Appendix G

Paleontological Resources Survey Report

PALEONTOLOGICAL RESOURCES SURVEY FOR THE INTERCONNECT TOWERS ASH HILL PROJECT SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:
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EXECUTIVE SUMMARY

InterConnect Towers, LLC, proposes to construct a communication site and use an existing access road that would be located on public lands managed by the Bureau of Land Management (BLM), near Ludlow, an unincorporated area of San Bernardino County, California. The Ash Hill Communication Site is north of County Route 66 (part of the former U.S. Route 66) and just south of Interstate 40 at the proposed cellular tower location. BLM is overseeing this process in compliance with the National Environmental Policy Act.

Prior to commencing fieldwork, a records search was conducted by the Natural History Museum of Los Angeles County. AECOM also conducted a literature search. There are no known pertinent paleontological sites nearby. The area of potential effects (APE) consists of the communication site, the existing access road alignment, and a 50-foot buffer around these features. Survey of the APE was conducted on October 24, 2019, by AECOM paleontologists using 10- to 15-meter transects. Conditions during the pedestrian survey of the 70-acre APE were clear and warm with surface visibility of nearly 100%.

No paleontological resources were identified during the October 24, 2019, pedestrian survey and no substantial excavations are planned for the project. Therefore, no further work is recommended for this project. If potential paleontological resources are incidentally discovered during construction of the project, all ground disturbance shall immediately cease within a 25-foot radius of the discovery until a qualified paleontologist can mobilize to the site to examine the discovery, evaluate its significance, and make further recommendations as appropriate.

INTRODUCTION

This report documents the results of a paleontological survey conducted in support of the Interconnect Towers Ash Hill Project, San Bernardino, County, California. The survey was conducted in compliance with California and federal laws and regulations that afford protection to paleontological resources, including the California Environmental Quality Act, the National Environmental Policy Act, and the Paleontological Resources Preservation Act. The survey was also conducted in accordance with the Society of Vertebrate Paleontology's 2010 guidance for the assessment and treatment of paleontological resources.

PROJECT DESCRIPTION

InterConnect Towers, LLC, proposes to construct, operate, and maintain a multi-carrier communication site and ancillary components, including use of an existing access road, on Bureau of Land Management (BLM)-administered land (Project). The proposed Project 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) (Figure 1). The proposed Project location is in sections 10, 11, 12, 13, 22, and 24 of township 7 north, Range 9 East, San Bernardino Meridian. The proposed Project lies on the Ash Hill and Siberia 7.5' quadrangles (Figure 2). The proposed Project is also approximately 340 feet within the boundaries of the Mojave Trails National Monument. The northern terminus is just south of I-40.

The proposed Project would consist of the following proposed components:

- 100-foot by 100-foot lease area that includes a single three-legged, 196-foot freestanding, self-supporting lattice communication tower;
- 20-foot by 40-foot equipment shelter;
- up to two 100-kilowatt backup generators with up to three 2,000-gallon propane tanks;
- up to three 20-foot by 40-foot solar arrays;
- a chain-link fence, with galvanized hardware mesh with dimensions of 1 inch by 2 inches, would be attached to the lower 18 inches of the chain-link fencing and buried to a depth of 12 inches, in accordance with standard specifications for fencing in desert tortoise habitat; and
- a 12.5-foot-wide entrance gate at the southerly line of the lease site.

The access route would primarily utilize a series of existing BLM-designated open access routes off Route 66. The access route would utilize Route 66 to route NS0017 to route NS0003 to the proposed Project site for a total of approximately 5.77 miles. The section of access route off NS0003 leading to the communication facility utilizes previously disturbed land but is considered unauthorized disturbance by BLM because that section of the route has not been previously authorized with a ROW or designated as an open route. Figure 2 shows the location of the proposed access route.

