Date: November 18, 2016 at 2:03:35 PM PST
To: Levi Cox <lcox@s-37.com>

So since SPBO for 3 is done can we immediately file Nipton? Every day we wait is a day added to the ROW delay right?

Nice to have the first 3 finally behind us isn’t it…

Thanks for all your continued effort (writing and then rewriting—I know "don’t remind me" right…) to get these under the bridge and approved.

Happy Weekend Levi,

Tom Gammon
Founder/Pres.

InterConnect Towers
Tom@ICTowers.Com
202-255-7777
Southern California

InterConnecting Wireless Coverage
On Federal Land Since 1998

On Nov 17, 2016, at 4:39 PM, Levi Cox <lcox@s-37.com> wrote:

It means that there will be no hold up from USFWS when BLM issues the ROWs. We have the SPBO for those 3 sites. I will get an update from Bill in the morning on the progress on Ash Hill. He said he circulated both Ash Hill and Halloran. Getting the SPBO is positive to helping BLM move ahead.

Regards,
LC

From: Tom Gammon [mailto:Tom@ICTowers.Com]
Sent: Thursday, November 17, 2016 3:59 PM
To: Levi Cox <lcox@s-37.com>
Subject: Re: HALLORAN SPRINGS, 40-95 JUNCTION & ASH HILL COMMUNCIATION SITES

Thanks Levi, so the email from Kim and then Bill below means ROW's can be processed for the 3 sites, is that right?

And if yes what is the schedule for Ash Hill, Halloran and 40/95 ROW's?

Warmest Thanks Levi,

Tom Gammon
Founder/Pres.

InterConnect Towers
Tom@ICTowers.Com
202-255-7777
Southern California

InterConnecting Wireless Coverage
On Federal Land Since 1998

> On Nov 16, 2016, at 1:37 PM, Levi Cox <lcox@s-37.com> wrote:
>
> FYI
>
> **From:** William Webster [mailto:wwebster@blm.gov]
> **Sent:** Wednesday, November 16, 2016 1:34 PM
> **To:** Levi Cox <lcox@s-37.com>
> **Subject:** RE: HALLORAN SPRINGS, 40-95 JUNCTION & ASH HILL COMMUNCIATION SITES
>
> Levi,
>
> We have a few new staff members, Resource branch chief and Monument Manager. I'm going to send the DNA for Ash Hill to them for review. Our Resource Chief has experience as a P&EC so he should be able to provide some valuable feedback.
>
> V/r
>
> Bill
>
> WILLIAM B. WEBSTER
> NEPA Planner / Realty Specialist
> Bureau of Land Management, Needles Field Office
> 1303 S US HWY 95
> Needles, CA 92363

760.326.7008 (office)
wwebster@blm.gov

Rights-of-Way
http://www.blm.gov/wo/st/en/prog/energy/cost_recovery_regulations.html
Communications Sites
http://www.blm.gov/commsites/

From: Levi Cox [mailto:lcox@s-37.com]
Sent: November-16-16 12:58 PM
To: Marsden, Kim; Katherine Maikis; William Webster
Cc: Gregory Miller
Subject: RE: HALLORAN SPRINGS, 40-95 JUNCTION & ASH HILL COMMUNCIATION SITES

Kim,

Good news. Thank you for your assistance and hard work on this. Much appreciated.

Regards,
LC

From: Marsden, Kim [mailto:kmarsden@blm.gov]
Sent: Wednesday, November 16, 2016 12:20 PM
To: Katherine Maikis <kmaikis@blm.gov>; William Webster <wwebster@blm.gov>
Cc: Levi Cox <lcox@s-37.com>; Gregory Miller <gmiller@blm.gov>
Subject: Fwd: HALLORAN SPRINGS, 40-95 JUNCTION & ASH HILL COMMUNCIATION SITES

FYI, memo below; we separated out the Nipton site because the impacts could not be addressed by progrrammatic (i.e., small projects) BO for desert tortoise.

---------- Forwarded message ----------
From: **Croft, Brian** <brian_croft@fws.gov>
Date: Tue, Nov 15, 2016 at 5:17 PM
Subject: HALLORAN SPRINGS, 40-95 JUNCTION & ASH HILL COMMUNCIATION SITES
To: Gregory Miller <gmiller@blm.gov>
Cc: "Ackley, Jeffrey" <jeffrey_ackley@fws.gov>, Kim Marsden <kmarsden@blm.gov>

In Reply Refer To:
FWS-SB-97B0003-17F0129

Memorandum

To: Deputy District Manager, Bureau of Land Management, California Desert District, Moreno Valley, California

From: Division Chief, West Mojave Desert Division, U.S. Fish and Wildlife Service, Palm Springs, California

Subject: Request to initiate formal section 7 consultation for issuance of right-of-ways for three proposed multi-tenant communication sites in San Bernardino County, California

Dear Mr. Miller,

On Oct 13, 2016, we (the U.S. Fish and Wildlife Service) received the Bureau of Land Management's (BLM) request for concurrence that the subject project is not likely to adversely affect the federally threatened desert tortoise (*Gopherus agassizii*) or its critical habitat. We cannot concur with this determination, as the project will involve removing physical and biological features from a critical habitat unit. However, after discussing additional project details with your staff member Kim Marsden, we agreed that the Programmatic Biological Opinion (PBO) on Small Disturbances in Desert Tortoise Habitat (1-8-97-F-17) can be applied to this project. The total ground disturbance will be less than two acres and the total disturbance limit for the Eastern Mojave Critical Habitat Unit has not yet been reached, both of which are requirements of the PBO.

We are providing this correspondence to approve use of the PBO. Approval is contingent on the BLM requiring the project proponents to comply with all applicable conservation measures listed in the PBO. The conservation measures we discussed with Kim Marsden and those listed in the Biological Assessment associated with this project are consistent with the PBO. Implementation of these measures would constitute appropriate application of the PBO.

In addition to the PBO, we also note that the BLM is requiring the following additional measures:

1. The raven survey/nest removal that focuses on the lattice towers and distribution lines would occur at each communication site and be conducted twice yearly between March 15 and June 1, separated by at least 30 days; approximately 20 to 40 man-hours annually, dependent on if nest removal is necessary.

2. A per-acre raven management contribution amount would be $64.00 for a twenty year project or $105 for a project with a life of 30 years. The total contribution would be derived from the total new disturbance of the communication sites, approx. 0.30 to 0.60 acres per site, including spur roads/distribution poles.

3. The Decommissioning Plan would include removal of power poles and transmission lines erected during construction. The Decommissioning Plan would be submitted for incorporation into the Facility Management Plan that would be on hand with the BLM. These plans would be prepared prior to NTP for construction.

We support the implementation of these measures and believe that they will address additional effects to the desert tortoise not captured by the PBOs protective measures.

If the proposed action changes as described at 50 Code of Federal Regulations 402.16, we recommend that you contact us immediately to determine whether additional consultation would be appropriate.

If you have any questions, please contact Jeffrey Ackley (jeffrey_ackley@fws.gov, (760) 322-2070, extension 420).

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> ***In spring at the end of the day you should smell like dirt~ Margaret Atwood***