Source: ESRI 2012; SANGIS 2012

25 12.5 0 25 Miles

Scale: 1:1,584,000; 1 inch = 25 miles

Figure 1
Regional Location Map

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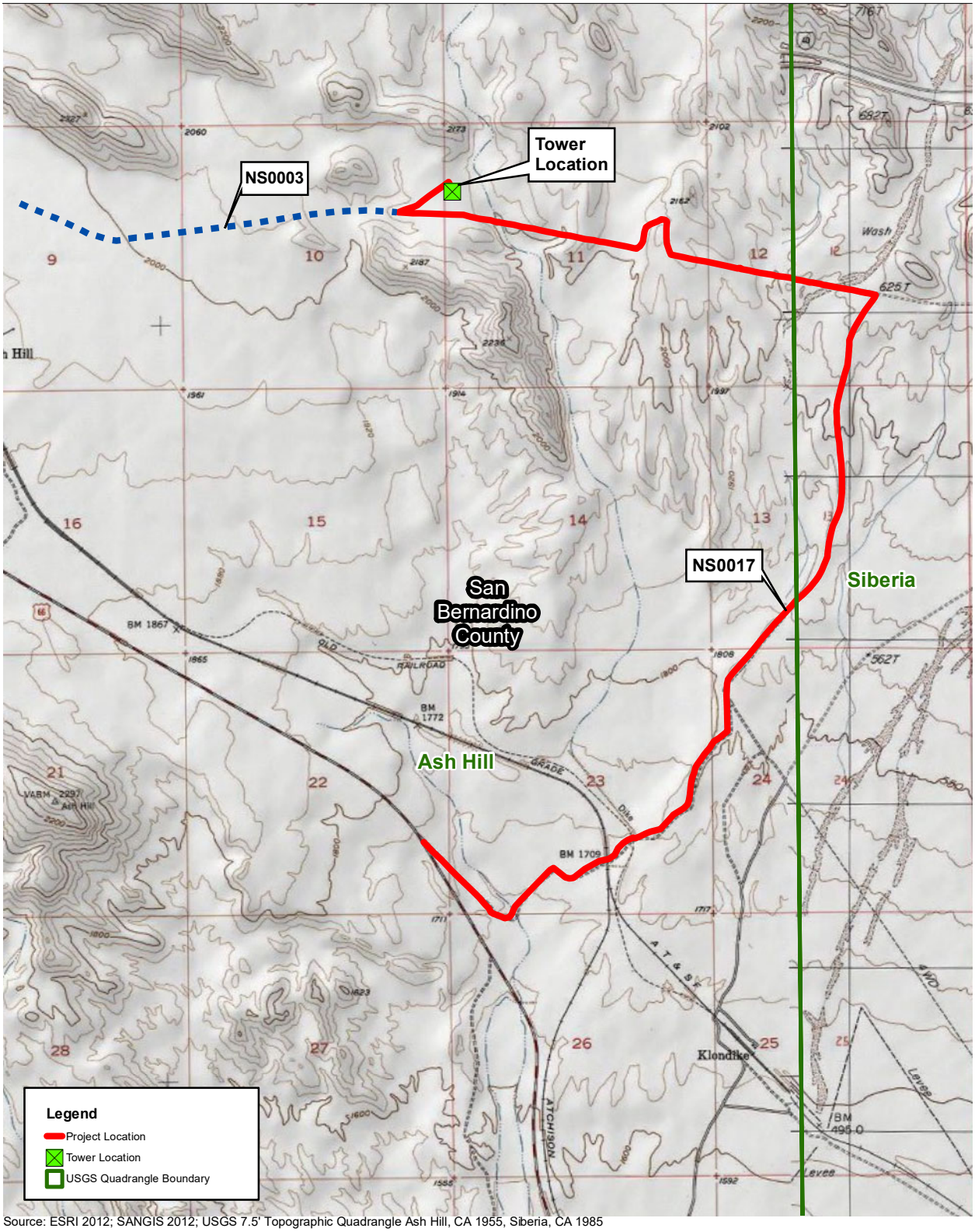

Source: ESRI 2012; SANGIS 2012; USGS 7.5' Topographic Quadrangle Ash Hill, CA 1955, Siberia, CA 1985

3,000 1,500 0 3,000 Feet

Scale: 1:36,000; 1 inch = 3,000 feet

Figure 2
Topo Map

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The access route is currently of adequate width for the site access road and would not require significant improvement (i.e., no widening) to construct the communication site. Any minor grading proposed would be performed to smooth out the existing dirt road similar to road maintenance following heavy rains. No new disturbances would occur aside from that created by continued vehicular access and hauling construction equipment to the proposed communication tower site, as well as limited, necessary road repairs of a 300-foot stretch of route NS0017 located in the wash 100 feet northeast of the Atchison, Topeka & Santa Fe railroad alignment and potentially placing material such as gravel over the existing road bed, if road maintenance is required there. Also, light smoothing of the access route may be necessary following heavy rains. Desert tortoise exclusionary fencing would not be installed along access road segments.

AREA OF POTENTIAL EFFECTS

The Project area of potential effects (APE) consists of approximately 70 acres. This includes the communication site and the existing access road. The APE also consists of a buffer of 50 feet around the communication site and on either side of the access road alignment.

PROJECT PERSONNEL

Joe Stewart, Ph.D., served as principal investigator, directed the fieldwork, and authored this report (see Appendix A for resumé). Kyle Ports participated in all the fieldwork and operated the global positioning system (GPS) devices.

REPORT ORGANIZATION

This report consists of an introduction that includes the project description and background; the project setting; records search and literature search; field methods; results and recommendations; summary and conclusions; and literature cited.

PROJECT SETTING

NATURAL SETTING

The Project lies within the Mojave Desert physiographic region. The Mojave Desert is situated between the subtropical Sonoran Desert to the south and the cold temperature Great Basin to the north. The Mojave Desert is characterized by extreme variations in daily temperatures and more arid conditions than other American desert regions. Freezing temperatures occur during the winter, particularly in higher-elevation regions. Summers tend to be hot, dry, and windy. Precipitation in the region is highly variable from one year to the next but typically ranges between 3 to 5 inches per year. Most precipitation falls in the winter, but the region also experiences rare, intense summer thunderstorms. It is during these rare flood events that some of the most dramatic changes take place on the desert landscape.

The Mojave Desert has a typical mountain-and-basin topography with sparse vegetation. A large portion of the APE lies within the Mojave creosote bush scrub (*Larrea tridentata*) plant community, which is the dominant plant species of the Mojave Desert (Warren 1984). Lower elevations are dominated by creosote bush, and higher

elevations contain yuccas and agaves and then pinion-juniper habitats (Warren 1984). Plant communities within proximity of springs, marshes, and streambeds produce tules, cattails, and various grass species (Warren 1984). The dominant plants observed in the APE included small creosote and burrobush (*Ambrosia dumosa*), with less abundant amounts of white rhatany (*Krameria bicolor*) and Pima rhatany (*Krameria erecta*). Portions of the existing access road pass through wash habitats vegetated with sparse Desert Dry Wash Woodland plants such as smoke tree (*Psorothamnus spinosus*), cheesebush (*Ambrosia salsola*), and spiny senna (*Senna armata*).

Large fauna species are rare in the Mojave Desert, with the most common being mule deer (*Odocoileus hemionus*) and coyote (*Canis latrans*); rabbits, rodents, reptiles, and birds are more common. Rabbit species found in the Mojave Desert include black-tailed jackrabbit (*Lepus californicus*) and desert cottontail (*Sylvilagus audubonii*). Rodent species include various pocket mice (*Perognathus* spp.), whitetail antelope squirrel (*Ammospermophilus leucurus*), and kangaroo rat (*Dipodomys* spp.). Reptile species include desert tortoise (*Xerobates agassizii*), desert iguana (*Dipsosaurus dorsalis*), common king snake (*Lampropeltis californiae*), and Mojave rattlesnake (*Crotalus scutulatus*). More than 300 species of birds are found in the Mojave Desert. Species more common to the open desert are prairie falcon (*Falco mexicanus*), burrowing owl (*Athene cunicularia*), roadrunner (*Geococcyx californianus*), and horned lark (*Eremophilia alpestris*) (Warren 1984).

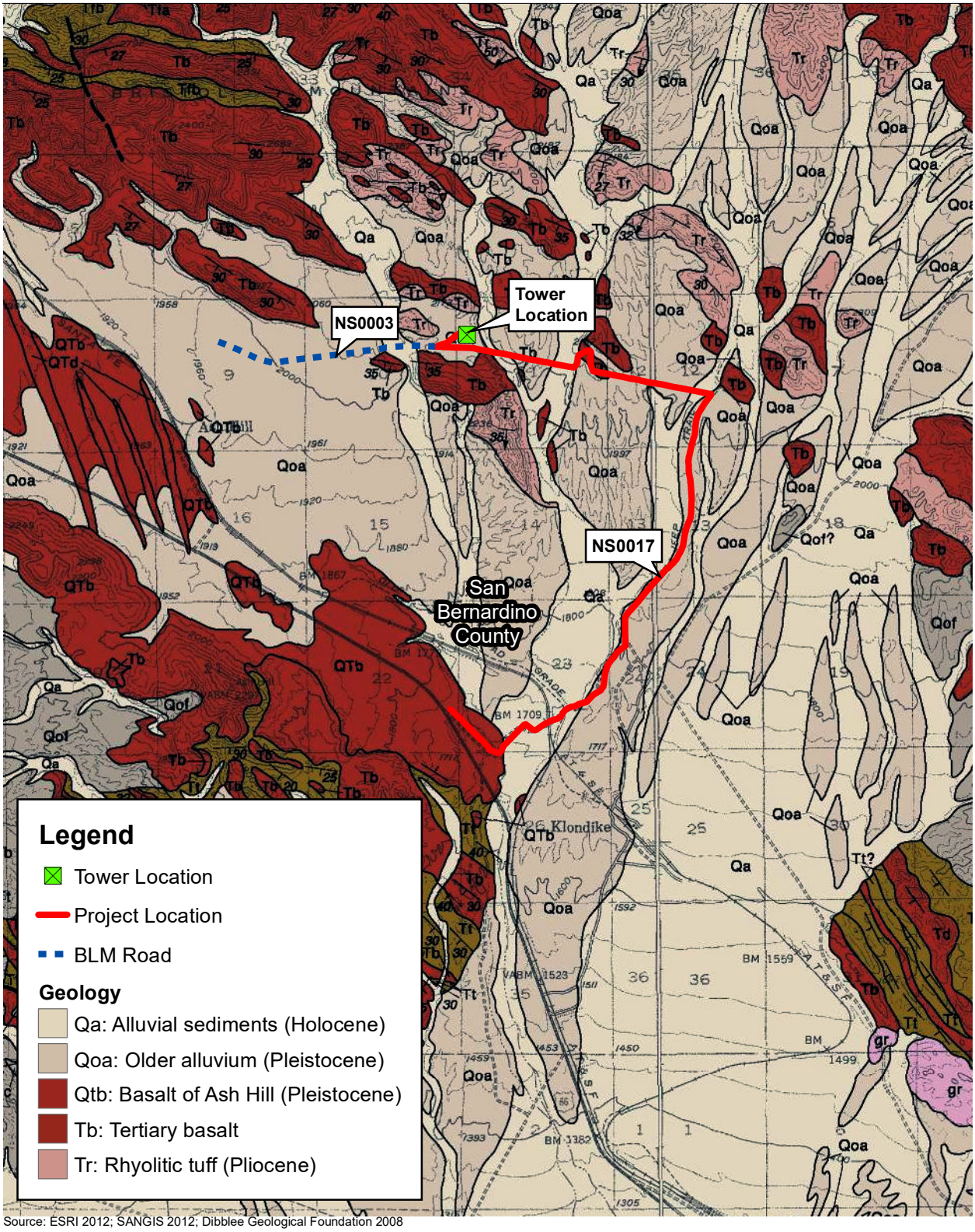
The work area comprising the APE is located south of the Bristol Mountains on a southward-trending slope ranging from a 5–10% grade. Approximately 80% of the east-west–trending portion of the APE (NS0003) has been disturbed, while the north-south–trending alignment (NS0017) has been approximately 30–40% disturbed by the construction of the existing roads. The surface of the non-disturbed portions of the APE consist primarily of desert pavement, as well as some areas of volcanic rubble, particularly on some of the larger wash slopes. The elevation of the APE ranges from approximately 1,675 to 2,087 feet above mean sea level.

GEOLOGIC SETTING

The geologic mapping used here is that by Dibblee (2008) at a scale of 1:62,500. The general area is dominated by volcanic deposits and deep and laterally extensive calcic paleosol development. The path crosses several unnamed washes.

The existing road to the site starts where NS0017 diverges from Route 66 (Figure 3). The rocks there are mapped as Qb (basalt flow of presumed Pleistocene age). Phillips (2003) studied the ages of basalt flow surfaces in the Project area and recorded dates of 11-79 ka. Liu (2003) studied basalt flow surfaces in the same area using desert varnish microstratigraphy. He calculated dates of 18–85 ka for various samples, and these dates correlate well with those of Phillips (2003).

The scarp just north of the old railroad where Qa cuts into Qoa reveals it composed of a series of cemented paleosol layers containing some volcanic clasts and reworked clasts of pedogenic calcium carbonate. The Qa wash has cut approximately 40 feet into to Qoa alluvial fan (Figure 4).



Source: ESRI 2012; SANGIS 2012; Dibblee Geological Foundation 2008

Figure 3
Geologic Map

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Source:

Figure 4
Cross Section of Deposit Mapped as Qoa (Older Alluvium)
Showing Multiple Cemented Layers where Truncated by Active Wash.

RECORDS SEARCH AND LITERATURE SEARCH

This section outlines the results of the paleontological records search conducted to obtain existing information on paleontological resource locality within and/or adjacent to the APE and of the paleontological literature search.

RECORDS SEARCH

AECOM requested a paleontological records search from the Natural History Museum of Los Angeles County (LACM) on September 12, 2019. Sam McLeod, PhD, replied with a report on September 26, 2019. That report is included as Appendix B. Dr. McLeod reported that the LACM does not have any vertebrate fossil localities that occur within the proposed project area boundaries, but that they do have localities at some distance from sedimentary deposits similar to those that may occur at depth in the proposed project area, either at the surface or at depth.

Dr. McLeod advised that excavations in the igneous rocks exposed in the proposed project area will not encounter any recognizable fossils. He suggested that shallow excavations in the Quaternary alluvial fan deposits exposed in most of the proposed project area are unlikely to uncover significant vertebrate fossils. Deeper excavations in the latter areas that extend down into older and perhaps finer-grained Quaternary deposits, however, may well encounter significant fossil vertebrate remains. He stated that any substantial excavations in the sedimentary deposits in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. He recommended that sediment samples from the proposed project area should also be collected and processed to determine the small fossil potential of the site. His recommendations on curation mirror those of the Society of Vertebrate Paleontology (2010): any fossils recovered should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

LITERATURE SEARCH

Dr. Stewart surveyed both published and unpublished reports on the paleontological findings in the Mojave Desert that might have relevance for this project. There is an extensive record of Pleistocene vertebrate fossils in the desert areas of California (Jefferson 1991 a, 1991b). One source of vertebrate fossils in such environments has recently been revealed in an unusual type of deposit: fossil soils (paleosols). Stewart and others (2012) and Raum and others (2014) documented this phenomenon in Riverside County. More recently, similar deposits in San Bernardino County have produced Pleistocene vertebrate faunas (Stewart 2013; Stewart and Hakel 2016, 2017). At many of the sites discussed in these publications and reports, fossils were found in deposits that were mapped as being of Holocene age. The conventional approach to surficial and near-surface Holocene and Pleistocene deposits is that the surficial sediments are of Holocene age, but Pleistocene sediments will be encountered somewhere below the surface. That scenario assumes an aggrading sedimentary context. The reality in many desert situations is that the context is degrading. Wind and rain have been removing the fine sediments from many desert floors and alluvial fans, leaving residual large objects and exposing Pleistocene fine-grained sediments at the surface (Stewart et al. 2012). As some of the sediments within the Project footprint were mapped as alluvial fans, this indicated a need to be checked for residual bones and Pleistocene sediments at the surface.

FIELD METHODS

The field survey was conducted under a BLM Fieldwork Authorization (FA-CA690-14-06) issued by the Needles Field Office under statewide BLM permit CA-20-02P.

A pedestrian survey of the APE was conducted on October 24, 2019, by a qualified AECOM paleontologist (Joe Stewart) and monitor (Kyle Ports) using 10- to 15-meter transects. The surveyors used 7.5-minute U.S. Geological Survey (USGS) topographic maps and larger-scale aerial photographs, as well as hand-held submeter GPS units loaded with shapefiles of the study area for orientation and to record resources and survey coverage.

RESULTS AND RECOMMENDATIONS

The APE starts in a southeasterly direction where NS0017 intersects Route 66. The geology of this segment up to where the existing road turns to the northeast is mapped as Qb, Quaternary basalt flow. The Lavic volcanic field is well known and appears confined to an area east of the Project. The flow where the Project begins appears to have no name. It lies between the Lavic volcanic field and Amboy Crater to the east.

Soon after the existing road turns to the northeast, it enters a large active drainage that is the lower reaches of the Bristol Mountains Wash watershed. All the sediments in this drainage are mapped as Qa, surficial alluvial sediments of Holocene age. This part of the existing road crosses under the Burlington Northern Santa Fe Railroad, and through abandoned supports for an older railroad, the historic Atchison, Topeka and Santa Fe Railroad.

Once NS0017 passes through the old railroad, it ascends a scarp to a surface mapped as Qoa, older Quaternary alluvium. This surface is generally desert pavement. The existing road remains on that surface to NS0003. The scarp where the active wash depositing Qa cuts into Qoa reveals the latter to be composed of an aggradational sequence of cemented paleosol layers containing some volcanic clasts and reworked clasts of pedogenic calcium carbonate (Figure 4). This scarp is approximately where the greatest road improvement needs to be done to NS0017. Topographic maps show the depth exposed there to be approximately 40 feet. The Qoa surface slopes to the south at approximately 10%. The topography indicates the source of the clasts was from the north. The formation of the Qoa layers clearly postdated the basalt flow that provided the volcanic clasts.

As the existing road turns west at NS0003, it crosses an active drainage mapped as Qa. It rises again to another elevated, southward-sloping Qoa surface, but encounters an outcrop of volcanic rock at a northward diversion. This outcrop is mapped as Tb, Tertiary basalt. As the existing road resumes its westward direction, it returns to the Qoa surface but immediately descends into another active wash mapped as Qa. It then rises to a third elevated, southward-sloping Qoa surface. The existing road rises out of the wash onto a small basalt outcrop also mapped as Tb. It then passes onto a fourth elevated Qoa surface to its westernmost extent and turns sharply to the northeast. The terminus, where the tower will be located, is not far away. It should be clarified that the four elevated Qoa surfaces were once continuous but have been dissected by more recent active washes.

Basalt is an extrusive igneous rock that does not preserve fossils. The paleontological potential of Qtb, Tb, and Tr is very low. The Qa sediments are too young to produce significant paleontological resources, and anything found in those sediments would have been transported from upstream.

The Qoa sediments are old enough to produce significant paleontological resources. They are essentially a stacked series of cemented fossil soils (paleosols), and they are cemented at depth. The fossils that typically come from such deposits are small bones of rodents, rabbits, and reptiles. They would have to weather out of the cemented sediments, and that would only happen at the nearly horizontal parts of the surface. Similar surfaces are known to produce vertebrate fossils (Stewart, 2013), but the fossils were obtained by screening loose sediments near the surface. No evidence of any small fossil bones were observed at the surface, and in most places even near surface sediments are cemented. In the cemented soils, no bioturbation was observed. Less cemented fossil soils can produce abundant vertebrate fossils (Stewart and Hakel 2016, 2017; Stewart et al. 2012). There are four regional documented aggradation events in the deserts of southern Nevada and southern California within the last 130 ka (Bull 1991). It is not clear to which of these this surface and underlying paleosols belong.

Given these findings and the fact that the existing road will be used with minimal improvements, monitoring of the road and communication site on this project for paleontological resources is not warranted. If potential paleontological resources are incidentally discovered during construction of the project, all ground disturbance shall immediately cease within a 25-foot radius of the discovery until a qualified paleontologist can examine the discovery, evaluate its significance, and make further recommendations as appropriate.

SUMMARY AND CONCLUSIONS

The paleontological resource surveys of the Ash Hill APE resulted in the detection of no paleontological resources, and the sediments encountered are judged to have little paleontological potential. If potential paleontological resources are discovered, all ground disturbance shall immediately cease within a 25-foot radius of the discovery until a qualified paleontologist can examine the discovery, evaluate its significance, and make further recommendations as appropriate.

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APPENDIX A

RESUME OF JOE STEWART

AECOM

Joe D. Stewart, PhD
Principal Paleontologist

Areas of Expertise

NEPA and CEQA Compliance
Project Management
Principal Investigator
Paleontological Management and Treatment

Education

MA, Systematics & Ecology, University of Kansas, 1979
PhD, Systematics & Ecology, University of Kansas, 1984

Years of Experience

With AECOM: 11
With Other Firms: 4

Registration/Certifications

Certified Paleontologist, Orange and Riverside counties, California
Research Associate, Natural History Museum of Los Angeles County
Hazardous Waste Operations and Emergency Response 40 Hr. General Site Worker
Certified paleontologist in the counties of Orange and Riverside
California BLM Permit

Professional Societies/Affiliates

Society of Vertebrate Paleontology

Joe Stewart is a vertebrate paleontologist with over 40 years of experience in paleontology and 30 years of experience in the geology and paleontology of California, particularly in Merced, Fresno, Kern, Santa Barbara, Los Angeles, Orange, San Bernardino, Riverside, Imperial, and San Diego counties. Joe has been involved in the permitting or construction of more than ten power plants, and has directed the paleontological monitoring and mitigation program for Path 15, a major transmission line project. He is also a certified paleontologist for the Counties of Orange and Riverside. His publications include 40 peer-reviewed articles in books and journals. His research specialties are fossil fishes and Pleistocene vertebrate faunas.

Project Specific Experience

Recurrent Energy Crimson Project, 2016. Supervised paleontological survey and wrote preliminary findings report.

Puente Power Project, 2014-2015: Supervised paleontological survey and wrote the Paleontological Resources section for the AFC.

SR-91 Corridor Improvement Project, 2013-present: Wrote Paleontological Mitigation Plan and supervised paleontological monitoring and mitigation of construction activities.

Devore I-15/I-215 Interchange Improvement Project, 2012-2015: Supervised paleontological monitoring and mitigation.

BrightSource Sonoran West Solar Project, 2012-2013: Supervised paleontological survey on BLM and private lands and wrote final report.

BrightSource Rio Mesa Solar Project, 2011-2013: Supervised paleontological survey on BLM and private lands. Wrote the Paleontological Resources section for the AFC.

Pio Pico Energy Center, 2010-2011: Supervised paleontological survey and wrote the Paleontological Resources section for the AFC.

Mesquite Nevada Replacement General Aviation Airport, 2009: Wrote the paleontological Resource Assessment for the Federal Aviation Administration.

Starwood Power-Midway, LLC Peaking Project Construction, 2008-2009: Wrote mitigation plan for paleontological resources, oversaw monitoring for paleontological resources, and wrote final report.

I-805 Managed Lanes South Project, 2008-2009: Directed paleontological survey of 11.4-mile long project area in San Diego, National City, and Chula Vista and wrote the Paleontological Resource Assessment for SANDAG.

I-805 North Corridor Project, 2008: Directed paleontological survey of 4.4-mile long project area in San Diego and wrote the Paleontological Resource Assessment for SANDAG.

Calnev Pipeline Project, 2008-present: Directed paleontological survey of 234-mile long project area in San Bernardino County, California and Clark County, Nevada and wrote the paleontological assessment.

Imperial Valley Solar Application for Certification, 2008-present: Directed paleontological pedestrian survey of project area in San Bernardino County and wrote the paleontological resource section of the AFC.

San Joaquin One and Two Application for Certification, 2008: Directed paleontological pedestrian survey of project area in Fresno County and wrote the paleontological resource section of the AFC.

Willow Pass Generating Station Application for Certification, 2008-present: Participated in paleontological pedestrian survey of project area in Contra Costa County and wrote the paleontological resource section of the AFC.

Marsh Landing Generating Station Application for Certification, 2008-present: Participated in paleontological pedestrian survey of project area in Contra Costa County and wrote the paleontological resource section of the AFC. Am serving as Paleontological Resource Specialist for construction.

Calico Solar Application for Certification, 2008-present: Participated in paleontological pedestrian survey of project area, edited the paleontology section of the AFC, and am serving as Paleontological Resource Specialist.

IID Niland Gas Turbine Plant Phase III project construction, 2007-2008: Served as Paleontological Resource Specialist Oversaw the work of the paleontological resource monitors, made numerous site visits, and will write final report on paleontological resources.

Carrizo Energy Solar Farm (Ausra) Application for Certification, 2007: Participated in paleontological pedestrian survey of project area and edited the paleontology section of the AFC.

Starwood Power-Midway, LLC Peaking Project Application for Certification, 2007: Participated in the responses to the CEC Provisional Staff Assessments.

BNSF Cajon Main Third Track Summit to Keenbrook permitting, 2007: Participated in the writing, editing, and production of the Paleontologic Resources Monitoring and Mitigation Plan and the Paleontological Resource Assessment.

Path 15 500-kV Power Transmission Line between Los Banos and Gates substations, 2003-2005: Supervised paleontological resource monitoring, excavations, specimen preparation, specimen identification, and report writing for 80-mile power line.

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Chronology

URS Corporation, Principal Paleontologist, San Diego, California, 2007-Present.

PCR Services Corporation, Principal Paleontologist, Irvine, California, 2005-2007.

Jones and Stokes, Project Paleontologist, Sacramento, California, 2003-2005.

Natural History Museum of Los Angeles County, California, Assistant Curator of Vertebrate Paleontology, 1985-2003.

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APPENDIX B

RECORDS SEARCH REPORT FROM THE NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

NATURAL HISTORY MUSEUM
LOS ANGELES COUNTY

Vertebrate Paleontology Section
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26 September 2019

AECOM
401 West A Street, Suite 1200
San Diego, CA 92101

Attn: J.D. Stewart, Ph.D., Paleontologist

re: Paleontological resources for the proposed ICT Ash Hill Project, AECOM Project # 60534139 task 008, near Klondike, San Bernardino County, project area

Dear J.D.:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed ICT Ash Hill Project, AECOM Project # 60534139 task 008, near Klondike, San Bernardino County, project area as outlined on the portions of the Ash Hill and Siberia USGS topographic quadrangle maps that you sent to me via e-mail on 12 September 2019. We do not have any vertebrate fossil localities that occur within the proposed project area boundaries, but we do have localities at some distance from sedimentary deposits similar to those that occur in the proposed project area, either at the surface or at depth.

In the very southwestern portion of the proposed project area, and in places along the northern transect of the proposed project area, there are exposures of volcanic lava flows that will not contain recognizable fossils. In the rest of the proposed project area the surface deposits are composed of either coarse older Quaternary alluvial fan deposits or of younger Quaternary alluvial fan deposits along the drainages. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, and we have no vertebrate fossil localities anywhere nearby from these deposits. Our closest fossil vertebrate locality in somewhat similar deposits is LACM 1208, north-northwest of the proposed project area southwest of Crucero near the Mesquite Hills, that produced fossil specimens of horse, *Equus conversidens*, and camel, *Camelops*. Our next closest vertebrate fossil locality from similar deposits is LACM 3350, south-southwest of the

proposed project area west of Deadman Lake near Surprise Spring that produced fossil specimens of horse, *Equus*, camels, *Tanupolama* and *Camelops*, and bison, *Bison*,

Excavations in the igneous rocks exposed in the proposed project area will not encounter any recognizable fossils. Shallow excavations in the Quaternary alluvial fan deposits exposed in most of the proposed project area are unlikely to uncover significant vertebrate fossils. Deeper excavations in the latter areas that extend down into older and perhaps finer-grained Quaternary deposits, however, may well encounter significant fossil vertebrate remains. Any substantial excavations in the sedimentary deposits in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples from the proposed project area should also be collected and processed to determine the small fossil potential of the site. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice