INITIAL STUDY
FOR THE
PROJ-2022-00056
28 PALMS RANCH CAMPSITE PROJECT – CONDITIONAL USE PERMIT
APN: 0609-121-15 & 0609-121-14

Lead Agency:

County of San Bernardino
Land Use Services Department
385 N. Arrowhead Avenue, 1st Floor
San Bernardino, California 92415-0182

Applicant:

Erin Stevenson
28 Palms Ranch
P.O. Box 480
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Prepared By:

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June 2023

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TABLES

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LIST OF ABBREVIATIONS AND ACROYNMS

AAQS	Ambient Air Quality Standards
amsl	above mean sea level
APE	Area of Potential Effect
APN	Assessor Parcel Number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
BACMs	Best Available Control Measures
BLM	Bureau of Land Management
BMPs	Best Management Practices
BRA	Biological Resources Assessment
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CBC	California Building Code
CCAR	Climate Action Registry
CDFW	California Department of Fish & Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CUP	Conditional Use Permit
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
DTSC	Department of Toxic and Substance Control
EHR	Environmental Health Services
EIR	Environmental Impact Report
FHWA	Federal Highway Administration
FHSZ	Fire Hazard Severity Zone
FRA	Federal Responsibility Area
FTA	Federal Transit Administration
GCC	Global Climate Change
GHG	Greenhouse Gas
GSPs	Groundwater Sustainability Plans
LD	Land Development
LSTs	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MMRP	Mitigation Monitoring and Reporting Plan
MUSD	Morongo Unified School District

NAAQS	National Ambient Air Quality Standards
PRMMP	Paleontological Resources Monitoring and Mitigation Plan
PPV	peak particulate velocity
RCNM	Road Construction Noise Model
RL	Rural Living
RMS	root mean square
RWQCB	Regional Water Quality Control Board
SBCTA	San Bernardino County Transit Authority
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SGMA	Sustainable Groundwater Management Act
SOI	Sphere of Influence
SWPPP	Storm Water Pollution Prevention Program
TCR	Tribal Cultural Resource
TPWD	Twentynine Palms Water District
USFWS	U.S. Fish & Wildlife Services
UWMP	Urban Water Management Plan
VdB	velocity in decibels
VMT	Vehicle Miles Traveled
YSMN	Yuhaaviatam of San Manuel Nation

SAN BERNARDINO COUNTY
INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the California Environmental Quality Act (CEQA) Guidelines.

PROJECT LABEL

APNs:	0609-121-15 and 0609-121-14	***USGS Quad:***	Sunfair, CA
Applicant:	Erin Stevenson 28 Palms Ranch P.O. Box 480, Twentynine Palms, CA 92277 562-665-0480	***T, R, Section:***	T1N, R8E, Section 8
Location:	The project site is located on two parcels situated along Mesa Drive at the northeast corner of the intersection of Mesa Drive and Lori Lane. The project address is 68282 Mesa Drive, Twentynine Palms, CA 92277. The project is located in unincorporated San Bernardino County within the Twentynine Palms sphere of influence (SOI). The project coordinates are 34.179578º, -116.164731º. Figure 1 shows the project regional location, and Figure 2 shows the project site location.	***Thomas Bros:***	N/A
Project No:	PROJ-2022-00056	***Community Plan:***	N/A
Rep:	Jon Stevenson, Hightower Main: (949) 566-6211 x224; Direct: (949) 535-2748; Mobile: (562) 644-1894 Email: jon@hightowercorp.com	***LUZD:***	LU: Rural Living (RL) Zoning: Rural Living-5 Acre Minimum (RL-5)
Proposal:	Approval of a Conditional Use Permit for a Mongolian Yurt Campsite (5 new and 6 existing) with full camping accommodation including but not limited to barbecue's, covered picnic tables, outdoor showers, and restrooms and open fire rings within unincorporated San Bernardino County within the Twentynine Palms SOI.	***Overlays:***	Biotic Resources (BR) for Burrowing Owl; Desert Tortoise – Medium Population

PROJECT CONTACT INFORMATION

Lead Agency: County of San Bernardino
Land Use Services Department
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PROJECT DESCRIPTION

Introduction

This document is being prepared for the County of San Bernardino for the 28 Palms Ranch Campsite Project. The County will consider entitlements for the development of an Authentic Mongolian Yurt camping destination on two parcels (5-acres each) totaling 10-acres within the Twentynine Palms SOI of the County. The Applicant, 28 Palms Ranch, has partially developed the project site, which presently contains 6 existing developed Yurts within the easterly parcel (APN 0609-121-14) and the adjoining parcel to the west (APN 0609-121-15) presently contains

3 undeveloped Yurt structures with 2 new Yurts planned to be installed as part of the proposed project. The purpose for the proposed project is to obtain a Conditional Use Permit (CUP) from the County to comply with development code standards for campground establishments and to resume and expand operations of the existing campground within the two parcels.

Existing Site Conditions

The site aerial photo (Figure 2), in addition to the Existing Site Plan (Figure 3) were reviewed to assemble the following information. The project site is located on an alluvial fan. The proposed project slopes downward from west to east, with the elevation ranging from about 2,195' to 2,170' above mean sea level (amsl). The project site contains native vegetation outside of the fenced in single-family home area, with limited native vegetation existing within the fenced in single-family home area. Within the fenced area on the easterly 5-acre parcel, there are several ornamental trees surrounding the existing 1,500 square foot (SF) single-family residence (refer to Figure 2, which provides an aerial view at the project site level). The easterly parcel has been developed with 6 Mongolian Yurts north of the existing single-family home, in addition to dirt pathways providing vehicular access to each existing Yurt. There are a few outbuildings located throughout the site in support of the existing Yurts, with a covered carport and ground mounted solar array located within the fenced area on the easterly 5-acre parcel. An aerial view of the Yurt configuration on the easterly parcel is shown on Figure 4. The westerly 5-acre parcel also contains an existing 600 SF single-family residence located at the southeast corner of the westerly parcel, essentially in the middle of the overall project site along Mesa Drive. Additionally, 3 existing Yurts have been installed on the northern portion of the westerly parcel, but these existing Yurts are not yet connected to septic, water, or electrical systems. This is because the 3 existing Yurts on the westerly parcel have been erected for storage and are not operational at this time. These 3 Yurts will be fully developed as part of the proposed project. Thus, on the westerly parcel, and the Applicant plans to install 2 additional Yurts for a total of 5 Yurts on the Westerly Parcel. Each of these 5 Yurts will require modifications as part of the proposed project to get connected to the water distribution, electrical system, and septic systems.

The project is located in a rural area supported by a dirt roadway (Mesa Drive) providing access to the site. The project site is located immediately adjacent to an existing residential use to the west, with a second residential land use located just northwest of the project site.

The San Bernardino Countywide Policy Plan Land Use designation for the project site is Rural Living (RL). The zoning classification is Rural Living-5 Acre Minimum (RL-5). The land uses bordering the project site are outlined in Table 1 below, and photos of the project site and the surrounding uses are provided in the Photos Section, below:

Table 1
EXISTING LAND USE AND LAND USE ZONING DISTRICTS

Location	Existing Land Use	Countywide Plan Land Use & Zoning District
Project Site	Two single-family residences, in addition to six Mongolian Yurts	LU: Rural Living (RL) Zoning: Rural Living-5 Acre Minimum (RL-5)
North	Vacant Land covered in native vegetation. Northwest: Single-family Residence	LU: Rural Living (RL) Zoning: Rural Living-5 Acre Minimum (RL-5)
South	Vacant Land covered in native vegetation	LU: Rural Living (RL) Zoning: Rural Living-5 Acre Minimum (RL-5)
West	Single-family Residence	LU: Rural Living (RL) Zoning: Rural Living-5 Acre Minimum (RL-5)
East	Vacant Land covered in native vegetation. Further east: Single-family Residence	LU: Rural Living (RL) Zoning: Rural Living-5 Acre Minimum (RL-5)

Project Description

The proposed development and expansion of the 28 Palms Ranch Campsite Project would transform the 10-acre project site into a glamping campground site. The existing portion of the project has been operating without an approved Conditional Use Permit (CUP). As a result, the Applicant has been advised and directed by the County to cease all further expansion of the project until CEQA clearance is obtained and is approved under the Conditional Use Permit. Once the CUP is approved, the project would be required to adhere to all mitigation in the CEQA Mitigation Monitoring Reporting Plan (MMRP) and Conditions of Approval from all County Departments as codified in the CUP.

The project proposes to utilize the existing infrastructure and the 6 existing Yurts on the easterly parcel of the project site, and would install some new infrastructure in support of these existing Yurts, including connecting the existing Yurts to the new septic systems, in addition to the existing HomeBiogas system.[1] However, the majority of the infrastructure (water connections, septic system connections, and electrical connections) that will be installed as part of the project would also support the proposed installation of 2 new Yurts and utilization of the 3 existing Yurts on the westerly parcel. Each of the existing and new Yurts would be Authentic Mongolian Yurts made in Mongolia. The Yurts are structurally engineered to utilize an engineered rope system provided by the manufacturer to enable the Yurts to be bolted down to a 20-foot concrete pad with a 12” x 12” footing. This engineering enables the Yurts to withstand the harsh Mongolian climate with certified blueprints including wind and snow load (refer to Figure 5 for the Manufacturer’s Mongolian Yurt Specifications).

The proposed project would retain the two single-family homes that exist within the two parcels, with the Applicant, who also serves as the site caretaker and property manager, to reside in the easterly single-family residence within the site. The Applicant will retain the westerly single-family residence as living quarters for family but may transition the single-family residence to a long-term rental in the future. No pets would be allowed at the westerly single-family residence because it will remain unfenced.

Upon project build-out, each of the 11 Yurts would be about 19’ in diameter, and about 7’6” in height and would be installed on concrete slabs, but do not require mass grading to enable each new Yurt installation. When completed, the proposed project will consist of 11 Mongolian Yurts

[1] HomeBiogas, 2023. http://homebiogas.com/ (accessed 04/20/23)

with full camping accommodation provided for each Yurt. The accommodations include barbecues, covered picnic tables, outdoor showers, restrooms, and open fire rings. Each Yurt accommodation would include outdoor showers with insulated plumbing to protect against freezing temperatures in the winter months, in addition to indoor restroom/toilet facilities for each Yurt. The project would require installation of each of these amenities in conjunction with each of the 5 Yurts on the westerly parcel, while the existing 6 Yurts on the easterly parcel are presently outfitted with these amenities and must be brought up to County standards. All Yurts either have at present or will have smoke/carbon monoxide detectors and will be equipped with fire extinguishers. The existing 6 Yurts on the easterly parcel will provide a maximum of two parking spaces, with each of the 5 Yurts on the westerly parcel to provide a maximum two parking spaces in support of future guests of the property.

The total number of parking spaces provided for guests to accommodate all visitor needs is 2 spaces per Yurt (22 required parking spaces), which is currently accounted for plus overflow parking as the project provides 2 parking spaces for each Yurt in addition to 10 additional overflow parking spaces. Thus, the proposed project would ultimately provide 32 parking spaces in total. Parking for the easterly single-family residence is provided at the southeastern corner of the site adjacent to the residence, while parking for the westerly single-family residence is provided just west of the central site entrance along Mesa Drive, shown on Figure 6, the site plan.

Ingress and egress from the site is provided along Mesa Drive and a new entrance will be provided along Lori Lane. Site access would be clearly marked and illuminated with solar lights for evening use and for the internal onsite accessible roadways.

Most of the electrical needs on the easterly parcel, including the single-family residence and the 6 existing Yurts, are met with onsite solar production, however the whole of the project site has an existing connection to Southern California Edison's (SCE) existing electrical distribution system. The project may or may not install additional solar panels in the future to meet the needs of the existing and new Yurts on the westerly parcel proposed as part of this project. Regardless, new internal electrical connections from SCE and/or from additional solar panel installation will be required to support the overall project's electrical needs at build-out.

Restroom facilities at 6 of the existing Yurts on the easterly parcel are proposed to utilize aboveground HomeBiogas generators to dispose of wastewater and food products; however, if these systems are ultimately not approved for use by the County, the HomeBiogas system would be utilized in conjunction with up to 4 septic systems to process solid waste at each bathroom site. The use of the HomeBiogas generator reduces the total effluent to 1.2 liters per flush, accommodating up to 12 gallons of solid waste per day for a total capacity of 36 flushes per day. Each HomeBiogas system has a tank volume of 700 gallons. The solid effluent is organically digested into liquid form, which would then be discharged into the proposed septic systems. Additionally, the grey water from the sinks and showers will connect directly, through new lateral piping, into the new septic systems. A byproduct of the HomeBiogas system is Biogas, which would be used in support of stoves available to future guests, in addition to the open fire rings provided at each new Yurt. The proposed project would include HomeBiogas generators at each Yurt and all will tie into the septic systems for the 11 total Yurts ultimately proposed within the whole of the project site. Thus, the proposed project would install up to 5 new HomeBiogas generators, and 4 onsite septic systems to meet County sewage disposal requirements, shown on Figure 7. The additional 5 HomeBiogas systems would be installed in support of the 5 Yurts on the westerly parcel. The site currently contains 2 existing septic tank systems in support of the easterly primary residence and the westerly single-family residence. The existing septic systems will remain in place and will not be modified as part of the proposed project. Overall, each new

septic tank system will accommodate 2-3 Yurts, and it is anticipated that 4 new septic systems would be developed in support of the proposed project. These systems will be capable of handling about 900 gallons of waste per day or about 300 gallons per Yurt per day and will be developed in accordance with 2019 California Plumbing Code (Part 5, Title 24, California Code of Regulations) standards, which sets parameters for private sewage disposal, and in compliance with the San Bernardino County Development Code, Article 6. These systems have been sized to accommodate greater waste than is anticipated to be generated by each Yurt per day. Please refer to Table 2, below, which demonstrates the capacities of the two alternatives for wastewater disposal, described above, proposed for use by the project.

Table 2
WASTEWATER DISPOSAL SYSTEM ALTERNATIVES

	HomeBiogas	HomeBiogas + Septic	Existing Septic
Overall Tank Capacity	700 gallons	Up to 1,700 gallons	Up to 1,700 gallons
Total Number Proposed of System	11	4	2 existing systems
Daily Capacity	Solid Waste: 12 gallons	900 gallons of wastewater	900 gallons of wastewater
Daily Capacity needed to accommodate Project	Solid Waste: 10 gallons[2]	300 gallons of wastewater per septic system[1]	300 gallons of wastewater per septic system[1]

[1] Septic system capacity is based on showers being connected to the septic system, thereby requiring additional capacity (about 100 gallons per Yurt)
[2] HomeBiogas capacity is based on connection to toilet system only. Existing shower systems presently are discharged to a holding tank, and the tank is pumped and disposed of utilizing a pump connected to the existing septic system. This will continue under the proposed project either to the existing septic system or to the proposed septic system.
Notes: At most, the new septic systems would require emptying by a qualified septic plumber once every 2 years. A septic tank pumping provider, such as local provider Action Pumping, would be appointed to maintain and remove wastewater from exceeding septic tank capacities, thereby preventing excess wastewater from being leached out into soils.

The site is served with water service by the City of Twentynine Palms and electrical service by Southern California Edison (SCE). The existing single-family residence on the westerly parcel is served by a pre-existing water and electrical connections. The electrical and water connections will be extended in support of the 5 Yurts on the westerly parcel, as shown on Figure 8 (water connections) and Figure 9 (electrical connections). Thus, new internal water distribution and electrical connections will be required in support of the 5 westerly Yurts. This effort will require some trenching, but existing utility connections will also be utilized. All waterline and electric connections for the eastern parcel are pre-existing that connect to the existing Yurts and the existing single-family residence.

Construction

Project construction will begin with clearing and grubbing the sites for the individual Yurts, in addition to the areas that will provide access to the new Yurts. This activity will consist of removing the vegetation from the areas that will eventually support the 2 new Yurts, the 4 new septic systems, and the site access road areas, and installing a 20-foot concrete pad with a 12” x 12” footing; no mass grading required to facilitate the installation of the proposed Yurts. An estimated 2-3 workers will complete this phase of site preparation for a period of about 1-2 weeks. A concrete truck will be necessary for one day of construction during this period to install the concrete slabs. In addition to the clearing and grubbing described above, site development will include the installation of the 4 septic tanks to meet County requirements for onsite wastewater management. The 4 septic systems would be installed at various points within the whole of the project site to support the 11 total Yurts onsite. The existing waterline and electrical system will

be extended within the westerly parcel in support of the 5 Yurts on this portion of the site through trenching, no greater than 2-3 feet in depth. Excavation will be required in support of the 4 septic systems, with an excavation depth of no greater than 10 feet. These utilities (electrical, water, and septic system connections) will require a backhoe and 2-3 workers for a period of 2-3 weeks. Construction equipment utilized for the above activities includes a small tractor, a small trencher, and a backhoe.

The internal roadways would be installed through surface grading with a small tractor to enable the continuation of internal access roads from the easterly parcel to the westerly parcel. During this effort, vegetation will be avoided to the extent feasible to maintain the native landscape within the site. It is anticipated that this effort will require 1-2 weeks with 1 worker to complete. The 2 new Yurts will be assembled/installed onsite over a period concurrent with other construction activities over a period of about 1 week by 1-2 workers. Appropriate living equipment and furniture will be installed in each of the 2 new Yurts. Desert-appropriate landscaping will be installed throughout the whole of the site, including non-invasive, shrubs and other plants native to the region. No asphalt or paving is proposed, and access roads and parking areas will be surface graded, and if fugitive dust is observed, access roads will be covered with compacted pea gravel, sprayed with water, or utilize other means of dust minimization. This is required to manage fugitive dust as a result of the fine particulate matter (PM-10) non-attainment status of the Mojave Desert area, which therefore requires that Best Available Control Measures (BACMs) be used to comply with the Mojave Desert Air Quality Management District (MDAQMD) Rule 403.

Construction timing: Design and construction of the project is anticipated to be begin at the beginning July of 2023 completed by August of 2023.

Operation

The applicant intends to be fully operational as the proposed 28 Palms Ranch Campsite by August of 2023. The facility will be open daily for guests. A property manager will be available onsite 24-hours and will handle daily operations and units will be visited daily for cleaning and maintenance. Check-In for guests arriving at the Campsite is 3:00 PM and Check-Out for guests departing from the Campsite is 11:00 AM. Guest activities will be required to be reduced for quite time at 10 PM each evening. The property manager enforces this requirement to ensure compliance with San Bernardino County Code Section 83.01.080, which pertains to noise reduction compliance. A maximum occupancy of 48 guests will be allowed at the 28 Palms Ranch Campsite. The project would support a total of 3 full-time employees, with 1 part-time employee that would be utilized on an as needed basis for maintenance and landscaping purposes.

Project Site Location, Existing Site Land Uses and Conditions (include site photos)

Photo 1: Aerial view of easterly parcel showing the existing Yurt configuration

Photo 2: Northwest view from 28 Palms Ranch Property

Photo 3: Southeast view of 28 Palms Ranch Property showing existing Yurt setup

Photo 4: Southwest view of 28 Palms Ranch Property showing existing Yurt and amenity setup

Photo 5: Northeast view of 28 Palms Ranch Property

Photo 6: Northwest view of 28 Palms Ranch Property showing existing single-family home at the southeast corner of the Property and the existing Yurt configuration on the easterly parcel

Photo 7: Southeast view of 28 Palms Ranch Property viewing Mesa Drive

Photo 8: Northeast view of 28 Palms Ranch Property

Photo 9: Southwest view from 28 Palms Ranch Property showing nearby hills viewing Mesa Drive

Photo 10: Northwest view of 28 Palms Ranch Property showing the westerly single-family residence on the property

Photo 11: Southeast view from the 28 Palms Ranch Property of the nearby hills and mountains viewing Mesa Drive

Photo 12: Southwest corner of the 28 Palms Ranch Property viewing nearby Copper Mountain

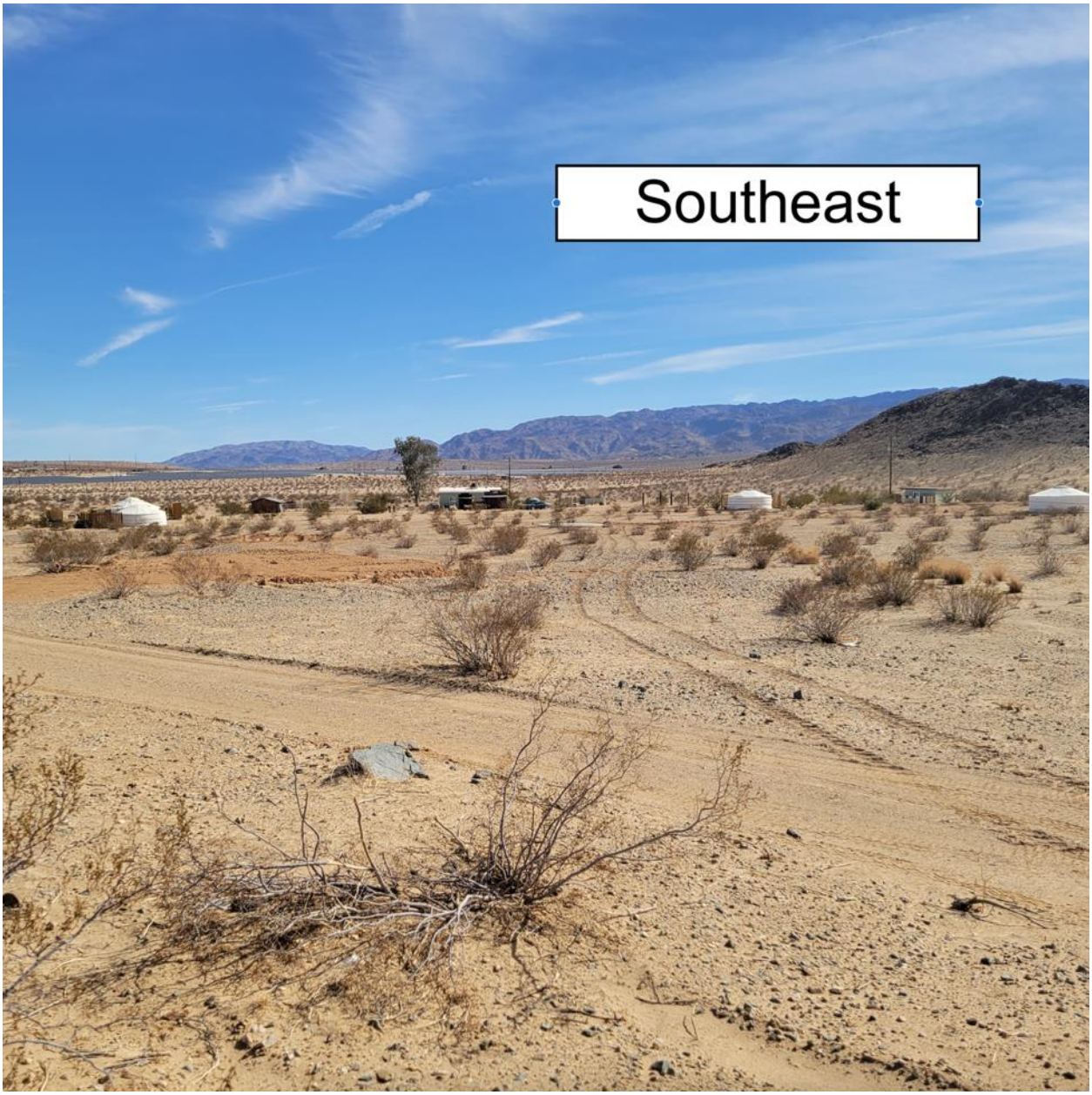


Photo 13: Southeast view of the 28 Palms Ranch Property of the nearby hills and mountains

Photo 14: South/Southeast view from 28 Palms Ranch Property

Photo 15: Nearest Neighbor to 28 Palms Ranch along the western property boundary

ADDITIONAL APPROVALS THAT MAY BE REQUIRED BY OTHER PUBLIC AGENCIES

(Example: permits, financing approvals or participation agreements.)

- San Bernardino County Fire Department: Project Approval
- The U.S. Fish and Wildlife Service (USFWS) and/or CDFW may need to be consulted regarding threatened and endangered species that may occur within an area of potential effects (APE). This could include consultations under the Fish and Wildlife Coordination Act.
- No other permits are known to be required at this location because the project would not result in the disturbance of more than one acre of soil/land during construction. Thus, no Storm Water Pollution Prevention Plan (SWPPP) or Water Quality Management Plan (WQMP) are required.

SUMMARY OF CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

AB 52 began on December 6, 2022. The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) and Morongo Band of Mission Indians (MBMI) requested several items to determine the significance of resources that could be discovered and disturbed as a part of project construction and operations. Ultimately, the County, at time of Public Review, was still in the Consultation status with MBMI and was awaiting on MBMI for final input. However, if in the event that MBMI provides final input with recommended mitigation during the Public Review process, the County will then accept and incorporate MBMI mitigation into the Final Initial Study. The YSMN responded in January 2023 to the County's initial AB 52 consultation letters, requesting incorporation of their standard mitigation measures, to which the proposed project must adhere.

EVALUATION FORMAT

This Initial Study is prepared in compliance with the California Environmental Quality Act, Public Resources Code section 21000, et seq. (CEQA) and the State CEQA Guidelines, California Code of Regulations section 15000, et seq. specifically, the preparation of an Initial Study is guided by Section 15063 of the CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based on its effect on 18 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

1. **No Impact**: No impacts are identified or anticipated and no mitigation measures are required.

2. **Less than Significant Impact**: No significant adverse impacts are identified or anticipated and no mitigation measures are required.

3. **Less than Significant Impact with Mitigation Incorporated**: Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List of mitigation measures)

4. **Potentially Significant Impact**: Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (List of the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

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

Jon Braginton — 06/06/2023

Signature (Jon Braginton, Plannner) — Date

Chris Warrick — 6/12/2023

Signature (Chris Warrick, Supervising Planner) — Date
Land Use Services Department/Planning Division

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

I. AESTHETICS

SUBSTANTIATION: (Check ☐ if project is located within the view-shed of any Scenic Route listed in the General Plan) San Bernardino County, 2020. *San Bernardino Countywide Plan, Final Environmental Impact Report.* https://countywideplan.com/resources/document-download/ (accessed 05/17/23)

a. *Less Than Significant Impact* – Adverse impacts to scenic vistas can occur in one of two ways. First, an area itself may contain existing scenic vistas that would be altered by new development. The project site contains native vegetation outside of the fenced in single-family home area, with limited native vegetation existing within the fenced in single-family home area. A review of the project area determined that there are no scenic resources located internally within the area proposed for the development of the Campsite. A scenic vista impact can also occur when a scenic vista can be viewed from the project area or immediate vicinity and a proposed development may interfere with the view to a scenic vista. As shown in the Photos 1 through 16, the views surrounding the project site can be characterized by Copper Mountain to the southwest of the project site, with the Little San Bernardino Mountains located father to the south of the project site, and native vegetation characteristic of the Desert Region of San Bernardino County. Thus, as the project is situated in the Morongo Basin of San Bernardino County in an area containing rural residential uses, the proposed project site does not contain any internal scenic vistas.

Hills, ridges and mountains are visible to the west, east, and south (towards Joshua Tree National Park). Development at this location would not interfere with the mountain views experienced in this area, because the Yurts are low to the ground with a maximum height of 7'6" and will not interfere substantially with the long-distance views. Furthermore, the installation of 2 new Yurts and utilization and operation of the 3 existing Yurts on the westerly parcel, in addition to the existing 6 operational Yurts on the easterly parcel would not substantially change the character of the site because it would conform to that which exists at present. Given that there are no pristine viewpoints in the vicinity of the project from which to observe the mountain vistas, the development of the low height Campsite in this area of the County is not considered significant. As such, implementation of the proposed development is not expected to cause any substantial effects on any important scenic vistas. This potential impact is considered a less than significant adverse aesthetic impact. No mitigation is required.

b. *Less Than Significant Impact* – The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway corridor. The project site is located along Mesa Drive at the southeast corner of the intersection of Mesa Drive and Lori Lane, neither of which are considered by the State to be a scenic highway. The County's recently adopted General Plan—the "Countywide Plan"[2]—identifies several county scenic routes as shown on Figure I-1, and Highway 62 is designated as a county scenic route in this area, and as an eligible state scenic highway. The proposed project would be compatible with the Countywide Policy Plan visual resource and aesthetic policies including:

- **Policy LU-2.1 Compatibility with existing uses.** We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.
    - The proposed project is at a similar scale as the surrounding rural residential uses.
- **Policy LU-2.4 Land use map consistency.** We consider proposed development that is consistent with the Land Use Map (i.e., it does not require a change in Land Use Category), to be generally compatible and consistent with surrounding land uses and a community's identity. Additional site, building, and landscape design treatment, per other policies in the Policy Plan and development standards in the Development Code, may be required to maximize compatibility with surrounding land uses and community identity.
    - The proposed project is compatible with the land use map designation.
- **Policy LU-4.7 Dark skies.** We minimize light pollution and glare to preserve views of the night sky, particularly in the Mountain and Desert regions where dark skies are fundamentally connected to community identities and local economies. We also promote the preservation of dark skies to assist the military in testing, training, and operations.
    - The proposed project would not utilize extensive night lighting; thus, promoting dark skies due to the limited nighttime operating hours. Furthermore, the proposed use is one that would benefit from dark skies.
- **Policy LU-4.1 Context-sensitive design in the Mountain/Desert regions.** We require new development to employ site and building design techniques and use building materials that reflect the natural mountain or desert environment and preserve scenic resources.
    - The proposed project would be installed to be compatible with the types of surrounding uses.
- **Policy NR-4.1 Preservation of scenic resources.** We consider the location and scale of development to preserve regionally significant scenic vistas and natural features, including prominent hillsides, ridgelines, dominant landforms, and reservoirs.
    - As discussed under this topic, the proposed project would not conflict with the preservation of scenic resources.
- **Policy NR-4.3 Off-site signage.** We prohibit new off-site signage and encourage the removal of existing off-site signage along or within view of County Scenic Routes and State Scenic Highways.
    - The proposed project would not install offsite signage, thus meeting the provisions of this policy. The proposed project would not result in a significant change in view shed in the vicinity of any County Scenic Route (Highway 62).

A review of the project area suggests that the proposed project would not be visible from Highway 62 due to the 3-mile distance from Highway 62, as the proposed project would be installed at such a small scale given the surrounding open landscape, thus minimizing the views to the site from the highway to the project site. As described above, the proposed project would comply with the Countywide Policy Plan, and by the standards of the San Bernardino Countywide Plan PEIR, the proposed project would have a less than significant potential to damage scenic resources within a state or County scenic highway.

[2] San Bernardino County, 2020. San Bernardino Countywide Plan. http://countywideplan.com/theplan/ (accessed 04/20/23)

Furthermore, no historic buildings are located within the area proposed that would be disturbed as part of the proposed project. No rock outcroppings would be impacted by the proposed project, as none have been observed within the project site. As stated under issue (a), above, the proposed project consists of desert scrub vegetation, with no trees on site that would fall under the County's tree ordinance. No other scenic resources have been identified on the site. Therefore, the project would have a less than significant potential to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

c. *Less Than Significant Impact* – The proposed Campsite is located in a rural desert environment. The proposed project is located in a relatively sparsely developed portion of the County, and according to the State Office of Planning and Research "Site Check," it does not meet the legal criteria for an urbanized area. Refer to Figure 3, which depicts an aerial view to the project area.

   Furthermore, by developing this vacant site in accordance with the proposed Campsite design, this site will provide visitors with an opportunity inhabit the surrounding desert environment first-hand and intimately. Thus, with the design elements incorporated, the project will minimize the potential aesthetic impacts to a less than significant level.

d. *Less Than Significant Impact* – Implementation of the proposed project will create only limited new sources of light during the occupancy phase of the project. Existing sources of light in the project area include nearby rural residences and occasional headlights from the adjacent roadways. The San Bernardino County Development Code requires new projects to adhere to the provisions of the Chapter 83.07.060 Glare and Outdoor Lighting – Mountain and Desert Requirements. The Development Code requires that outdoor lighting to meet shielding requirements, light pollution standards, automated control standards, dark sky curfew, and other requirements. While the proposed project will generate a new source of lighting, including low level solar path lighting along the site access roads and in support of Yurt Campsites on the westerly portion of the site, and new low level efficient lighting inside each of the Yurts and in support of the restroom facilities, the project lighting will occur in a background of rural residences where lighting is not intrusive. No mitigation will be required for lighting at this location and with County Development Code compliance, potential light and glare impacts associated with the proposed project will be a less than significant impact.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Will the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

II. AGRICULTURE AND FORESTRY RESOURCES

SUBSTANTIATION: San Bernardino County, 2020. *San Bernardino Countywide Plan, Final Environmental Impact Report.* https://countywideplan.com/resources/document-download/ (accessed 05/17/23) (Check ☐ if project is located in the Important Farmlands Overlay)

a-e. *No Impact* – The proposed project is located in an area that is sparsely developed which is consistent with the Campsite use at this site. Neither the project site nor the adjacent and surrounding properties are designated for agriculture or forest/timber uses (refer to Figure II-1, the Countywide Plan Agricultural Resources Map). No agricultural activities or timber harvesting activities exist in the project area; and there is no potential for impact to any agricultural or forest/timber uses or values as a result of project implementation. No adverse impact to any agricultural resources or forest/timber would occur from implementing the proposed project. No mitigation is required.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Will the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

III. AIR QUALITY

SUBSTANTIATION: California Air Resources Board (5/4/16); Victorville Station: Ozone, CO, NO2, PM-10, PM-2.5; data: www.arb.ca.gov/adam/; Urban Crossroads, November 16, 2021. *Victorville Residential Air Quality Impact Analysis City of Victorville.* (Appendix 1)

Air Quality Standards

Existing air quality is measured at established Mojave Desert Air Quality Management District (MDAQMD) air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table III-1. Because the State of California had established Ambient Air Quality Standards (AAQS) several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table III-1. Sources and health effects of various pollutants are shown in Table III-2.

Table III-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Average Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter (PM2.5)[9]	24 Hour	–	–	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	–	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	–	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	–	Ultraviolet Flourescense; Spectrophotometry (Paraosaniline Method)
	3 Hour	–		–	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Lead 8[12,13]	30-Day Average	1.5 µg/m^3	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Avg	–		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No Federal Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: California Air Resources Board (5/4/16)
Footnotes:

1 California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM10, PM2.5, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year, with a 24-hour average concentration above 150 $\mu g/m^3$, is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7 Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

8 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9 On December 14, 2012, the national PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primarily and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primarily and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11 On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12 The ARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 j.tg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.

Table III-2
HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Baseline Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin, or in the case of the Morongo Basin pollution transported into the desert from the South Coast Air Basin. Limited air quality data is

available for the Morongo Basin, so ambient air quality data is taken for the Victor Valley. This location is in the Mojave Desert but is some distance from the Morongo Basin.

Monitoring of air quality in the Mojave Desert Air Basin (MDAB) is the responsibility of the Mojave Desert Air Quality Management District (MDAQMD) headquartered in Victorville, California. Existing levels of criteria air pollutants in the project area can generally be inferred from measurements conducted at the Victorville Station at 14306 Park Avenue. Although the Victorville Station monitors most of the spectrum of pollutants, data for CO is no longer monitored in the Mojave Desert. Table III-3 summarizes the last three years of monitoring data from the available data for this Victorville monitoring station. From these data one can infer that baseline air quality levels near the project site are occasionally unhealthful, but that such violations of clean air standards usually affect only those people most sensitive to air pollution exposure.

a. Photochemical smog (ozone) levels occasionally exceed standards. The 8-hour state ozone standard has been exceeded approximately 7 percent of all days in the last three years while the 1-hour state standard has been exceeded less than one percent of all days. The 8-hour federal standard has been exceeded approximately 5 percent of all days in the past three years. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade.
b. Respirable dust (PM-10) levels often exceed the state standard of 50 $\mu g/m^3$ but the less stringent federal PM-10 standard of 150 $\mu g/m^3$ is violated with much less frequency. However, given the high Max. 24-Hour concentrations it is clear that PM-10 is still of concern.
c. A substantial fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). There has only been one measured violation in the last three years.

Although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within the reasonably near future.

Table III-3
AIR QUALITY MONITORING SUMMARY (2017-2020)
(NUMBER OF DAYS STANDARDS WERE EXCEEDED, AND MAXIMUM LEVELS DURING SUCH VIOLATIONS)

Pollutant/Standard	2017	2018	2019	2020
Ozone				
1-Hour > 0.09 ppm (S)	0	5	3	4
8-Hour > 0.07 ppm (S)	17	55	29	35
8- Hour > 0.075 ppm (F)	7	27	13	17
Max. 1-Hour Conc. (ppm)	0.088	0.107	0.104	0.112
Max. 8-Hour Conc. (ppm)	0.082	0.096	0.081	0.094
Nitrogen Dioxide				
1-Hour > 0.18 ppm (S)	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.057	0.051	0.056	0.059
Inhalable Particulates (PM-10)				
24-Hour > 50 $\mu g/m^3$ (S)	na	na	na	na
24-Hour > 150 $\mu g/m^3$ (F)	1	1	2	2
Max. 24-Hr. Conc. ($\mu g/m^3$)	182.5	165.2	170.0	261.4
Ultra-Fine Particulates (PM-2.5)				
24-Hour > 35 $\mu g/m^3$ (F)	0	0	0	4
Max. 24-Hr. Conc. ($\mu g/m^3$)	27.2	32.7	17.8	48.4

Notes:
na = not available; S=State Standard; F=Federal Standard
Source: Victorville Station: Ozone, CO, NO2, PM-10, PM-2.5; data: www.arb.ca.gov/adam/

Air Quality Standards

The Mojave Desert AQMD has adopted numerical emissions thresholds as indicators of potential impact even if the actual air quality increment cannot be directly quantified. The MDAQMD thresholds are as follows:

Carbon Monoxide (CO)	548 pounds/day	100 tons/year
Nitrogen Oxides (NOx)	137 pounds/day	25 tons/year
Sulfur Oxides (Sox)	137 pounds/day	25 tons/year
Reactive Organic Gases (ROG)	137 pounds/day	25 tons/year
Particulate Matter (PM-10)	82 pounds/day	15 tons/year
Particulate Matter (PM-2.5)	65 pounds/day	12 tons/year
GHG	548,000 pounds/day	100,000 tons/year

Impact Analysis

a. *Less Than Significant Impact –*

Compliance with MDAQMD Air Quality Plan
The proposed project would not conflict with or obstruct implementation of the MDAQMD Air Quality Management Plan (AQMP). The CEQA Handbooks provide the following two criteria to determine if a project is consistent with the AQMP:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Criterion 1 – Increase in the Frequency or Severity of Violations
The proposed project would ultimately include the operation of 11 Yurts, of which 6 are operational at present, 3 have been installed, but are not operational, and 2 have not yet been installed. The project site is presently and will continue to be utilized by tourists visiting Joshua Tree National Park. For analysis purposes it is assumed that 22 vehicles will visit the site on average and drive a total of 400 miles per day. The only other two sources of emissions are electricity consumption (electricity emissions are not generated locally, and overall would be minimized through the use of existing solar panels, with even greater electricity minimization as a result of a possible second solar array to be developed on site) and generation of fugitive dust from dirt roads. Based on the minimal amount of activity related to this project, local pollutant concentrations would not be projected to exceed the MDAQMD air quality standards. Therefore, based on the information provided above, the proposed project would be consistent with the first criterion.

Criterion 2 Exceed Assumptions in the AQMP
Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The proposed project is consistent with the current land use designation and would not require a General Plan Amendment or zone change. As such, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the MDAQMD AQMP. Therefore, a less than significant impact will occur in relation to implementation of the AQMP. However, note that due to violations of ozone and particulate standards (nonattainment) in the MDAB,

mitigation is provided to address particulates which are generated locally. Ozone is a secondary pollutant that is transported into the MDAB from the South Coast Air Basin and is not subject to local emission controls.

b. *Less Than Significant With Mitigation Incorporated* – The project site is approximately 10 acres in size. Due to the nature of the Yurt structures proposed to operate and be installed as part of the project, there will be no mass grading proposed for this project. The area where the Yurts will be installed will be cleared and fine graded to provide a stable foundation for the Yurts, which will consist of a 20-foot concrete pad with a 12" x 12" footing for each new Yurt. Additionally, the internal roadways would be installed through surface grading with a small tractor to enable the continuation of internal access roads from the easterly parcel to the westerly parcel, septic systems would be excavated, and internal utilities (water, electric, and septic connections) will be installed utilizing tractor, a small trencher, and a backhoe. The whole of construction is anticipated to result in minimal emissions will be associated with site preparation. To control fugitive dust during site preparation, a mix of water or soil stabilizers will be utilized, enforced by **MM AQ-1**.

Similarly, ozone precursor emissions (ROG and NOx) are assumed to be below MDAQMD CEQA thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control options are defined in **MM AQ-2**. With the implementation of mitigation measures, any impacts related to construction emissions are considered less than significant. No further mitigation is required.

Long-Term Operational Air Quality Impacts

The proposed project would consist of operating a Campsite on the property as outlined in the project description. The proposed project would generate air emissions from area sources (vehicles accessing the site) and energy usage. Mitigation to minimize operational impacts, through the use of energy star heating, cooling, lighting, and appliances, shall be implemented. Thus, with the implementation of **MM AQ-3**, a less than significant regional air quality impact would occur from operation of the proposed project.

To provide some quantitative air quality information about the proposed project we can use some emission forecast data from the City of Victorville (the Air Quality Impact Analysis for which is provided as Appendix 1). The project evaluated is a 210-lot single-family residential project proposed on a 60-acre project site. Using CalEEMod2020 daily and annual emissions were compiled. The resulting emission are shown in the following table.

Table III-4
ANNUAL EMISSIONS SUMMARY AND SIGNIFICANCE THRESHOLDS

Emissions Source	Total Emissions (tons per year)						
	ROG	NOx	CO	Sox	PM_{10}	$PM_{2.5}$	CO_2e
Year 1 Construction Emissions (2023)	0.34	2.83	3.16	0.01	0.54	0.25	719
Year 2 Construction Emissions (2024)	0.30	2.26	3.06	0.01	0.43	0.17	737
Year 3 Construction Emissions (2025)	1.06	0.52	0.80	<0.01	0.09	0.04	165
Total Operational Emissions	1.72	0.96	5.47	0.01	1.13	0.32	1,454
Significant Emissions Threshold	**25**	**25**	**100**	**25**	**15**	**12**	**100,000**

Source: Urban Crossroads, November 16, 2021. *Victorville Residential Air Quality Impact Analysis City of Victorville.* (Appendix 1)

Table III-5
DAILY EMISSIONS SUMMARY AND SIGNIFICANCE THRESHOLDS

Emissions Source	Total Emissions (tons per year)						
	ROG	NOx	CO	Sox	PM_{10}	$PM_{2.5}$	CO_2e
Year 1 Construction Emissions (2023)	3.39	34.55	28.62	0.06	9.08	5.14	6,459
Year 2 Construction Emissions (2024)	2.45	17.00	24.25	0.06	3.33	1.34	6,352
Year 3 Construction Emissions (2025)	56.78	15.95	23.64	0.06	3.24	1.26	6,249
Total Operational Emissions	10.42	6.53	37.65	0.08	6.60	1.98	9,533
Significant Emissions Threshold	**137**	**137**	**548**	**137**	**82**	**65**	**548,000**

Source: Urban Crossroads, November 16, 2021. *Victorville Residential Air Quality Impact Analysis City of Victorville.* (Appendix 1)
Notes:
ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NOx: oxides of nitrogen; CO: Carbon monoxide; Sox: oxides of sulfur; PM_{10}: particulate matter less than 10 micrometers in diameter; $PM_{2.5}$: particulate matter less than 2.5 micrometers in diameter; and CO_2e: Carbon dioxide equivalent.

The 28 Palms Ranch Campsite Project is 10 acres in size, it will not be mass graded and all 11 Yurts will not be continuously occupied like a residence. Furthermore, the two single-family residences within the project site are existing, and the uses for which would not be altered as a part of the proposed project. In comparison to the 210-unit residential project site, the 13 units (11 Yurts and 2 residences) as a whole represent a mere 5% in density, when compared to the 210 units of the Victorville project. Thus, operationally, the proposed project would represent 5% of the total operational emissions for each criterion pollutant forecast for the operation of the Victorville Project. Furthermore, while the size of the project site to be developed would be roughly one sixth the size of the Victorville project, the ground surface that would be disturbed as a result of project construction (surface grading with a small tractor, excavation, and utilization of a tractor, a small trencher, and a backhoe), would, at less than one acre for the project, represent approximately 1.7% of the intensity of construction forecast for the Victorville Project, and thereby would represent approximately 1.7% of the total construction emissions for each criterion pollutant forecast for the construction of the Victorville Project. Using this value, the construction and operational emissions would all be reduced even further below annual and daily emissions thresholds. It is clear through this relative comparison that emissions from the Camp Site project will be very low.

Conclusion
With the incorporation of **MMs AQ-1, AQ-2** and **AQ-3**, the development of the proposed project would have a less than significant potential to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

c. *Less Than Significant Impact* – Due to the limited construction activities and minimal occupancy emissions from this project, no potentially significant source of local emission can occur. Over the long-term criteria emissions will not be increased to a significant level locally. No additional mitigation is required.

Toxic Air Contaminants Impacts from Construction
The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk assessment methodology. It should be noted that the most current cancer risk assessment methodology recommends analyzing a 30-year exposure period for the nearby sensitive receptors.

Given that that proposed project would utilize only small-to-medium duty construction equipment, the distance at which construction equipment would operate to the nearby sensitive receptors (about 150 feet from the nearest area in which construction equipment will be utilized within the site (refer to Figure 3, the site plan), and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 30 or 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. As such, construction of the proposed project would result in a less than significant exposure of the nearby sensitive receptors to toxic air contaminants.

d. *Less Than Significant Impact* – The proposed project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Construction-Related Odor Impacts
Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints, and solvents and from emissions from diesel equipment. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Due to the transitory nature of construction odors, a less than significant odor impact would occur and no mitigation would be required.

Operations-Related Odor Impacts
The proposed project would consist of the development of a Campsite and occupancy by tourists accessing the National Park and other features of the local desert. No significant odor generation for this use is expected and no impact related to odors would occur during the ongoing operations of the proposed project. Therefore, a less than significant odor impact would occur and no mitigation would be required.

Mitigation Program

MM AQ-1 **Fugitive Dust Control. The following measures shall be incorporated into Project plans and specifications for implementation:**

- **Apply soil stabilizers or moisten inactive areas.**
- **Water exposed surfaces to avoid visible dust leaving the construction site (at least 2-3 times/day).**
- **Cover any stock piles with tarps at the end of each day and as needed during the construction day.**
- **Provide water spray during loading and unloading of earthen materials.**
- **Require the contractor to minimize in-out traffic from construction zone to the extent feasible and enforce a speed limit of 10 MPH on site to avoid dust migration from the site.**

MM AQ-2 **Exhaust Emissions Control. The following measures shall be incorporated into Project plans and specifications for implementation:**

- **Utilize off-road construction equipment that has met or exceeded the maker's recommendations for vehicle/equipment maintenance schedule.**
- **Contactors shall utilize Tier 3 or better heavy equipment.**
- **Enforce 5-minute idling limits for both on-road trucks and off-road equipment.**

MM AQ-3 **The Project shall incorporate Energy Star heating, cooling, lighting devices, and appliances, where applicable.**

Therefore, no significant adverse impacts are identified or anticipated with implementation of the above mitigation measures.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IV. BIOLOGICAL RESOURCES: Will the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

IV. BIOLOGICAL RESOURCES

SUBSTANTIATION: (Check if project is located in the Biological Overlay or contains habitat for any species listed in the California Natural Diversity Database ☒): The project is located in the County's Biological Overlay for Burrowing Owl and Desert Tortoise: Medium (Figure IV-1). The following information is provided based on a study titled "*Twentynine Palms Yurt Campground San Bernardino County, California (Assessor Parcel Number 0609-121-15-00100, Totaling 5 Acres) Biological Resources Assessment" (BRA)* prepared by ELMT Consulting, Inc. dated March 2023, provided as Appendix 2.

General Site Conditions

The survey area supports a mixture of undeveloped, developed, and disturbed land. According to historic aerials the southern portion of the site has supported minimal development since at least 1994, and

scattered development has expanded throughout the site since at least 2009. During the field investigation one (1) plant community was observed within the boundary of the project site: creosote bush scrub. In addition, the site supports three (2) land cover types that would be classified as disturbed and developed.

Vegetation
The creosote bush scrub plant community occurs consistently throughout the site. This plant community supports very rocky soils and is dominated by creosote (*Larrea tridentata*). Other common plant species observed in this plant community include Mormon tea (*Ephedra nevadensis*), devil's spineflower (*Chorizanthe rigida*), white rhatany (*Krameria bicolor*), and big galleta (*Hilaria rigida*).

Disturbed land generally refers to areas that have been subject to a high level of anthropogenic disturbances from foot traffic, vehicular access, and activities associated with current and former site development. Disturbed areas on-site include unpaved paths throughout the site and graded areas associated with proposed Yurt installation. These areas are generally unvegetated or support ruderal/weedy plant species. Species observed in the disturbed areas of the site include Mediterranean grass *(Schinus arabicus*) and Saharan mustard (*Brassica tournefortii).*

Developed areas generally encompass all buildings/structures and associated landscaping, parks, and paved or otherwise impervious surfaces. Within the project footprint, developed areas are concentrated within the eastern portion of the project site and include all areas of the six existing Yurts and their associated facilities, in addition to the residence on the eastern portion of the project site, and the second residence on the southwestern portion of the project site. Plant species supported by developed areas have been intentionally installed and include species such as desert willow (*Chilopsis linearis*), eucalyptus (*Eucalyptus sp.*), palo verde tree (*Parkinsonia sp.*), and cottonwood (*Populus augustifolia*).

Wildlife
Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed during the field survey or that are expected to occur within the project site.

Fish: No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) with frequent sources of water that would provide suitable habitat for fish were observed on or immediately adjacent to the survey area. Therefore, no fish are expected to occur and are presumed absent from the project site.

Amphibians: No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or immediately adjacent to the survey area. Therefore, no amphibians are expected to occur on the project site and are presumed absent.

Reptiles: The creosote bush scrub plant community provides suitable foraging and nesting habitat for a variety of reptilian species adapted to conditions within the Mojave Desert. No reptilian species were observed during the field investigation. Common reptilian species that could be expected to occur include common side- blotched lizard (*Uta stansburiana elegans*), desert horned lizard (*Phrynosoma platyrhinos calidiarum*), Great Basin collard lizard (*Crotaphytus bicinctores*), Great Basin whiptail (*Aspidoscelis tigris tigris*), southwestern speckled rattlesnake (*Crotalus mitchellii*), northern Mohave rattlesnake (*Crotalus scutulatus scutulatus*) and Great Basin gopher snake (*Pituophis catenifer deserticola*).

Birds: The creosote bush scrub plant community provides suitable foraging and nesting habitat for a variety of resident and migrant bird species adapted to conditions within the Mojave Desert. The only avian species observed onsite include mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*). Common species expected to occur include horned lark (*Eremophila alpestris*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), turkey vulture (*Cathartes aura*), Say's phoebe (*Sayornis saya*), verdin (*Auripes flaviceps*), white-crowned sparrow (*Zonotrichia leucophrys*), and yellow-rumped warbler (*Setophaga 39roject39*).

Mammals: The creosote bush scrub plant community provides suitable foraging and nesting habitat for a variety of mammalian species adapted to conditions within the Mojave Desert. Most mammal species are nocturnal and are difficult to observe during a diurnal field visit. Common mammalian species detected during the field investigation include coyote (*Canis latrans*), and desert kangaroo rat (*Dipodomys deserti*). Other common mammalian species that have the potential to occur on-site include black-tailed jackrabbit (*Lepus californicus*), white-tailed antelope ground squirrel (*Ammospermophilus leucurus*), and desert cottontail (*Sylvilagus audubonii*).

Impact Analysis

a. *Less Than Significant With Mitigation Incorporated* –

Sensitive Biological Resources

Special Status Wildlife
A BRA survey was conducted by ELMT Consulting in March 2023 to identify potential habitat for special status wildlife and habitats within the project area. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species. The literature search identified five (5) special-status plant species, five (5) special-status wildlife species, and no special-status plant communities as having the potential to occur within the Sunfair quadrangle.

Special Status Plant Communities
According to the California Natural Diversity Data Base (CNDDB) and California Native Plant Society (CNPS), 5 special-status plant species have been recorded in the Sunfair quadrangle (refer to Appendix C of the BRA). No special-status plant species were observed on-site during the field investigation. Based on habitat requirements for the identified special-status species, and known distributions, it was determined that the creosote bush scrub plant community supported by the project site has a low potential to support Utah vine milkweed (*Funastrum utahense*; CNPS Rare Plant Rank 4.2), little San Bernardino Mountains linanthus (*Linanthus maculatus* ssp. *Maculatus*; CNPS Rare Plant Rank 1B.2), and western Joshua tree (*Yucca brevifolia*; CNPS Rare Plant Rank considered by rejected [CBR]). Further, it was determined that the project site does not have potential to support any of the other special-status species documented as occurring within the vicinity of the project site.

None of the aforementioned special-status plant species are federally or State listed as endangered or threatened and have only been listed by the CNPS as Rare Plant Rank species. These species are not regulated under the federal or state Endangered Species Acts. In an effort to increase coverage for unlisted but regionally sensitive plants under CEQA, the CNPS began publishing sensitivity rankings for special-status plant species. These species, therefore, do not rise to the level of a species of concern under CEQA. Project impacts to the aforementioned species, if found, would therefore be less than significant, and no mitigation is required. No focused surveys are recommended.

Special Status Wildlife
According to the CNDDB, 5 special-status wildlife species have been reported in the Sunfair quadrangle (refer to Appendix C). No special-status wildlife species were observed on-site during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of onsite habitats, it was determined that the proposed project site has a low potential to support burrowing owl (*Athene cunicularia*), prairie falcon (*Falco mexicanus*), loggerhead shrike (*Lanius ludovicianus*), and desert tortoise (*Gopherus agassizii*). It was further determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the vicinity of the site.

In order to ensure impacts to loggerhead shrike, prairie falcon, desert tortoise, and burrowing owl do not occur from implementation of the project, pre-construction nesting bird and tortoise clearance surveys shall be conducted prior to ground disturbance. With implementation of the pre-construction clearance surveys, impacts to these special-status species will be less than significant and no mitigation will be required.

Impact Conclusion

No special-status wildlife species were observed on-site during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site has low potential to support burrowing owl, prairie falcon, desert tortoise, and loggerhead shrike. It was further determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the vicinity of the site. However, out of abundance of caution and to ensure desert tortoise remain absent from the project site, a pre-construction clearance survey be conducted prior to ground disturbance. Therefore, the **MM BIO-1** would ensure protection of Desert Tortoise and would therefore not impact Desert Tortoise as a result of project implementation.

Additionally, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance, enforced through **MM BIO-2**. With implementation of **MM BIO-2** in requiring the pre-construction clearance survey, impacts to loggerhead shrike, burrowing owl, and prairie falcon will be less than significant. Furthermore, through implementation of the **MM BIO-1**, potential impacts to desert tortoise will be minimized to a level of less than significant. Thus, the proposed project would have a less than significant potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

b. *Less Than Significant Impact* – Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a Clean Water Act [CWA] Permit from the Corps). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

   The project site is not located within federally designated Critical Habitat. The nearest Critical Habitat designation is located approximately 8.8 miles southwest of the site for desert tortoise (Figure IV-1 *Critical Habitat*). Therefore, there is no potential for development at this site to result in impacts to federally designated Critical Habitat from implementation of the proposed project. Thus, impacts are less than significant.

c. *No Impact* – The project site does not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or California Department of Fish and Wildlife (CDFW). A query of the National Wetlands Inventory (NWI) database found no potential blueline streams, riverine, or other aquatic resources within or adjacent to the project site. Therefore, project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required and thus, the proposed project would have no potential to have a substantial adverse effect on state or federally

protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d. *Less Than Significant With Mitigation Incorporated* – Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both anthropogenic disturbance and natural fluctuations in resources.

The site was not identified as occurring within or adjacent to a recognized wildlife corridor. The site occurs in a largely undeveloped area between the Bullion and Pinto Mountains that could be expected to support local wildlife movement; however, implementation of the proposed project is not expected to have a significant impact to wildlife movement opportunities or prevent local wildlife movement through the area since there is ample habitat adjacent to the project site to support wildlife movement opportunities.

However, Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds shall be conducted within three (3) days (72-hours) of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. A pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. Thus, with implementation of **MM BIO-2**, any effects on migratory birds, wildlife movement or the use of wildlife nursery sites can be reduced to a less than significant impact.

e. *Less Than Significant Impact* – Certain desert plant species (i.e., smoke trees, cacti, Mojave yuccas [*Yucca schidigera*]) are regulated pursuant to Section 88.01.060 of the San Bernardino County Development Code and Section 80073 of the California Desert Native Plant Act. Therefore, impacts to these species should be avoided in all instances. In the event that avoidance is not feasible, the project applicant will be required to obtain a Tree or Plant Removal Permit from the County of San Bernardino, prior to removal of any regulated tree or plant. However, it is anticipated that, due to the flexibility of site design, the proposed project will avoid impacting desert plant species that require permit for removal from the County of San Bernardino. Furthermore, no desert plant species protected by the San Bernardino County Development Code and Section 80073 of the California Desert Native Plant Act were identified as part of the biological resource survey of the project site. Thus, through compliance with the County of San Bernardino Development Code and Desert Plant removal permitting therein, the proposed project would have a less than significant potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f. *No Impact* – The BRA provided as Appendix 2 concluded that the project site is not located in an area within a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, and implementation of the proposed project would therefore not result in a significant impact to any such plans. No mitigation is required.

Mitigation Program

MM BIO-1 **Pre-Construction Desert Tortoise Clearance Survey**
A pre-construction clearance survey be conducted thirty (30) days prior to ground disturbing activities in undeveloped areas to confirm the absence of desert tortoise within the boundaries of the survey area. Survey transects should be spaced at

10-meter (33-foot**) intervals throughout the undeveloped portions of the project area to provide 100 percent visual coverage and increase the likelihood of locating desert tortoise and/or sign. All burrows, if present, will be thoroughly inspected for the presence of desert tortoise or evidence of recent use using non-intrusive methods (i.e., mirror, digital camera). Burrow characteristics including class, shape, orientation, size, and evidence of deterioration will be recorded on field data sheets.**

Although not anticipated, if desert tortoises are found onsite during the pre-construction clearance survey, coordination will need to occur with the USFWS and CDFW to determine if avoidance and minimization measures can be implemented to avoid any direct or indirect impacts to desert tortoise, or if "Take" permits will need to be obtained prepared and approved by the USFWS and CDFW.

MM BIO-2 **Pre-Construction Nesting Bird Clearance Survey**

All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA) and California Fish and Game Code Sections 3503, 3511 and 3513. The MBTA governs the taking and killing of migratory birds, their eggs, parts, and nests and prohibits the take of any migratory bird, their eggs, parts, and nests. Compliance with the MBTA shall be accomplished by completing the following:

Construction activities involving vegetation removal shall be conducted between September 1 and January 31. If construction occurs inside the peak nesting season (between February 1 and August 31), a pre-construction survey by a qualified Biologist shall be conducted within 72 hours prior to construction activities to identify any active nesting locations. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur.

If the Biologist finds an active nest within the pre-construction survey area and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. The size of the buffer shall be determined by the Biologist and shall be based on the nesting species, its sensitivity to disturbance, expected types of disturbance, and location in relation to the construction activities. These buffers are typically 300 feet from the nests of non-listed species and 500 feet from the nests of raptors and listed species. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a Biological Monitor shall take place within the buffer zone until the nest is vacated. The Biologist shall serve as a Construction Monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the Property Owner/Developer and the County of San Bernardino. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds.

Therefore, no significant adverse impacts are identified or anticipated with implementation of the above mitigation measures.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
V. CULTURAL RESOURCES: Will the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

V. CULTURAL RESOURCES

SUBSTANTIATION: (Check if project is located in the Archaeological ☐ or Paleontological ☒ Resources overlays or cite results of cultural resource review) The following information is provided based on a Historical / Archaeological resources Survey Report of the project site. The report was conducted by CRM TECH dated April 16, 2023 and is titled "*Phase I Historical/Archaeological Resources Survey 28 Palms Ranch Campsite Expansion Project Assessor's Parcel Numbers 0609-121-14 and -15 Desert Heights Area, San Bernardino County, California* (Appendix 3). The following information is abstracted from this report. It provides an overview and findings regarding the cultural resources found within the project area.

Summary of the Finding

The purpose of the cultural report is to provide the County and other responsible agencies with the necessary information and analysis to determine whether the project would have an effect on any "historic properties," as defined by 36 CFR 800.16(l), or "historical resources," as defined by PRC §5020.1(j), that may exist in or near the APE. In order to identify such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, contacted pertinent Native American representatives, and carried out an intensive-level field survey. During the course of the study, two existing single-family residences on the property, located at 68282 and 68638 Mesa Drive, were found to be from the late historic period, both constructed in the late 1950s. However, the buildings have been significantly altered, and neither of them retains sufficient historical character today to relate to their period of origin or to any persons or events in their history. As such, they are not considered potential "historical resources" and require no further study. No other buildings, structures, objects, sites, features, or artifact deposits of prehistoric (i.e., Native American) or historical origin were encountered within the project area during this study.

Based on these findings, CRM TECH recommends to the County of San Bernardino a conclusion of *No Impact* regarding "historical resources." No further cultural resources investigation is recommended for this project unless development plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are encountered during any earth-moving operations associated with the project, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

Impact Analysis

a. *Less Than Significant Impact* – CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired." No historical resources within or adjacent to the project area

have any potential to be disturbed as they are not within the proposed area in which the facilities will be constructed and developed, and thus, the project as it is currently proposed will not cause a substantial adverse change to any known historical resources.

b. *Less Than Significant with Mitigation Incorporated.* Per the above discussion and definition, no archaeological sites or isolates were recorded within the project boundaries; thus, none of the sites requires further consideration during this study. However, if in the event archaeological resources are uncovered, implementation of Mitigation Measures **MM CR 1** and **MM CR-2** in requiring the cessation of work within 60 feet of the find, the contacting of Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) and Morongo Band of Mission Indians (MBMI) of the discovery find and development of a Monitoring and Treatment Plan by a certified archaeologist (to be provided to YSMN and MBMI) would ensure that archaeological and pre-contact cultural resources are protected. With the implementation of **MM CR-1** and **MM CR-2,** the potential for impact to cultural resources will be reduced to a less than significant level.

c. *Less Than Significant Impact* – As noted in the discussion above, no available information suggests that human remains may occur within the Area of Potential Effect (APE) and the potential for such an occurrence is considered low. Human remains discovered during the project will need to be treated in accordance with the provisions of HSC §7050.5 and PRC §5097.98, which is mandatory. State law (Section 7050.5 of the Health and Safety Code) as well as local laws requires that the Police Department, County Sheriff and Coroner's Office receive notification if human remains are encountered. Compliance with existing laws is considered adequate mitigation for potential impacts to unintentional discovery of human remains.

Mitigation Program

MM CR-1 **During Grading an archaeological monitor shall be present. In the event of an archaeological discovery, either historic or prehistoric, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.**

MM CR-2 **If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.**

Therefore, no significant adverse impacts are identified or anticipated with implementation of the above mitigation measures.

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

VI. ENERGY

SUBSTANTIATION: Dennis Silverman, UC Irvine, October 2007. *Southern California Household Energy Savings* https://www.physics.uci.edu/~silverma/actions/HouseholdEnergy.html (accessed 05/17/23)

a. *Less Than Significant Impact* – During construction, the existing water and electrical systems will be extended onto the undeveloped portion of the property. Most of the electrical needs on the easterly parcel, including the single-family residence and the 6 existing Yurts, are met with onsite solar production, however the whole of the project site has an existing connection to Southern California Edison's (SCE) existing electrical distribution system. The project may or may not install additional solar panels in the future to meet the needs of the existing and new Yurts on the westerly parcel proposed as part of this project. Regardless, new internal electrical connections from SCE and/or from additional solar panel installation will be required to support the overall project's electrical needs at build-out.

Energy consumption encompasses many different activities. For example, construction can include the following activities: delivery of equipment and material to a site from some location (note it also requires energy to manufacture the equipment and material, such as harvesting, cutting and delivering wood from its source); employee trips to work, possibly offsite for lunch (or a visit by a catering truck), travel home, and occasionally leaving a site for an appointment or checking another job; use of equipment onsite (electric or fuel); and sometimes demolition and disposal of construction waste. For the proposed project the number of construction workers will be limited due to the scope and type of project and the minimal length of time required to complete construction of the project (less than 2 months). To minimize energy costs of construction debris management, laws are in place that require diversion of all material subject to recycling. Energy consumption by equipment will be reduced by requiring shutdowns when equipment is not in use after five minutes and ensuring equipment is being operated within proper operating parameters (tune-ups) to minimize emissions and fuel consumption. Furthermore, a majority of construction would be accomplished utilizing smaller construction equipment, such as a small tractor, a small trencher, and a backhoe, intended to protect the environment, as well as by use of hand tools that do not require electricity to operate. These requirements are consistent with State and regional rules and regulations. Under the construction scenario outlined in the project description, the proposed project will not result in wasteful, inefficient, or unnecessary energy consumption during construction.

The Project will be supplied power from Southern California Edison (SCE) and will utilize existing solar sources in support of the single-family residence and existing Yurts on the easterly parcel. Additionally, as stated above, the project may or may not install additional solar panels in the future to meet the needs of the existing and new Yurts on the westerly parcel proposed as part of this project. At present, the solar on the easterly parcel presently accounts for more than the average daily demand by about 500 kilowatt hours (kWh) per month; overall the electricity demand on the easterly parcel is 500 kWh per month. The westerly parcel accounts for about 100 kWh per month on average. The addition of the 5 new yurts on the westerly parcel would potentially add to the electricity demand by about 300 kWh per month. Relative to the state average of 2,000 kWh per year

demanded per person,[3] with an additional potential for 20 guests to occupy the site as a result of the 5 new Yurts within the site, the additional electricity demanded on a per year basis by the proposed project—3,600 kWh per year—would be minimal and would fall well below the state average electricity demand per person per year. Furthermore, when compared to the overall electricity generated in California, equal to 277,704 gigawatt hours (GWh) according to the CEC, 2020 Total System Electric Generation, the proposed project electricity demand is not substantial such that a significant electricity demand would occur.

The new yurts would not require natural gas connections, as the HomeBiogas generators utilized at each of the 5 new Yurt sites to dispose of wastewater and food products, create a byproduct Biogas, which would be used in support of stoves available to future guests, in addition to the open fire rings provided at each new Yurt. The HomeBiogas systems generate 1,200 liters of biogas per day per system. Thus, through the use of existing alternative energy methods to meet demand, the proposed project would continue to not result in wasteful, inefficient, or unnecessary energy consumption during operation and the project is not anticipated to require a significant amount of electricity in the context of existing available power sources.

The proposed project, however, must be constructed in conformance with a variety of existing energy efficiency regulatory requirements or guidelines including, but not limited to the following:

- Compliance with diversion of construction and demolition materials from landfills.
- Compliance with AQMD Mandatory use of low-pollutant emitting finish materials.
- Compliance with AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.
- Compliance with diesel exhaust emissions from diesel vehicles and off-road diesel vehicle/equipment operations.

Compliance with these regulatory requirements for operational energy use and construction energy use would not be wasteful or unnecessary use of energy. Further, SCE is presently in compliance with State renewable energy supply requirements from alternative sources and SCE will supply electricity to the project. The proposed project does not include any substantive new stationary or mobile sources of emissions, and therefore, by its very nature, will not generate substantive amounts of energy demand from project operations. The project does not propose a substantive daily trip-generating land use other than those trips that would result from visitors of the project site (anticipated to result in less than 50 roundtrips per day; equal to up to one trip per day per car, in addition to trips generated by the two single-family residences), that would generate any substantive amount of on-going energy demands. As such, under the operational scenario for the proposed project, the proposed project will not result in wasteful, inefficient, or unnecessary energy consumption that could result in a significant adverse impact to energy issues based on compliance with the referenced laws, regulations and guidelines. No mitigation is required.

b. *Less Than Significant Impact* – Based on the analysis in the preceding discussion, the proposed project will not conflict with current State energy efficiency or electricity supply requirements or any local plans or programs for renewable energy or energy efficiency requirements. No mitigation is required.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

[3] Dennis Silverman, UC Irvine, October 2007. *Southern California Household Energy Savings* https://www.physics.uci.edu/~silverma/actions/HouseholdEnergy.html (accessed 05/17/23)

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VII. GEOLOGY AND SOILS: Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
(ii) Strong seismic ground shaking?	☐	☐	☒	☐
(iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
(iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or offsite land-slide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

VII. GEOLOGY AND SOILS

SUBSTANTIATION: (Check ☐ if project is located in the Geologic Hazards Overlay District) A paleontological report was prepared for this Project. The report was conducted by CRM TECH dated April 16, 2023 and is titled "*Paleontological Resources Assessment Report 28 Palms Ranch Campsite Expansion Project Assessor's Parcel Numbers 0609-121-14 and -15 Desert Heights Area, San Bernardino County, California* (Appendix 4). San Bernardino County, 2020. *San Bernardino Countywide Plan, Final Environmental Impact Report.* https://countywideplan.com/resources/document-download/ (accessed 05/17/23)

a.i. Ground Rupture

Less Than Significant Impact – The project site is located in the County of San Bernardino within the Mojave Desert region west of Twentynine Palms, which is located in a highly seismically active area. The project is located approximately 2.75 miles to the east of the Copper Mountain Fault Zone

system, which is classified as an Alquist-Priolo Special Study Zone under the Alquist-Priolo Earthquake Fault Zoning Act. The Pinto Mountain Fault Zone, which is also a delineated Alquist-Priolo Special Study Zone, is located 2.51 miles to the south of the project site, and the Mesquite Lake Fault Zone, another delineated Alquist-Priolo Special Study Zone is located approximately 6.75 miles to the east of the project site. Figure VII-1 shows where these faults are located as indicated by the San Bernardino Countywide Plan Earthquake Fault Zones Map. As shown, the closest known active fault zones are more than two and a half miles from the proposed project site. As such, and as illustrated on Figure VII-1, the San Bernardino Countywide Plan Earthquake Fault Zones Map, the site is not located within an Alquist-Priolo Special Study Zone. Based on this information, the risk for ground rupture at the site location is low; therefore, it is not likely that future visitors and employees of the project will be subject to rupture from a known earthquake fault. Therefore, any impacts under this issue are considered less than significant; no mitigation is required.

a.ii. Strong Seismic Ground Shaking

Less Than Significant Impact – As stated in the discussion above, several faults run through this portion of the County, and as with much of southern California, the proposed structures will be subject to strong seismic ground shaking impacts should any major earthquakes occur in the future, as shown on Figure VII-1. Any future developments at the subject site should anticipate that moderate to large seismic events could occur near the site. The earthquake shaking potential at the site as shown on the *Department of Conservation Data Viewer Earthquake Shaking Potential for California Map* (Figure VII-2) indicates that the project has a moderate earthquake shaking potential. As a result, and like all other development projects in the County and throughout the Southern California Region, the proposed project will be developed in accordance with the applicable development code, the 2022 California Building Code (CBC). This will ensure that structural integrity will be maintained in the event of an earthquake, and as such, impacts associated with seismic ground shaking will be less than significant.

a.iii. Seismic-Related Ground Failure Including Liquefaction

No Impact – According to the map prepared for the County of San Bernardino Countywide Plan EIR Liquefaction & Landslides Map (Figure VII-3), the project site is not located in an area that is considered susceptible to seismic-related ground failure, including liquefaction. Furthermore, the San Bernardino Countywide Environmental Impact Report (EIR) Chapter 5, Geology & Soils, indicates that, in the Desert Regions, liquefaction is most likely to occur in areas of alluvial deposits with relatively shallow groundwater or around dry lakebeds, along the Mojave River, and areas adjacent to faults that form groundwater barriers. As the proposed project is not located in any of the aforementioned areas, it is not anticipated that the proposed project would be susceptible to seismic-related ground failure, including liquefaction. No impacts are anticipated and no mitigation is required.

a.iv. Landslides

No Impact – The project site is located in a flat area and is therefore not located in an area in which landslides are anticipated to occur. According to the map prepared for the San Bernardino Countywide Plan Liquefaction & Landslides Map (Figure VII-3), the project site is not mapped within an area that is considered susceptible to landslides. Therefore, the project will not expose people or structures to potential substantial adverse landslide effects, including the risk of loss, injury, or death involving landslides. No impacts under this issue are anticipated and no mitigation is required.

b. *Less Than Significant Impact* – Project construction will not include any mass grading at the site, as the proposed project intends to keep the landscape in its natural state as much as possible. The only minor grading and excavation that will occur will be for the internal roadways—which would be installed through minor surface grading with a small tractor to enable the continuation of internal access roads from the easterly parcel to the westerly parcel—septic systems, and internal utility installation. This will result in only minor losses of topsoil or erosion. Furthermore, the San Bernardino County Development Code Chapter 85.11.030 requires standard erosion control practices (Best

Management Practices [BMPs]) to be implemented for all construction, which would ensure that the project would not result in substantial soil erosion or the loss of topsoil. Therefore, any impacts under this issue are considered less than significant.

c. *Less Than Significant Impact* – As previously stated, according to the Liquefaction & Landslides Map prepared for the San Bernardino Countywide Plan (Figure VII-2), the potential for liquefaction to occur within the project site is low. Additionally, the potential for landslide at the project site has been determined to be minimal. The San Bernardino Countywide Plan EIR indicates that subsidence due to groundwater extraction affects the Desert Regions, particularly near dry lakebeds in the Mojave and Morongo basins. Areas at high risk of future subsidence include the El Mirage Valley, Lower Mojave, Harper Valley, and Lucerne Valley. Areas at medium-high risk include the Upper Mojave River, Irwin Subbasin, Fremont Valley, and Twentynine Palms. The proposed project has been mapped as being located in an area that has medium to high subsidence potential by the San Bernardino Countywide Plan EIR (Figure VII-4). Thus, as the proposed project would only include the development of temporary structures, in that, the Yurts can easily be dismantled or moved, and do not contain fixed walls or roofing, that would not require mass grading to enable the concrete slab foundation to be established, the project would have a less than significant potential to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite subsidence. According to the San Bernardino Countywide Plan EIR, Desert Regions have the highest potential for collapsible soils due to their aridity, the prevalence of both alluvial and wind-deposited soils, and soils with salts. As previously stated, project construction will not include any mass grading at the site, as the proposed project would keep the landscape in its natural state as much as possible. Thus, as only minor grading would be required for the campground and driveway, and as structures would be temporary in nature, the potential for a significant impact to occur as a result of collapse at the project site would be less than significant. Based on the above discussion, it is not anticipated that the project will be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. No further mitigation is required.

d. *Less Than Significant Impact* – The San Bernardino Countywide Plan EIR Chapter 5, Geology & Soils, indicates that much of the Desert Region has low to moderately expansive soils. In select areas, such as Lucerne Valley and dry lakebeds, the soils can be highly expansive. This proposed project site is not located on a dry lakebed. Thus, it is anticipated that the expansion potential is low. Furthermore, no clay type soils exist at the project site, and as such, the development of the project will not create a substantial risk to life or property by being placed on expansive soils because no expansive soils exist on the site. Thus, impacts under this issue are considered less than significant. No further mitigation is required.

e. *Less Than Significant Impact* – Restroom facilities at 6 of the existing Yurts on the easterly parcel currently utilize aboveground HomeBiogas generators to dispose of wastewater and food products; however, if these systems are ultimately not approved for use by the County, the HomeBiogas system would be utilized in conjunction with up to 4 septic systems to process solid waste at each bathroom site (refer to Table 2). The use of the HomeBiogas generator would reduce the total effluent to 1.2 liters per flush, accommodating up to 12 gallons of solid waste per day for a total capacity of 36 flushes per day. The solid effluent is organically digested into liquid form, which would then be discharged into the proposed septic systems. Additionally, the grey water from the sinks and showers will connect directly, through new lateral piping, into either the existing or the new septic systems. The proposed project would include HomeBiogas generators at each Yurt and all will tie into the septic systems for the 11 total Yurts ultimately proposed within the whole of the project site. Thus, the proposed project would install up to 5 new HomeBiogas generators at the Yurts on the westerly parcel, and up to 4 onsite septic systems to meet County sewage disposal requirements.

As discussed in the Project Description, the site currently contains 2 existing septic tank systems which will remain in place and will not be modified as part of the proposed project. Overall, each new septic tank system will accommodate 2-3 Yurts, and it is anticipated that 4 new septic systems would

be developed in support of the proposed project. These systems will be capable of handling about 900 gallons of waste per day or about 300 gallons per Yurt per day and will be developed in accordance with 2019 California Plumbing Code (Part 5, Title 24, California Code of Regulations) standards, which sets parameters for private sewage disposal, and in compliance with the San Bernardino County Development Code, Article 6.

As previously stated, the proposed project is supported by stable soils (soils in the greater area are underlain by a Dune land-Cajon complex, which series consists of very deep, somewhat excessively drained soils that formed in sandy alluvium from dominantly granitic rocks). Furthermore, these soils are somewhat excessively drained, with negligible to low runoff, and rapid permeability, which demonstrates the stability of these soils.[4] Based on the nearly exclusive use of septic tanks or other alternative wastewater systems within the area (no municipal wastewater collection or treatment systems exist in the project vicinity), the soils are capable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. Through compliance with the 2019 California Plumbing Code (Part 5, Title 24, California Code of Regulations), any impacts under this issue are considered less than significant. No mitigation is required.

f. *Less Than Significant With Mitigation Incorporated* – The San Bernardino Countywide Plan for indicates that the proposed project area is located in a high sensitivity area for paleontological resources (refer to Figure VII-5). Previously unknown and unrecorded paleontological resources may be unearthed during excavation and grading activities of the proposed project. According to the Paleontological Resources Report (Appendix 4), no paleontological resources were identified in the project area. In addition, no known fossil localities were identified within the same geologic formation upon which the project area is immediately situated, which suggest that the project location appears to have a low potential to contain significant paleontological resources in the subsurface sediments. According to guidelines proposed by Scott and Springer, as described in the San Bernardino Countywide Plan paleontological resources can be considered to be of significant scientific interest if they meet one or more of the following criteria:

1. The fossils provide information on the evolutionary relationships and developmental trends exhibited among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or the interactions between palaeobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life; and/or
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

If previously unknown potentially unique paleontological resources are uncovered during excavation or construction, significant impacts could occur. According to the San Bernardino Countywide Plan EIR, the County requires that projects located within areas that have been delineated as low-to-high sensitivity for paleontological resources by the County General Plan (Figure VII-5) meet the requirements of its MM **CUL-5**, which states:

In areas of documented or inferred paleontological resource presence, development projects proposed on previously undisturbed soils shall require consultation with a qualified paleontologist meeting the standards of SVP (2010). The initial consultation may be provided by a qualified paleontologist on staff at the County Museum. The qualified paleontologist will determine the degree of paleontological resource sensitivity, as outlined below, and will recommend a project-specific paleontological resources monitoring and mitigation plan (PRMMP). This plan will address specifics

[4] National Cooperative Soil Survey, 2023. Cajon Series. https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CAJON.html (Accessed 05/30/23)

of monitoring and mitigation for the development project, and will take into account updated geologic mapping, geotechnical data, updated paleontological records searches, and any changes to the regulatory framework. This PRMMP should usually meet the standards of the SVP (2010), unless the project is on BLM land or subject to federal jurisdiction, in which case the BLM standards (2009) should be used. The following provisions would be typical for units mapped with the different levels of paleontological sensitivity:

- *All projects involving ground disturbance in previously undisturbed areas mapped with low-to-high paleontological sensitivity will only require monitoring if construction activity will exceed the depth of the low sensitivity surficial sediments. The underlying sediments may have high paleontological sensitivity, and therefore work in those units might require paleontological monitoring, as designated by the Qualified Paleontologist in the PRMMP. When determining the depth at which the transition to high sensitivity occurs and monitoring becomes necessary, the Qualified Paleontologist should take into account: a) the most recent local geologic mapping, b) depths at which fossils have been found in the vicinity of the project area, as revealed by the museum records search, and c) geotechnical studies of the project area, if available.*

As the first performance standard outlined in the County's **MM GEO-5** has been met through a consultation with a qualified paleontologist meeting the standards of SVP (2010) as documented in Appendix 5. Based on the research findings presented above, the project area is situated upon surface exposure of Holocene-age alluvial sediments. Such sediments have little potential to contain significant, nonrenewable paleontological resources. Additionally, any potentially fossiliferous sediments that may be present below the surface are presumed to be below any project related excavations. Therefore, the proposed project's potential to impact significant, nonrenewable paleontological resources appears to be low. As this determination has been made, no PRMMP is anticipated to be required as the site-specific paleontological sensitivity is considered to be low. However, if buried paleontological materials are encountered inadvertently during any earth-moving operations associated with the project, all work within 50 feet of the discovery should be halted or diverted until a qualified paleontologist can evaluate the nature and significance of the finds. Thus, the following mitigation measure (sourced from the 2019 San Bernardino Countywide Plan EIR), which addresses the potential for discovery of fossils, shall be required as part of this project, as provided below. With incorporation of the above project specific and County developed mitigation measure, the potential for impact to paleontological resources will be reduced to a less than significant level. No additional mitigation is required.

Mitigation Program

MM GEO-5 **In the event of any fossil discovery, regardless of depth or geologic formation, construction work will halt within a 50-ft. radius of the find until its significance can be determined by a Qualified Paleontologist. Significant fossils will be recovered, prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility in accordance with the standards of the SVP (2010) and BLM (2009). A repository will be identified, and a curatorial arrangement will be signed prior to collection of the fossils. Although the San Bernardino County Museum is specified as the repository for fossils found in the county in the current General Plan (San Bernardino County, 2007), the museum may not always be available as a repository. Therefore, any accredited institution may serve as a repositor.**

Therefore, no significant adverse impacts are identified or anticipated with implementation of the above mitigation measure.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

VII. GREENHOUSE GAS EMISSIONS

SUBSTANTION: Urban Crossroads, November 16, 2021. *Victorville Residential Greenhouse Gas Impact Analysis City of Victorville.* (Appendix 5)

Background

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. Many scientists believe that the climate shift taking place since the industrial revolution (1900) is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years.

An individual project like the project evaluated in this GHGA cannot generate enough greenhouse gas emissions to effect a discernible change in global climate due to the size of the project, use of solar to offset energy demand (energy use contributes to greenhouse gas emissions), use of Biogas from the HomeBiogas system in support of camp stoves and fire rings, as well as the intermittent housing within the project.

AB 32 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California's reputation as a "national and international leader on energy conservation and environmental stewardship." It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Requires immediate "early action" control programs on the most readily controlled GHG sources.
- Mandates that by 2020, California's GHG emissions be reduced to 1990 levels.
- Forces an overall reduction of GHG gases in California by 25-40%, from business as usual, to be achieved by 2020.
- Must complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been developed. GHG sources are categorized into direct sources (i.e., company owned) and indirect sources (i.e., not company owned). Direct sources

include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

Thresholds of Significance

According to the MDAQMD's *CEQA and Federal Conformity Guidelines*, a project is significant if it triggers or exceeds the most appropriate evaluation criteria. The MDAQMD states that in general, for GHG emissions, the significance emission threshold of 100,000 tons CO2e (90,718.5 MT CO2e) per year is sufficient. A significant project must incorporate mitigation sufficient to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation.

Impact Analysis

a. *Less Than Significant Impact* – Project construction activities would generate an insignificant amount of CO2 and CH4 emissions due to the lack of grading, limited clearing and grubbing needed, the small size of the site, and the lack of building and construction needed on the site. The Yurts require minimal assembly to be fully installed, thus, the only construction needed is clearing and grubbing, installation of a 20-foot concrete pad with a 12" x 12" footing per new Yurt, and installation of utilities (electrical, water, and septic system connections) and internal roadways.

Construction Emissions Summary

Because of the limited size of this project, a construction related GHG emissions report is not necessary.

Operational and Total Emissions Summary

Operational activities associated with the proposed project will result in emissions of CO2, CH4, and N2O from the following primary sources: Building energy use; water supply, distribution, solid waste and mobile source emissions. Appendix 5 contains a detailed greenhouse gas evaluation for a 210 single-family residential division in Victorville. This document is presented to allow a comparison with the emissions of the proposed 28 Palms Ranch Project. The proposed project would ultimately include the operation of 11 Yurts, of which 6 are operational at present, 3 have been installed, but are not operational, and 2 have not yet been installed. The project site also contains an existing 2 single-family residences that will remain unchanged as part of the proposed project. Assuming that each Yurt is each equivalent to a single-family residence, the 13 units (11 Yurts and 2 residences) as a whole represent a mere 5% in density, when compared to the 210 units of the Victorville project. Thus, operationally, the proposed project would represent 5% of the total operational GHG emissions forecast for the operation of the Victorville Project. Furthermore, while the size of the project site to be developed would be roughly one sixth the size of the Victorville project, the ground surface that would be disturbed as a result of project construction (surface grading with a small tractor, excavation, and utilization of a small tractor, a small trencher, and a backhoe), would constitute less than one acre of ground disturbance for the project, and thus represent approximately 1.7% of the intensity of construction forecast for the Victorville Project. Thereby, construction generated GHG emissions would constitute 1.7% of that which was forecast for the Victorville Project. Based on a review of the greenhouse gas emissions presented in Table VIII-1, below, the project would result in two percent of the emissions reported, due to the size of the four residential Yurts included in this project, resulting in about 148.95 MTCO2e/year.

Table VIII-1
ANNUAL EMISSIONS SUMMARY AND SIGNIFICANCE THRESHOLDS

Emissions Source	VICTORVILLE PROJECT Total Emissions (Metric Tons/ year)	28 PALMS RANCH ESTIMATED Total Emissions (Metric Tons/ year)
	CO_2e	CO_2e
Annual Construction Related Emissions Amortized over 30 years	36.10	0.6137 (1.7% of Victorville Project emissions)
Total Operational Emissions (All Sources: Area, Energy, Waste, Water)	2,966.77	148.34 (5% of the Victorville Project emissions)
Significant Emissions Threshold	**90,718.5**	**148.95**

When compared to the MDAQMD GHG threshold of 90,718.5 MTCO2e/year, project generated GHG emissions are not forecast to result in a significant adverse impact.

b. *Less Than Significant Impact* – Based on the data presented in Appendix 5, the proposed project will not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Furthermore, the proposed project would use solar to offset energy demand (energy use contributes to greenhouse gas emissions), would utilize solar lighting to illuminate access roads within the site, and would use Biogas from the HomeBiogas system in support of camp stoves and fire rings, thereby not requiring a connection to a natural gas utility or use of propane tanks as the system generates 1,200 liters of Biogas per day per system. At present, the solar on the easterly parcel presently accounts for more than the average daily demand by about 500 kilowatt hours (kWh) per month, thereby resulting in energy being sent back to the grid. The addition of the 5 new Yurts on the westerly parcel would potentially add to the electricity demand by about 300 kWh per month, which is anticipated to, on average, be covered by the existing solar generated within the site. However, in the future, the Applicant may install additional solar to ensure coverage during peak summer electricity demand periods. Thus, overall, the proposed project would contribute to the implementation of GHG reduction programs within the State and County through the project features discussed, above.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

IX. HAZARDS AND HAZARDOUS MATERIALS

SUBSTANTIATION: San Bernardino County, 2020. *San Bernardino Countywide Plan, Final Environmental Impact Report*. https://countywideplan.com/resources/document-download/ (accessed 05/17/23)

a&b. *Less Than Significant Impact* – The project should not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; but it may create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction. However, because the project is small in size and only a limited amount of construction requiring small-to-medium duty construction equipment needed for a very short duration of time, a hazardous spill is unlikely and would not create a significant hazard to the public or the environment either through the routine transport, use, or disposal of hazardous materials. Thus, though the potential is minor, during construction there may be a potential for accidental release of petroleum products in sufficient quantity to pose a significant hazard to people or the environment. Due to the size of ground disturbance anticipated as part of development of the proposed project (i.e., less than one acre), the proposed project would not be subject to a Storm Water Pollution Prevention Plan (SWPPP). Thus, in order to reduce accidental release of hazardous materials to a less than significant

level, the following condition will be required by the County to be implemented as a best management practice (BMP) during construction of the project.

Condition HAZ-1 **All accidental spills or discharge of hazardous material during construction activities shall be reported to the Certified Unified Program Agency and shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately a licensed disposal or treatment facility. This measure shall be incorporated into construction contract as a BMP to be implemented during construction the proposed project. Prior to accepting the site as remediated, the area contaminated shall be tested to verify that any residual concentrations meet the standard for future residential or public use of the site.**

The proposed project will consist of development of an Authentic Mongolian Yurt camping destination that would include a total of 11 Yurt accommodations on site, of which 6 are presently operational at the site, 3 have been installed but are not operational and are not yet connected to the HomeBiogas generator system and/or septic, water, or electrical systems, and 2 have yet to be installed, and as such will be installed as part of the proposed project. Operation of the proposed site use would not involve the use of a substantial amount of hazardous materials. Household/commercial cleaning supplies would continue to be used in support of the existing and new restroom facilities, but no substantial increase in the use of hazardous materials is anticipated to be required to support the proposed 28 Palms Ranch Campsite. Compliance with all Federal, State, and local regulations governing the storage and use of hazardous materials is required and will ensure that the project operates in a manner that poses no substantial hazards to the public or the environment. No mitigation is required.

c. *No Impact* – The proposed project site is not located within one quarter mile of a school, and the closest schools are greater than eight miles from the project site, located to the west (Joshua Tree Elementary School: 4950 Sunburst Ave, Joshua Tree, CA 92252) and to the east (Condor Elementary School: 2551 Condor Rd, Twentynine Palms, CA 92277; Twentynine Palms Elementary School: 74350 Playa Vista Dr, Twentynine Palms, CA 92277; and, Monument High School: 72770 Hatch Rd, Twentynine Palms, CA 92277) of the project site. Based on this information, and that operation of the proposed site use would not involve the use of a substantial amount of hazardous materials the proposed project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No adverse impacts are anticipated. No additional mitigation is required.

d. *No Impact* – The proposed project would develop a Campsite within Unincorporated San Bernardino in the Twentynine Palms SOI; the project site is partly developed with 6 operational Yurts, 3 Yurts that have been erected for storage and are not yet operational or connected to utilities, and 2 single-family residences. The project will not be located on a site that is included on a list of hazardous materials sites that are currently under remediation. According to the California State Water Board's GeoTracker website (consistent with Government Code Section 65962.5), which provides information regarding Leaking Underground Storage Tanks (LUST) and Department of Toxic Substance Control (DTSC) cleanup sites, there are no open or closed LUST, DTSC, or other clean-up sites within 2,500 feet of the project site (Figure IX-1). Therefore, there is no potential for the project to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 thereby creating a significant hazard to the public or the environment. Project construction and operation of the site as the 28 Palms Ranch Campsite will have a less than significant potential to create a significant hazard to the population or to the environment from their implementation. No mitigation is required.

e. *No Impact* – The project site is located greater than 13.5 miles from any nearby airport. As shown on the Airport Safety & Planning Areas map prepared for the San Bernardino Countywide Plan (Figure IX-2), the proposed project is not located within an Airport Safety Review Area at any of the area airports (Yucca Valley Airport, Twentynine Palms, and Southern California Logistics Airport, etc.). There is no potential safety hazard for people residing or working in the project area as a result of proximity to a public airport or private airstrip. No mitigation is required.

f. *Less Than Significant Impact* – The proposed project is not anticipated to interfere with an adopted emergency response plan or emergency evacuation plan. As shown on the Evacuation Route Map prepared for the San Bernardino Countywide Plan (Figure IX-3), the adopted evacuation route is Highway 62 to the south of the project site. Development of the project at this location would not interfere with access to emergency evacuation routes, as the proposed project will be constructed entirely within the boundaries of the project site. Ingress and egress from the site is provided along Mesa Drive and a new entrance will be provided along Lori Lane. Site access would be clearly marked and illuminated with solar lights for evening use and for the internal onsite accessible roadways. Thus, the proposed project will not experience substantial conflicts with surrounding traffic. Therefore, there is a less than significant potential for the development of the project to physically interfere with any adopted emergency response plans, or evacuation plans.

g. *No Impact* – The proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The construction of the project will occur mostly within the westerly parcel, which is presently vacant, containing native vegetation characteristic of the east desert. According to the San Bernardino Countywide Plan Fire Hazard Severity Zones Map (Figure IX-4), the proposed project is located in an area with Moderate wildfire risk. The proposed project does not include the use of flammable or explosive materials. The proposed project has no other identifiable potential to expose people or property to wildland fires. Furthermore, the proposed project would conform to Countywide Plan Policy HZ-1.2, below.

> ***Policy HZ-1.2*** *New development in environmental hazard areas. We require all new development to be located outside of the environmental hazard areas listed below. For any lot or parcel that does not have sufficient buildable area outside of such hazard areas, we require adequate mitigation, including designs that allow occupants to shelter in place and to have sufficient time to evacuate during times of extreme weather and natural disasters.*
>
> - *Flood: 100-year flood zone, dam/basin inundation area*
> - *Geologic: Alquist Priolo earthquake fault zone; county identified fault zone; rockfall/ debris-flow hazard area, medium or high liquefaction area (low to high and localized), existing and county identified landslide area, moderate to high landslide susceptibility area)*
> - *Fire: Moderate fire hazard severity zones*

Ultimately, the proposed project is located in an area removed from high fire hazard areas within the County, of which none are located in the region of the County in which the project is proposed (refer to Figure IX-4). Therefore, project implementation would not result and a potential to expose people or structures to fire hazards. No mitigation measures are required.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
(i) result in substantial erosion or siltation on-site or offsite?	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or offsite?	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?; or,	☐	☒	☐	☐
(iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY

SUBSTANTIATION: San Bernardino County, 2020. *San Bernardino Countywide Plan, Final Environmental Impact Report*. https://countywideplan.com/resources/document-download/ (accessed 05/17/23)

a. *Less Than Significant With Mitigation Incorporated* – The proposed project is located within the planning area of the Colorado River Regional Water Quality Control Board (RWQCB). The project would be supplied with water by Twentynine Palms Water District (TPWD) and expects to dispose of wastewater through the use of an alternative wastewater disposal system if approved by the County, such as the HomeBiogas system, or through the use of the HomeBiogas system in conjunction with 4 new onsite septic systems (refer to Table 2). Existing shower systems presently are discharged to a holding tank, and the tank is pumped and disposed of utilizing a pump connected to the existing septic systems on site. This will continue under the proposed project either to the existing septic systems or to the proposed septic systems.

The project proposes to enable the operation of 11 Yurts, of which 6 Yurts are operational at present, 3 Yurts have been erected for storage and are not yet operational or connected to utilities, and 2 single-family residences. Ground disturbing activities include the installation of 4 septic tanks,

connections to the existing Yurts from the new septic tanks on the easterly parcel, trenching to enable the connection of the westerly 5 Yurts to electricity, septic, and water, and compaction of the ground to facilitate the installation of access roads on the westerly parcel. The construction of the project will occur mostly within the westerly parcel, which presently supports an existing single-family residence, in addition to 3 Yurts that are presently being used for storage and are not operational. This area contains native vegetation characteristic of the Mojave Desert.

Three main sources of potential violation of water quality standards or waste discharge requirements are as follows: from generation of municipal wastewater; from stormwater runoff; and potential discharges of pollutants, such as accidental spills. The proposed project may result in very minor soil erosion during construction activities because the proposed project would be developed within some undisturbed areas but would not require substantial ground disturbance to facilitate the installation of the project. Due to the small size of the ground disturbance associated with the proposed project (less than one acre), a SWPPP, which would typically address means by which to control potential sources of water pollution that could violate any standards or discharge requirements during construction, is not required. The Applicant shall instead implement Best Management Practices (BMPs) during construction, which will be enforced through implementation of **MM HYD-1**. Implementation of **MM HYD-1** in addition to County identified BMPs, would ensure that project-related after development surface runoff meets discharge requirements over the short- and long-term.

Implementation of **MM HYD-1**, in addition to County identified BMPs, would ensure that project-related after development surface runoff meets discharge requirements over the short- and long-term. The BMPs will establish requirements for capturing, retaining, and treating onsite stormwater once the project has been developed. Per Regulatory Requirement (RR) HYD-3 identified in the Countywide Plan, the BMPs provide the following: control contaminant discharges downstream of the project site; and provide education materials to future customers the public about stormwater impacts.

Once constructed, the proposed project will not include substantial aboveground permanent structures, as the Yurts will be temporary structures, in that, the Yurts can easily be dismantled or moved, and do not contain fixed walls or roofing, and will be placed on compacted ground. Onsite drainage will be managed during operation pursuant to San Bernardino County requirements, which stipulate that "Individual projects would be required to effectively retain or treat the 85th percentile 24-hour stormwater runoff for pollutants prior to discharge off their properties" (Countywide Plan EIR). Furthermore, the use of the HomeBiogas systems is self-contained, with no potential to violate any water quality standards whether permitted as the sole wastewater disposal mechanisms, or through the use of septic systems in conjunction with the HomeBiogas systems. The Applicant is presently utilizing these systems for operation of the 6 easterly Yurts, and no observed water quality violations have been documented.

Furthermore, in an email conversation with the Reginald Tan at the RWQCB,[5] based on the product description, the HomeBiogas system does not have any wastewater discharge, and there is no need for a permit from the RWQCB when there is no discharge. Thus, with the RWQCB concurrence, as there is no greywater discharge from the proposed project, no permit is necessary. However, ultimately, the County Environmental Health Services (EHS) and Land Development (LD) would need to approve the use of this system as the sole wastewater disposal method for the project prior to connecting the systems to the project. As such, this project proposes to either (a) use the HomeBiogas system as the sole means by which wastewater is processed on site, or (b) use the HomeBiogas system to reduce the amount of wastewater then conveyed to 4 new onsite septic systems (refer to Table 2).

Through the proper use of the HomeBiogas system, per the manufacturer's instruction manual, it is anticipated that the continued use and expanded use of these systems will have a less than significant

[5] Email conversation between Kaitlyn Dodson Hamilton (Tom Dodson & Associates), the Applicant, and Reginald Tan of the RWQCB dated April 18, 2023.

potential to violate water quality standards. Therefore, with only minimal changes anticipated as a result of operational impacts, implementation of these mandatory plans and their BMPs, compliance with regulatory requirements identified by the Countywide Plan and Development Code, as well as **MM HYD-1** and **Condition HAZ-1** above, will prevent a violation of any water quality standards or waste discharge.

b. *Less Than Significant Impact* – The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a substantial lowering of the local groundwater table level. The project site is located in the Twentynine Palms Valley Basin. Within the Twentynine Palms Valley Basin are the Mesquite Lake and Mainside subbasins. According to the 2020 Twentynine Palms Water District (TPWD) Urban Water Management Plan (UWMP)[6], the TPWD gallons per capita, per day (GPCD) is 135. The proposed project will, at a maximum, house 48 guests and up to 3 onsite residents at any given time during the operation of the 28 Palms Ranch Campsite. Thus, the maximum amount of water required to operate the proposed project if constantly at full-occupancy would be 6,885 gallons per day (GPD)(135 GPCD x 51 guests/residents = 6,885), equal to 7.72 acre feet per year (AFY). This estimate is anticipated to be high for the actual use of the proposed project given that the average number of guests is anticipated to be about ½ of the maximum number of occupant guests, and the water use is anticipated to be lower than that of the typical residential user. Furthermore, the 28 Palms Ranch Campsite, at present, experiences a high season (cooler months) and a low season (warmer months), and thus is not anticipated to be at full capacity throughout the year. Therefore, average amount of water required to operate the proposed project at 50 percent occupancy would, be at or less than 3.36 AFY. In 2020, TPWD's demand for potable water was 2,449 AF. By 2045, the anticipated demand is anticipated to increase to 3,200 AF. TPWD anticipates a supply of 6,995 AFY in 2045, which indicates that there is ample supply to accommodate the increase in water demanded by the proposed site use. As the proposed 28 Palms Ranch Campsite Project is not forecast to result in the development of impervious surfaces, the proposed project will not substantially interrupt the existing percolation of the site, or any flow of groundwater under the project site. Thus, no significant adverse impacts to groundwater resources are forecasted to occur from implementing the proposed project. No mitigation is required.

c(i-iii). *Less Than Significant With Mitigation Incorporated* – No substantial impact to drainage patterns or structures will result from implementing this project. The proposed project will consist of the installation of temporary Yurt structures, in that, the Yurts can easily be dismantled or moved, and do not contain fixed walls or roofing, and will require only minimal ground disturbance required to enable the implementation of the proposed 28 Palms Ranch Project. Once the proposed improvements are made to the project site, the site itself will generate essentially the same amount of stormwater as they do at present because no significant change in drainage patterns is anticipated. The drainage pattern of stormwater within the site is not anticipated to be significantly altered due to the type of development that is proposed. However, as discussed above, under issue X(a), above, the proposed project will be required to implement BMPs throughout the duration of construction through the implementation of **MM HYD-1**, which would ensure proper management of stormwater drainage. In addition, the project will be required to adhere to regulatory requirements identified by the Countywide Plan and Development Code to ensure that stormwater runoff is controlled. Thus, no substantial change to the existing drainage pattern will result from project implementation. Adequate drainage facilities exist to accommodate pre- and post-project drainage flows, and when combined with the drainage management proposed as part of this project, the project would result in a less than significant impact. Based on the data outlined above, this project will not substantially alter the existing drainage pattern of the site or area; will not substantially alter the course of a stream or river in such a manner that will result in substantial erosion or siltation either on or off the project footprint; or contribute runoff water that could exceed the capacity of the existing drainage facilities. No

[6] TPWD, 2021. Twentynine Palms Water District 2020 Urban Water Management Plan Update https://29palmswater.com/wp-content/uploads/TPWD-2020-UWMP-Update-FINAL_Appendices-Included.pdf (accessed 04/20/23)

additional sources of polluted runoff will result and impacts are considered less than significant. No additional mitigation is required.

c(iv). *Less Than Significant Impact* – According to the San Bernardino Countywide Plan Flood Hazard Map (Figure X-1), the proposed project is not located in a 100-year or 500-year flood hazard area. Furthermore, development of this site is not anticipated to redirect or impede flood flow at the project site, particularly given that the drainage pattern of stormwater within the site is not anticipated to be significantly altered due to the type of development that is proposed. Therefore, impacts under this issue are considered less than significant and no mitigation is required.

d. *Less Than Significant Impact* – Implementation of the project will not expose people or structures to a significant risk of inundation by seiche, tsunami, or other flood hazards. According to the San Bernardino Countywide Plan Dam & Basin Hazards Map (Figure X-2), the project is not located within the limit of an inundation area delineated as such as a result of a nearby dam. The project is located more than 100 miles from the Pacific Ocean, which eliminates the potential for a tsunami to impact the project area. Additionally, a seiche would not occur within the vicinity of the project because no lakes or enclosed bodies of water exist near the site that could be impacted by such an event. It is anticipated that through compliance with the County's Development Code and minimal modifications to the existing drainage patterns within the site, inundation hazards within the County would be reduced to a level of less than significant. Therefore, the potential to expose people or structures to a significant risk of pollutants due to inundation would be minimal. No mitigation is required.

e. *Less Than Significant Impact* – In 2014, Governor Brown signed into law the Sustainable Groundwater Management Act, also known as SGMA. The Act took effect in 2015. It "requires for the first time in state history that groundwater resources be sustainably managed by local agencies through the formation of Groundwater Sustainability Agencies (GSAs) in each basin that are deemed high-priority or medium-priority by the Department of Water Resources. In such basins, GSAs are required to develop and implement Groundwater Sustainability Plans."[7] The SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins and requires GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California. According to the California Department of Water Resources Groundwater Sustainability Agency Formation Notification System[8], the groundwater basin underlying the project site, the SGMA Twentynine Palms Valley Basin, which has been designated very low priority under the SGMA (refer to Figure X-3). Given that the project is located within a basin that is considered very low priority, no conflict or obstruction of a water quality control plan or sustainable groundwater management plan is anticipated. As such, the project would not conflict with a sustainable groundwater management plan. Water consumption and effects in the basin indicate that the proposed project's water demand [See X(b) above] is considered to be minimal and within the available supply provided by the area water purveyor: TPWD. By controlling water quality during construction and operations through implementation of both short and long term BMPs at the site, no potential for conflict or obstruction of the Regional Board's water quality control plan has been identified.

Mitigation Program

MM HYD-1 **The Applicant shall require that the construction contractor to implement specific Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters. These practices shall include a Plan that identifies the methods of containing, cleanup, transport and proper disposal of hazardous chemicals or materials released during construction activities that are**

[7] Western Municipal Water District, 2023. Sustainable Groundwater Management Act https://www.wmwd.com/461/Sustainable-Groundwater-Management-Act (accessed 04/20/23)
[8] Department of Water Resources, 2023. Groundwater Sustainability Act Map Viewer. https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true (accessed 04/20/23)

compatible with applicable laws and regulations. BMPs to be implemented by the District include the following:

- **The use of silt fences or coir rolls;**
- **The use of temporary stormwater desilting or retention basins;**
- **The use of water bars to reduce the velocity of stormwater runoff;**
- **The use of wheel washers on construction equipment leaving the site;**
- **The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;**
- **The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and**
- **Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.**

Therefore, no significant adverse impacts are identified or anticipated with implementation of the above mitigation measures.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XI. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

XI. LAND USE AND PLANNING

SUBSTANTIATION: San Bernardino County, 2020. *San Bernardino Countywide Plan, Final Environmental Impact Report.* https://countywideplan.com/resources/document-download/ (accessed 05/17/23)

a. *No Impact* – Refer to the aerial photos provided as Figures 1 and 2, which depict the project's regional and site-specific location. The project site is zoned for Rural Living use and the Countywide Plan land use designation is Rural Living. The existing project is located within the SOI of the City of Twentynine Palms, within the Mojave Desert Region of San Bernardino County. The proposed Yurts would be developed within an area consistent with the Rural Living land use designation in that, sparse single-family residences are located in the vicinity of the project. The proposed use of this site would be consistent with the surrounding uses, which includes single-family residences, such as the existing single-family residences within the project site, the onsite Campsites and nearby rural single-family residences. Given that the development and continued operation of the proposed 28 Palms Ranch Campsite would be consistent with and similar to the surrounding uses, operation of 11 Yurts, of which 6 are presently operational, 3 are being used for storage and are not connected to utilities, and 2 will be developed as part of the project site, the proposed project would be consistent with both the uses surrounding the project and the surrounding land use designations and zoning classifications. Consequently, the development of the project site with the proposed use will not divide any established community in any manner. Therefore, no significant impacts under this issue are anticipated and no mitigation is necessary.

b *Less Than Significant Impact* – The proposed project will develop the 28 Palms Ranch Campsite within a site that contains some native vegetation, but that has been modified to incorporate the existing Yurts into the native landscape. The site presently supports two single-family residences, 6 operational Yurts, 3 Yurts utilized for storage that are not connected to utilities and are therefore

not operational, and native vegetation throughout the site. The project site is zoned for Rural Living use and the San Bernardino Countywide Plan land use designation is Rural Living. The County's recently approved Countywide Plan lists the following Goals and Policies under the Land Use Element:

- Goal LU-1: Growth and development that builds thriving communities, contributes to our Complete County, and is fiscally sustainable.
  - Applicable policies:
    - Policy LU-1.5 Development Impact Fees
- Goal LU-2 Land Use Mix and Compatibility: An arrangement of land uses that balances the lifestyle of existing residents, the needs of future generations, opportunities for commercial and industrial development, and the value of the natural environment.
  - Applicable policies:
    - Policy LU-2.1: Compatibility with existing uses
    - Policy LU-2.3: Compatibility with natural environment
    - Policy LU-2.4: Land Use Map consistency
    - Policy LU-2.6: Coordination with adjacent entities
- Goal LU-4 Community Design: Preservation and enhancement of unique community identities and their relationship with the natural environment.
  - Applicable policies:
    - Policy LU-4.1: Context-sensitive design in the Mountain/Desert regions
    - Policy LU-4.3: Native or drought-tolerant landscaping
    - Policy LU-4.5: Community identity
    - Policy LU-4.7: Dark skies

The proposed project would be consistent with the above goals and policies. A review of all other General Plan Goals (Housing Element, Infrastructure & Utilities Element, Transportation & Mobility Element, Natural Resources Element, Renewable Energy & Conservation Element, Cultural Resources Element, Hazards Element, Personal & Property Protection Element, Economic Development Element, and Health & Wellness Element) indicates that the proposed project is consistent with all applicable Goals, often with mitigation, as demonstrated by the findings in the pertinent sections of this Initial Study. The proposed project can be implemented without significant effects on the circulation system; all infrastructure exists at or can be extended to the site to support the 28 Palms Ranch Campsite Project; it can meet the requirements set forth in the Economic Development Element pertaining to new revenue generating development; it will not generate significant air emissions or GHG emissions; it will meet noise design requirements with mitigation; it can meet all Safety Element requirements; and it implements the land use compatibility requirements of the Health and Wellness Element. Therefore, the implementation of this project at this site will be consistent with surrounding land uses, and current use of the site.

The project would therefore have a less than significant potential to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No mitigation is required to minimize impacts under this issue.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XII. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

XII. MINERAL RESOURCES

SUBSTANTIATION: (Check ☐ if project is located within the Mineral Resource Zone Overlay) San Bernardino County, 2020. *San Bernardino Countywide Plan, Final Environmental Impact Report.* https://countywideplan.com/resources/document-download/ (accessed 05/17/23)

a. *Less Than Significant Impact* – The proposed project is located on a previously developed site containing vegetation that is best described as sparse desert shrubland, and as such, does not contain any known important minerals resources. The San Bernardino Countywide Plan Mineral Resource Zones map indicates that the proposed project is not located within any delineated mineral resource zone (Figure XII-1). The proposed project is furthermore not located within an area designated by the State Mining and Geology Board in 1987 or 2013. Given that the proposed project is not located on a delineated state or regionally significant site, and that no mineral extraction currently occurs or is known to have ever occurred on the property, it is anticipated that the development of the site would have a less than significant to result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b. *Less Than Significant Impact* – The proposed project would not result in a significant impact under any of the Initial Study Checklist Topics, provided mitigation measures are implemented. As stated above, the San Bernardino Countywide Plan Mineral Resource Zones map indicates that the proposed project not located within any delineated mineral resource zone (Figure XII-1). Given that the site does not currently support mineral resources and has not supported any mineral resources extraction in the past, it is not anticipated that the proposed project would interfere with a locally important mineral resource recovery site. Furthermore, given the small size of the site and the lack of any mining operations in the immediate vicinity of the project, such a use at this site would be infeasible; additionally, development of the site would not preclude future extraction of resources in the general project area. As such, the development of the proposed 28 Palms Ranch Campsite Project at the proposed site would have a less than significant potential to result in the loss of any available locally important resource recovery site delineated on a local general plan, specific plan or other land use plan.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

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

XIII. NOISE

SUBSTANTIATION: (Check if project is located in the Noise Hazard Overlay District ☐ or is subject to severe noise levels according to the General Plan Noise Element ☐) A Noise Impact Analysis (NIA) for the proposed project titled *"Mesa Drive Yurts Noise Impact Analysis, County of San Bernardino,"* was prepared by Urban Crossroads. The NIA is provided as Appendix 6 to this Initial Study and is dated April 18, 2023.

Introduction to Noise Regulations

Noise is generally described as unwanted sound. The proposed project consists of the installation of 2 new Yurts and utilization and operation of the 3 existing Yurts on the westerly parcel, in addition the continued operation of the existing 6 operational Yurts on the easterly parcel, making up the 28 Palms Ranch Campsite Project. Each of the 11 Yurts would be about 19' in diameter, and about 7'6" in height and would be installed on the ground, requiring no mass grading to enable each new Yurt installation. When completed, the proposed project will consist of 11 Mongolian Yurts with utility connections and full accommodations provided for each Yurt. The accommodations include barbecues, covered picnic tables, outdoor showers, restrooms, and open fire rings. Each Yurt accommodation also would include outdoor showers. The project would require installation of each of these amenities in conjunction with the 2 new Yurts and the 3 existing non-operational Yurts on the westerly parcel, while the existing Yurts on the easterly parcel are presently outfitted with these amenities.

The unit of sound pressure ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by over one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is therefore used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity from around 500 to 2,000 cycles per second are factored more heavily into sound descriptions in a process called "A-weighting," written as "dBA."

Leq is a time-averaged sound level; a single-number value that expresses the time-varying sound level for the specified period as though it were a constant sound level with the same total sound energy as the time-varying level. Its unit of measure is also the decibel (dB). The most common averaging period for Leq is hourly.

Because community receptors are more sensitive to unwanted noise intrusion during more sensitive evening and nighttime hours, state law requires that an artificial dBA (A-weighted decibel) increment be

added to quiet time noise levels. The State of California has established guidelines for acceptable community noise levels that are based on the Community Noise Equivalent Level (CNEL) rating scale (a 24-hour integrated noise measurement scale). The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land use types. The State Guidelines, Land Use Compatibility for Community Noise Exposure, single-family homes are "normally acceptable" in exterior noise environments up to 60 dB CNEL and "conditionally acceptable" up to 70 dB CNEL based on this scale. Multiple family residential uses are "normally acceptable" up to 65 dB CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries, and churches are "normally acceptable" up to 70 dB CNEL, as are office buildings and business, commercial and professional uses with some structural noise attenuation.

San Bernardino Countywide Plan Noise Element
The Countywide Plan Hazards (HZ) Element includes goals, policies, and programs intended to avoid or reduce noise-related impacts. The most common sources of environmental noise in San Bernardino County are associated with roads, airports, railroad operations, and industrial activities. The facilities are used to transport residents, consumer products and provide basic infrastructure for the community. To address these noise sources found in the County of San Bernardino, the following goals have been identified in the Countywide Plan as applicable to the Project:

> ***Policy HZ-2.8 Proximity to Noise Generating Uses:*** *We limit or restrict new noise sensitive land uses in proximity to existing conforming noise generating uses and planned industrial areas.*
>
> ***Policy HZ-2.9 Control Sound at the Source:*** *We prioritize noise mitigation measures that control sound at the source before buffers, sound walls, and other perimeter measures.*

County of San Bernardino General Plan Noise Element
The County Code, Title 8 Development Code contains the noise level limits for mobile, stationary, and construction-related noise sources.

Transportation Noise Standards: Section 83.01.080(d), Table 83-3, contains the County of San Bernardino's mobile noise source- related standards, shown on Exhibit 3-A. Based on the County's mobile noise source standards, there are no exterior noise level standards for the Project commercial land use. Exterior transportation (mobile) noise level standards for residential land uses in the Project study area are shown to be 60 dBA CNEL, while non-noise-sensitive land uses, such as office uses, require exterior noise levels of 65 dBA CNEL per the County's Table 83-3 mobile noise source standards. Standards for noise exposure for sources that are pre-empted from local control are articulated in the Noise Element of the County Development Code shown in Table XIII-1.

Table XIII-1
NOISE STANDARDS FOR ADJACENT MOBILE NOISE SOURCES

Noise Standards for Adjacent Mobile Noise Sources			
Land Use		***Ldn (or CNEL) dB(A)***	
Categories	***Uses***	***Interior (1)***	***Exterior (2)***
Residential	Single and multi-family, duplex, mobile homes	45	60(3)
Commercial	Hotel, motel, transient housing	45	60(3)
	Commercial retail, bank, restaurant	50	N/A
	Office building, research and development, professional offices	45	65
	Amphitheater, concert hall, auditorium, movie theater	45	N/A
Institutional/Public	Hospital, nursing home, school classroom, religious institution, library	45	65
Open Space	Park	N/A	65

Notes:

(1) The indoor environment shall exclude bathrooms, kitchens, toilets, closets and corridors.

(2) The outdoor environment shall be limited to:

- Hospital/office building patios
- Hotel and motel recreation areas
- Mobile home parks
- Multi-family private patios or balconies
- Park picnic areas
- Private yard of single-family dwellings
- School playgrounds

(3) An exterior noise level of up to 65 dB(A) (or CNEL) shall be allowed provided exterior noise levels have been substantially mitigated through a reasonable application of the best available noise reduction technology, and interior noise exposure does not exceed 45 dB(A) (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level shall necessitate the use of air conditioning or mechanical ventilation.

CNEL = (Community Noise Equivalent Level). The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night from 10:00 p.m. to 7:00 a.m.

Source: County of San Bernardino County Code, Title 8 Development Code, Table 83-3.

Operational Noise Standards: To analyze noise impacts originating from a designated fixed location or private property such as the Mesa Drive Yurts Project, stationary-source (operational) noise such as the expected outdoor gatherings and parking lot activity are typically evaluated against standards established under a jurisdiction's Municipal Code. The County of San Bernardino County Code, Title 8 Development Code, Section 83.01.080(c) establishes the noise level standards for stationary noise sources. Since the Project's land use will potentially impact adjacent noise-sensitive uses in the Project study area, this noise study relies on the more conservative residential noise level standards to describe potential operational noise impacts.

For residential properties, the exterior noise level shall not exceed 55 dBA Leq during the daytime hours (7:00 a.m. to 10:00 p.m.) and 45 dBA Leq during the nighttime hours (10:00 p.m. to 7:00 a.m.) for both the whole hour, and for not more than 30 minutes in any hour. The exterior noise level standards shall apply for a cumulative period of 30 minutes in any hour, as well as the standard plus 5 dBA cannot be exceeded for a cumulative period of more than 15 minutes in any hour, or the standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour, or the standard plus 15 dBA for a cumulative period of more than 1 minute in any hour, or the standard plus 20 dBA for any period of time. Further, Section 83.01.080(e) indicates that if the existing ambient noise level already exceeds any of the exterior noise level limit categories, then the standard shall be adjusted to reflect the ambient conditions. The County of San Bernardino operational noise level standards are shown on Table XIII-2.

Table XIII-2
COUNTY OF SAN BERNARDINO NOISE ORDINANCE LIMITS –
PRIVATE PROPERTY AND STATIONARY SOURCES

Affected Land Uses (Receiving Noise)	7 a.m. to 10 p.m. Leq[1] dB(A)[2]	10 p.m. to 7 a.m. Leq[1] dB(A)[2]
Residential	55	45
Professional Services	55	55
Other Commercial	60	60
Industrial	70	70

[1]Leq=(Equivalent Energy Level): The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period, typically 1.8 or 24 hours.
[2]dB(A)=(A-weighted Sound Pressure Level): The sound pressure level, in decibels, as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, placing greater emphasis on those frequencies within the sensitivity range of the human ear.
Source: County of San Bernardino General Design Standards, Section 87.0905.

The percentile noise descriptors are provided to ensure that the duration of the noise source is fully considered. However, due to the relatively constant intensity of the Project operational activities, the L50 or average Leq noise level metrics best describe the outdoor gatherings and parking lot activity. In addition, the Leq noise level metric accounts for noise fluctuations over time by averaging the louder and quieter events and giving more weight to the louder events. In addition, due to the mathematical relationship between the median (L50) and the mean (Leq), the Leq will always be larger than or equal to the L50. The more variable the noise becomes, the larger the Leq becomes in comparison to the L50. Therefore, this noise study conservatively relies on the average Leq sound level limits to describe the Project operational noise levels.

Construction Noise Standards: Section 83.01.080(g)(3) of the County of San Bernardino Development Code indicates that construction activity is considered exempt from the noise level standards between the hours of 7:00 a.m. to 7:00 p.m. except on Sundays and Federal holiday. However, a construction noise significance threshold derived from the FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a threshold for noise sensitive residential land use, a noise level of 85 dBA Leq for commercial locations, and 90 dBA L_{eq} for industrial locations.

Construction Vibration Standards: The County of San Bernardino Development Code, Section 83.01.090(a) states that vibration shall be no *greater than or equal to two-tenths inches per second measured at or beyond the lot line*. (12) Therefore, to determine if the vibration levels due to the operation and construction of the Project, the peak particle velocity (PPV) vibration level standard of 0.2 inches per second is used

Significance Criteria Summary
Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed Project. Table XIII-3 shows the significance criteria summary matrix.

Table XIII-3
SIGNIFICANCE CRITERIA SUMMARY

Analysis	Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Operational	Residential	Exterior Noise Level Limit[2]	55 dBA L_{eq}	45 dBA L_{eq}
	Noise-Sensitive[1]	if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} Project increase	
		if ambient is 60 - 65 dBA L_{eq}	≥ 3 dBA L_{eq} Project increase	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} Project increase	

Analysis	Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Construction	All	Permitted between 7:00 a.m. to 7:00 p.m.; except Sundays and Federal holidays.[3]		
	Residential	Noise Level Threshold[4]	80 dBA L_{eq}	n/a
	Commercial		85 dBA L_{eq}	n/a
	Industrial		90 dBA L_{eq}	n/a
	All	Vibration Level Threshold[5]	0.20 PPV in/sec	n/a

[1] FICON, 1992.
[2] County of San Bernardino Development Code, Title 8, Section 83.01.080 (Appendix 3.1)
[3] Section 83.01.080(g)(3) of the County of San Bernardino County Code.
[4] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[5] Section 83.01.090(a) of the County of San Bernardino County Code.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m. "n/a" = construction activities are not planned during the nighttime hours; "PPV" = peak particle velocity.

Existing Noise Level Measurements

To assess the existing noise level environment, 24-hour noise level measurements were taken at four locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Figure XIII-1 provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Saturday, March 25, 2023 (refer to Appendix 6). Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

Table XIII-2 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Table XIII-4 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number.

Table XIII-4
24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located to the north of the Project site near residence at 68727 Indian Trail.	47.9	55.1
L2	Located to the east of the Project site near the residence at 68846 Mesa Drive.	46.5	53.7
L3	Located to the southeast of the Project site near the residence 4349 Copper Mountain Road.	54.0	63.5
L4	Located to the west of the Project site near the residence 68356 Mesa Drive.	51.1	59.3

[1] See Exhibit 5-A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 7:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Sensitive Receiver Locations

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown on Figure XIII-2, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise- sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, out- patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

The selection of receiver locations is based on Federal Highway Administration (FHWA) guidelines and is consistent with additional guidance provided by Caltrans and the Federal Transit Administration (FTA). Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

R1: Location R1 represents existing noise sensitive rural residence located at 68727 Indian Trail, approximately 1811 feet to the north of the Project site. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R2: Location R2 represents existing noise sensitive rural residence located at 68846 Mesa Drive, approximately 847 feet to the east of the Project site. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.

R3: Location R3 represents the existing noise sensitive rural residence located at 4349 Copper Mountain Road, approximately 2008 feet to the southeast of the Project site. A 24-hour noise measurement was taken near this location, L3, to describe the existing ambient noise environment.

R4: Location R4 rural residence located at 68356 Mesa Drive, approximately 95 feet to the west of the Project site. A 24-hour noise measurement was taken near this location, L3, to describe the existing ambient noise environment.

Impact Analysis

a. *Less Than Significant With Mitigation Incorporated* – The proposed project is located in a rural living region, and has very little cross traffic around the project. Background noise in the vicinity of the project area is generally at or lower than the San Bernardino Development Code noise standard for Rural Living uses.

Long-Term Operational Noise

This section analyzes the potential stationary-source operational noise impacts at the nearest receiver locations, identified in Section 8, resulting from the operation of the 28 Palms Ranch Campsite Project. Figure XIII-3 identifies the representative receiver locations and noise source locations used to assess the hourly average L_{eq} operational noise levels consistent with the County of San Bernardino noise standards. To present the potential worst-case noise conditions, this analysis assumes the Project would be operational 24 hours per day, seven days per week. The onsite Project-related noise sources are expected to include: the outdoor gatherings and parking lot activity.

To estimate the Project operational noise impacts, reference noise levels were taken from manufacturers specifications or measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. This section provides a detailed description of the reference noise level measurements shown on Table XIII-5

used to estimate the Project operational noise impacts. It is important to note that the following projected noise levels assume the worst-case noise environment with the outdoor gatherings and parking lot activity all operating at the same time. These sources of noise activity will likely vary throughout the day.

Table XIII-5
REFERENCE NOISE LEVEL MEASUREMENTS

Noise Source[1]	Noise Source Height (Feet)	Min./Hour[2]		Reference Noise Level (dBA L_{eq}) @ 50 Feet	Sound Power Level (dBA)[3]
		Day	Night		
Parking Lot Activity	3'	60	60	52.1	83.7
Outdoor Gathering	5'	60	60	49.8	81.4

[1] As measured by Urban Crossroads, Inc.
[2] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.
[3] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

To assess the noise levels created by outdoor gathering activity, reference noise levels were based on the square footage of the area, number of people, and assuming raised voices. Assuming eight (8) people per gathering area the reference noise level is 49.8 dBA Leq at 50 feet. For this noise analysis, outdoor gathering activity is expected operate continuously for the daytime and the nighttime hours and will be located five feet above the ground elevation. This is conservatively assumed as activities during the nighttime hours are anticipated to be much less than the daytime hours.

Using the reference noise levels to represent the proposed Project operations that include outdoor gatherings and parking lot activity, Urban Crossroads, Inc. calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table XIII-6 shows the Project operational noise levels during the daytime and nighttime. The noise levels at the off-site receiver locations are conservatively expected to range from 25.4 to 43.3 dBA L_{eq}. This is considered conservative as activities during the nighttime hours are anticipated to be much less than during the daytime hours.

Table XIII-6
REFERENCE NOISE LEVEL MEASUREMENTS

Noise Source[1]	Daytime Noise Level (dBA L_{eq})			
	R1	R2	R3	R4
Parking Lot Activity	32.4	41.6	30.8	23.9
Outdoor Gathering	29.6	38.3	27.4	20.2
Total (All Noise Sources)	**34.2**	**43.3**	**32.4**	**25.4**

Project Operational Noise Level Compliance

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the County of San Bernardino exterior noise level standards at nearest noise-sensitive receiver locations. Table XIII-7 shows the operational

noise levels associated with the Project will satisfy the County of San Bernardino exterior noise level standards at all nearby receiver locations. Therefore, the operational noise impacts are considered less than significant at the nearest noise-sensitive receiver locations.

Table XIII-7
OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[1]	Project Operational Noise Levels (dBA L_{eq})[2]		Exterior Noise Level Standards (dBA L_{eq})[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	34.2	34.2	55	45	No	No
R2	43.3	43.3	55	45	No	No
R3	32.4	32.4	55	45	No	No
R4	25.4	25.4	55	45	No	No

[1] See Exhibit 6-A for the receiver locations.
[2] Proposed Project operational noise levels as shown in Tables 7-2.
[3] Exterior noise level standards are shown in Table 3-1.
[4] Do the estimated Project operational noise source activities exceed the noise level standards?
"Daytime" = 7:01 a.m. to 10:00 p.m.; "Nighttime" = 10:01 p.m. to 7:00 a.m.

Project Operational Noise Level Increases
As indicated on Tables XIII-8 and XIII-9, the project will generate daytime and nighttime operational noise level increases ranging from less than 0.1 to 1.3 dBA L_{eq} at the nearest receiver locations. Project-related operational noise level increases will satisfy the operational noise level increase significance criteria presented on Table XIII-2. Therefore, the incremental project operational noise level increase is considered *less than significant* at all receiver locations.

Short Term Construction Noise
This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the project. Figure XIII-4 shows the construction noise source activity location in relation to the nearest sensitive receiver locations previously described in Section 6. To prevent high levels of construction noise from impacting noise-sensitive land uses, County of San Bernardino Development Code Section 83.01.080(g)(3), states that construction activities are limited to the hours of 7:00 a.m. to 7:00 p.m. on any day and limited at any time on Sundays and federal holidays.

To describe peak construction noise activities, this construction noise analysis was prepared using reference noise level measurements published in the FHWA Road Construction Noise Model (RCNM). Table XIII-8 provides a summary of the FHWA construction reference noise level measurements expressed in maximum hourly noise level (dBA L_{eq}) using the FHWA RCNM usage factors to describe the typical construction activities for each stage of Project construction.

To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest noise level impacts when equipment with the highest reference noise level is operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location. This is simulated by modeling multiple pieces of construction as moving point sources. As shown on Table XIII-9, the construction noise levels from the utilization of the small tractor, small trencher, and backhoe are expected to range from 32.6 to 46.4 dBA L+, and the highest construction levels are expected to range from 39.4 to 56.9 dBA L+ at the nearest receiver locations.

Table XIII-8
CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Construction Equipment	Reference Noise Level @ 50 Feet (dBA L_{max})[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})[1]	Composite Reference Noise Level (dBA L_{eq})
Site Preparation	Tractor	84.0	80.0	84.4
	Grader	85.0	81.0	
	Excavator	80.7	76.7	
Grading	Dozer	81.7	77.7	80.6
	Front End Loader	79.1	75.1	
	Backhoe	77.6	73.6	
Building Assembly	Front End Loader	79.1	75.1	81.4
	Crane	80.6	72.6	
	Gradall	83.4	79.4	
Paving	Paver	77.2	74.2	77.8
	Roller	80.0	73.0	
	Vacuum Street Sweeper	81.6	71.6	

[1] FHWA's Roadway Construction Noise Model, January 2006.

Table XIII-9
CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{max})				
	Site Preparation	Grading	Building Construction	Paving	Highest Levels[2]
R1	46.9	43.6	45.3	40.1	46.9
R2	56.9	53.6	55.3	50.1	56.9
R3	46.4	43.1	44.8	39.6	46.4
R4	39.4	36.1	37.8	32.6	39.4

[1] The nearest noise receiver locations are shown in Exhibit 9-A.
[2] Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 9.1.

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA Leq is used as a reasonable threshold to assess the daytime construction noise level impacts at residential locations. The construction noise analysis shows that the nearest receiver locations will satisfy the reasonable daytime significance thresholds shown in Table XIII-3 during Project construction activities as shown on Table XIII-10. Therefore, the noise impacts due to Project construction noise is considered less than significant at all receiver locations.

Conclusion

Through compliance with the San Bernardino County Development Code, neither operation or construction of the proposed project would violate the County's noise standards. Impacts under this issue are considered less than significant without the need for added mitigation.

Table XIII-10
CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{max})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	46.9	80	No
R2	56.9	80	No
R3	46.4	80	No
R4	39.4	80	No

[1] All noise receiver locations are shown on Exhibit 6-A. The nearest noise receiver locations are shown in Exhibit 9-A.
[2] Highest construction noise level calculations based on distance from the construction noise source activity to nearby receiver locations as shown on Table 9-2.
[3] Construction noise level thresholds are limited to the noise sensitive receiver locations (Section 3.5).
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

b. *Less Than Significant Impact* – Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by vibration of room surfaces is called structure borne noises. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous or transient. Vibration is often described in units of velocity (inches per second) and discussed in decibel (VdB) units in order to compress the range of numbers required to describe vibration. Vibration impacts related to human development are generally associated with activities such as train operations, construction, and heavy truck movements.

Vibration is most commonly expressed in terms of the root mean square (RMS) velocity of a vibrating object. RMS velocities are expressed in units of vibration decibels. The range of vibration decibels (VdB) is as follows:

65 VdB	-	threshold of human perception
72 VdB	-	annoyance due to frequent events
80 VdB	-	annoyance due to infrequent events
94-98 VdB	-	minor cosmetic damage

Construction activity can result in varying degrees of groundborne vibration but is generally associated with pile driving and rock blasting. Other construction equipment—such as air compressors, light trucks, hydraulic loaders, etc.—generates little or no ground vibration. The San Bernardino County Development Code offers guidance on Vibration. San Bernardino County Development Code 83.01.090 provides guidance regarding how vibration should be measured and offers the following Standard:

(a) Vibration standard. No ground vibration shall be allowed that can be felt without the aid of instruments at or beyond the lot line, nor shall any vibration be allowed which produces a particle velocity greater than or equal to two-tenths (0.2) inches per second measured at or beyond the lot line.

Additionally, according to the San Bernardino County Development Code, construction is exempt from vibration regulations during the hours of 7 a.m. and 7 p.m. and the proposed project would be developed within the hours in which vibration during construction is exempt.

Ground vibration levels associated with various types of construction equipment are summarized on Table XIII-11.

Table XIII-11
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Table XIII-12 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 95 feet to 761 feet from Project construction activities (at the Project site boundary), construction vibration levels are estimated to range up to 0.01 in/sec PPV and will remain below the County of San Bernardino 0.2 in/sec PPV threshold for vibration at all receiver locations. Therefore, the Project-related vibration impacts are considered less than significant during the construction activities at the Project site.

Table XIII-12
PROJECT CONSTRUCTION VIBRATION LEVELS

Receiver[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level		
R1	95'	0.00	0.00	0.01	0.01	0.01	0.20	No
R2	415'	0.00	0.00	0.00	0.00	0.00	0.20	No
R3	761'	0.00	0.00	0.00	0.00	0.00	0.20	No
R4	733'	0.00	0.00	0.00	0.00	0.00	1.20	No

[1] Receiver locations are shown on Exhibit 6-A.
[2] Distance from Project construction boundary to the receiver building structure.
[3] Based on the Vibration Source Levels of Construction Equipment (Table 9-4).
[4] Caltrans 2020.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the Project site perimeter.

c. *No Impact* – The project site is located more than 13.5 miles from any nearby airport. As shown on the Airport Safety & Planning Areas map prepared for the San Bernardino Countywide Plan (Figure IX-2), the proposed project is not located within a designated Airport Safety Review Area at any of the area airports in the area, and therefore is not located within the noise contours for the Airport. Therefore, there is no potential for the project expose people residing or working in the project area to excessive noise levels as a result of proximity to a public airport or private airstrip. No mitigation is required.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

XIV. POPULATION AND HOUSING

SUBSTANTIATION:

a. *No Impact* – Implementation of the project will not induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). The proposed project would retain the two single-family homes that exist within the two parcels, with the Applicant, who also serves as the site caretaker and property manager, residing in the easterly single-family residence within the site. The applicant intends to be fully operational as the proposed 28 Palms Ranch Campsite by the end of Summer of 2023. The proposed project would not require a significant number of employees to operate, as it would support a total of 3 full-time employees, with 1 part-time employee that is utilized on an as needed basis for maintenance and landscaping purposes. A maximum of 48 guests will be allowed at the 28 Palms Ranch Campsite. Though the proposed project would expand the operations of the 28 Palms Ranch Campsite from 6 operational Yurts to 11 operational Yurts, and therefore would serve a greater number of guests, no new positions of employment would be created by the proposed project, as the employees that support the existing operations would be sufficient to handle future operation of the 28 Palms Ranch Campsite. Thus, based on the type of project, and that the proposed project would not contribute to increment indirect population growth, project implementation will not induce substantial population growth that exceeds either local or regional projections. No impacts under this issue are anticipated and no mitigation is required.

b. *No Impact* – The project site presently contains two single-family residences, which will remain in place and in use as part of the proposed project. Thus, while the proposed project contains two existing residences, and supports about 3 residents, the proposed project would not displace the residences or persons that exist and reside within the site. Thus, no impacts will occur and no mitigation is required.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XV. PUBLIC SERVICES: Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

XV. PUBLIC SERVICES

SUBSTANTIATION:

a. *Less Than Significant Impact* – The proposed project site is served by the San Bernardino County Fire Department, and the nearest fire stations to the proposed project site are the San Bernardino County Fire Station 36 and 44, which are located about 8 miles west and east, respectively, of the project site. The San Bernardino County Fire Department provides fire protection, fire prevention, and emergency medical services to the project area. The proposed 28 Palms Ranch Campsite Project would result in minimal potential for random emergency events during operations, because the majority of the activities at the site would be related to recreation. Based on the above information, the proposed project does not pose a significant fire or emergency response hazard, nor the proposed project forecast to cause a significant demand for fire protection services. The County will require standard conditions to ensure adequate fire flow at the proposed facilities. The project will be required to adhere to the California Fire Code, which ensures that new structures are designed to minimize fire risks related to human safety (including that of emergency responders), loss of property, and other impacts to the environment. Furthermore, the proposed project would not induce substantial population within the County such that a significantly greater demand on fire protection services would be required. These requirements are considered adequate measures to prevent any significant impacts under this issue, thus no mitigation is required.

b. *Less Than Significant Impact* – The proposed project receives police services through the San Bernardino County Sheriff's Department. The Department enforces local, state, and federal laws; performs investigations and makes arrests; administers emergency medical treatment; and responds to County emergencies. The closest Sheriff's Station is located at 6527 White Feather Road, Joshua Tree, California 92252, which is approximately 8 miles to the west of the project site. The proposed project will not include the kind of uses or activities that would likely attract criminal activity, except for random trespass and/or theft; however, any random trespass is unlikely given that the type of activities proposed, the remote location, and that such trespass has not occurred as part of the existing operational scenario. Thus, the project is not of a type that would typically attract criminal activities. Furthermore, the proposed project would not induce substantial population within the County such that a significantly greater demand on police services would be required. Therefore, due to the proposed use of the project site, implementation of the proposed project would not substantially increase the demand for law enforcement services beyond that already existing at the project site.

c. *Less Than Significant Impact* – The proposed project is anticipated to temporarily employ a maximum of 3 persons during construction and will not increase the number of employees required to operate the 28 Palms Ranch Campsite. The project is not anticipated to generate any new direct demand for the area schools. The 28 Palms Ranch Campsite would be developed within a site that would be served by Morongo Unified School District (MUSD). As addressed above under issue Population and Housing, XV(a) above, the proposed project does not include any land uses that would substantially induce population growth and will not require a substantial temporary or permanent labor force. The development of the 28 Palms Ranch Campsite at this site is not anticipated to adversely impact schools in any manner. The proposed project will not generate a substantial increase in elementary, middle, or high school population, and since payment of school impact fees is a mandatory requirement for the project, no further mitigation measures are required to reduce school impacts caused by the proposed project to a less than significant level.

d. *Less Than Significant Impact* – The proposed project, through the continued hosting of guests as part of the 28 Palms Ranch Campsite Project, will continue to contribute to and increase demand for recreational facilities, in the sense that the Joshua Tree National Park is the main attraction for guests of the 28 Palms Ranch Campsite Project. Although the Project has a potential to accommodate up to 48 guests at the proposed 28 Palms Ranch Campsite would on average accommodate about half of the guests and thus would contribute to a new demand for parks and recreation. Joshua Tree National Park includes 792,510 acres, of which 120,757 are in the County of San Bernardino. The portion within the County is situated south 29-Palms, Joshua Tree and east of the community of Morongo Valley. The park allows rock climbing, backpacking, camping, hiking, horseback riding, geologic sight- seeing, birding, wildlife viewing, and stargazing. will not directly add to the existing demand on public park or recreational facilities. The National Park Service is primarily funded by Congress through both the annual appropriations cycle as well as some mandatory funds (thus, federal income tax contributes to National Park System funding). The National Park System also receives funding through park entrance and user fees. The existing residents of the project site would contribute through the required payment federal income tax, which, as stated above, contributes to funding National Parks (maintenance, upkeep, employees, land dedication, etc.). Additionally, guests of the 28 Palms Ranch Project would contribute entrance fees to access Joshua Tree National Park, where applicable, which is sufficient to offset incremental demand for recreation within Joshua Tree National Park. The proposed project is not anticipated to generate any new direct demand for other parks within the County, as this project would have no potential to induce local population growth. No other nearby parks would be impacted by the proposed project, as there are no other parks in close proximity to the project site. As such, existing federal and state, and local regulations pertaining to parkland dedication and maintenance assessed by the above governmental entities would mitigate potential adverse impacts to the environment that may result from the increased demand for park and recreation services within the County as a result of implementation of the proposed project. The proposed project will have a less than significant impact on parks and recreation facilities.

e. *Less Than Significant Impact* – Other public facilities include library and general municipal services. According to the Countywide Plan, County library services are funded mostly through taxes—mainly property taxes and sales taxes. State, federal, and other government assistance, in addition to library fees, also fund the library. Since the project will not directly induce substantial population growth, it is not forecast that the use of such facilities will increase substantially as a result of the proposed project. However, the Applicant will continue to contribute property tax to the County and will also increase sales tax revenue from operation of the expanded 28 Palms Ranch Campsite Project, which will offset any increase in demand for library or other public services. Thus, any impacts under this issue are considered less than significant, and no mitigation is required.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

SUBSTANTIATION

a. *Less Than Significant Impact* – As previously discussed in Section XIV, Population and Housing and Section XV, Public Services, this project will not contribute to an increase in the population beyond that already allowed or planned for by local and regional planning documents. However, as previously stated, the proposed project, through the continued hosting of guests as part of the 28 Palms Ranch Campsite Project, will continue to contribute to and increase demand for recreational facilities, in the sense that the Joshua Tree National Park is the main attraction for guests of the 28 Palms Ranch Campsite Project. Thus, the up to 48 guests of the proposed 28 Palms Ranch Campsite would contribute to the increased demand for recreation and park visitation of the Joshua Tree National Park. The demand for use of the Joshua Tree National Park would be offset by the existing residents of the project site contribution to mandatory federal income tax, which, as stated above, contributes to funding National Parks (maintenance, upkeep, employees, land dedication, etc.). Additionally, many of the guests of the 28 Palms Ranch Project in visiting would contribute entrance fees to access Joshua Tree National Park, which is sufficient to offset incremental demand for recreation within the Joshua Tree National Park. The proposed project is not anticipated to generate any new direct demand for other parks within the County, as this project would have no potential to induce local population growth. Therefore, while the proposed project would have a potential to increase the use of Joshua Tree National Park, payment of mandatory taxes and entrance fees to the Park itself would mitigate potential adverse impacts to the environment. Thus, impacts under this issue are considered less than significant, and no mitigation is required.

b. *No Impact* – The proposed project provides the following amenities for the 6 operational Yurts and will provide the following for the 5 new/nonoperational Yurts: barbecues, covered picnic tables, and open fire rings. As described throughout this Initial Study, the development and operation of the proposed project would not result in significant impacts under any issue category, and therefore, the installation of the above amenities in support of the proposed project would not result in an adverse physical effect on the environment. Furthermore, the proposed project is not forecast to induce population growth no new employees will be supported by the proposed project operations, and visitors will only stay at the Campsite sporadically and temporarily. Therefore, no impacts are anticipated to occur under this issue, and no mitigation is required.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

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

XVII. TRANSPORTATION

SUBSTANTIATION:

a. *Less Than Significant Impact* – The project site is currently accessible by car, with no accessible sidewalks provided in the vicinity of the project site. The proposed project will install compacted access roads throughout the site, and a new entrance along Lori Lane, as shown on the site plan provided as Figure 3 per San Bernardino County Development Standards 129B and 130. Additionally, the surrounding areas around the site do not currently provide for bike lanes, though the Countywide Future Bicycle Facilities Map indicates that the San Bernardino County Transit Authority (SBCTA) Bicycle Plan includes plans for a Class II bike lane to the east of the project site along Mesa Drive going south towards the outskirts of Copper Mountain (Figure XVII-1). The proposed project would not prevent the installation of or utilization of this bike lane in the future and the site will continue to be accessible by existing means of transport, with enhanced access to the site through the proposed access roads and points installed by the project.

The project site is not located within a service route for any area transit providers, and as such will not impact the transit circulation system.

Based on a review of the circulation in the vicinity of the Campsite, the minimal peak hour traffic that would be generated over the short- and long-term by the proposed project (anticipated to be less than 50 trips per day total), would have a less than significant potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. No mitigation is required.

b. *Less Than Significant Impact* – Senate Bill 743 mandates that California Environmental Quality Act (CEQA) guidelines be amended to provide an alternative to Level of Service for evaluating transportation impacts. The amended CEQA guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Traveled (VMT) for transportation impact evaluation.

The County of San Bernardino adopted analytical procedures, screening tools and impact thresholds for VMT, which are documented in the San Bernardino County Transportation Impact Study Guidelines (July 2019) (County Guidelines). The County Guidelines provides details on appropriate criteria that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed analysis. Screening thresholds are broken into the following types:

- Project Type Screening
- Transit Priority Area (TPA) Screening
- Low VMT Area

A land use project need only to meet one of the above screening thresholds to result in a less than significant impact. The proposed project appears to meet the Project Type Screening for the following reasons: the County Guidelines notes smaller projects that generate fewer than 110 trips per day are assumed to cause a less than significant VMT impact. The proposed project is anticipated to result in less than 50 round-trips per day, which equal to up to one trip per day per car, in addition to trips generated by the two single-family residences. As the estimated number of trips generated by this project per day are less than the 110 trip per day significance threshold, VMT impacts would be less than significant.

c. *Less Than Significant Impact* – The proposed project would occur entirely within the project site boundaries. Construction activities would not occur within the adjacent roadways to the project site. There are no uses that would be impacted by construction equipment or construction trips on the adjacent roadways. Trucks delivering equipment can enter the site without major conflicts with the flow of traffic on the roadways used to access the site. Additionally, the proposed project would be required to comply with all applicable fire code and ordinance requirements for construction and access to the site. Emergency response and evacuation procedures would be coordinated with the County, as well as the local police and fire departments. Therefore, the proposed project would have a less than significant potential to substantially increase hazards due to a geometric design feature or incompatible uses. No mitigation is required.

d. *Less Than Significant Impact* – The proposed project area is located in an area moderately susceptible to wildland fires and is located within a delineated moderate Fire Hazard Severity Zone (FHSZ) in a Federal Responsibility Area (FRA) as shown on Figures IX-4 and XX-1. As stated under Section XVII of the San Bernardino Countywide Plan, Transportation under issue (d), there is an emergency evacuation route located in the vicinity of the project site, which enable travel east and west of the project site in the event of an emergency. This route is Highway 62 and has been delineated as such on the Evacuation Route map provided as Figure IX-3. The proposed project is not located along this emergency route, nor would implementation of the project impede emergency response from accessing the site or surrounding area. Additionally, the proposed project would be required to comply with all applicable fire code and ordinance requirements for construction and access to the site. Access to the site would be provided at two driveways along Mesa Drive (existing) and a new entrance along Lori Lane. Emergency access to the site would be via the easterly driveway along Mesa Drive, as Mesa Drive would serve as an emergency route to the nearest major roadways Lear Avenue, which provides access to Highway 62. The project is located within a moderate FHSZ and impacts to emergency response and/or emergency evacuation plans are considered less than significant, especially given the type of vegetation within the project site. Thus, because of the lack of adverse impact on local circulation no potential for significant impacts on emergency access are forecast to occur during construction or operation. No further mitigation is required.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVIII. TRIBAL CULTURAL RESOURCES: Will the project:				
a) Would the project cause a substantial change in the significance of tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to the California Native American Tribe, and that is?				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or?	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

XVIII. TRIBAL CULTURAL RESOURCES

SUBSTANTIATION: Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

a.i-ii *Less Than Significant With Mitigation Incorporated* – The County of San Bernardino staff notified the following tribes pursuant to AB 52: 1) Colorado River Indian Tribes, 2) Fort Mojave Indian Tribe, 3) Twenty-Nine Palms Band of Mission Indians, 4) Gabrieleño Band of Mission Indians – Kizh Nation, 5) Morongo Band of Mission Indians, 6) San Gabriel Band of Mission Indians, 7) Yuhaaviatam of San Manuel Nation (YSMN), and 8) Soboba Band of Luiseno Indians. During the 30-day consultation period, responses were received from one tribe: the Morongo Band of Mission Indians. The Morongo Band of Mission Indians requested several items to determine the significance of resources that could be discovered and disturbed as a part of project construction and operations. Ultimately, the County, at time of Public Review, was still in the Consultation status with MBMI and was awaiting on MBMI for final input. However, if in the event that MBMI provides final input with recommended mitigation during the Public Review process, the County will then accept and incorporate MBMI mitigation into the Final Initial Study.

The YSMN responded in January 2023 to the County's initial AB 52 consultation letters, requesting incorporation of their standard mitigation measures, which are provided below, and to which the proposed project must adhere. No further mitigation beyond the measures described below, is required to minimize impacts to Tribal Cultural Resources. Therefore, with implementation of the above mitigation measure, the project has a less than significant potential to cause a substantial change in the significance of tribal cultural resources, defined in Public Resources Code section

21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to the California Native American tribe and that is either **a)** Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or **b)** A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Mitigation Program

MM TCR-1 **The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in CR-1, of any pre-contact and/or historic-era cultural resources discovered during project implementation and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.**

MM TCR-2 **Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.**

Therefore, no significant adverse impacts are identified or anticipated with implementation of the above mitigation measures.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

XIX. UTILITIES AND SERVICE SYSTEMS

SUBSTANTIATION:

a. Water

Less Than Significant Impact – Access to water service will be provided by Twentynine Palms Water District (TPWD) as there is service available to and presently serving the proposed project site. There is currently a water main installed and ready to service the site. As previously stated under issue Section X, Hydrology and Water Quality, sufficient water resources exist to meet project demand. The project is estimated to require a water demand that will represent only a nominal percentage of the available supply from TPWD (see Discussion XIXb below). Therefore, given that the proposed project would not result in significant impacts under any issue, as demonstrated throughout this Initial Study, development of the 28 Palms Ranch Project would not result in a significant environmental effect related to the relocation or construction of new or expanded water facilities in support of project operations and construction. Impacts are less than significant.

Wastewater

Less Than Significant Impact – The proposed project anticipates disposal of wastewater through the use of an alternative wastewater disposal system if approved by the County, such as the HomeBiogas system, or through the use of the HomeBiogas system in conjunction with 4 new onsite septic systems. As discussed in the Project Description (refer to Table 2), the use of the HomeBiogas generator reduces the total effluent to 1.2 liters per flush, accommodating up to 12 gallons of solid waste per day for a total capacity of 36 flushes per day, which is more than sufficient to accommodate the waste generated by each Yurt. Each HomeBiogas system has a tank volume of 700 gallons. Based on the existing Yurt wastewater generation onsite, each Yurt generates a maximum of 10 gallons of wastewater per day, which can be accommodated by the HomeBiogas systems. Should

the HomeBiogas system be required to connect to the septic systems, the HomeBiogas generated waste—termed bio-fertilizer—will be redirected from being utilized as fertilizer on site, to the septic systems, which will be capable of handling about 900 gallons of waste per day or about 300 gallons per Yurt per day and will be developed in accordance with 2019 California Plumbing Code (Part 5, Title 24, California Code of Regulations) standards, which sets parameters for private sewage disposal, and in compliance with the San Bernardino County Development Code, Article 6. These systems have been sized to accommodate greater waste than is anticipated to be generated by each Yurt per day, as stated above, each Yurt generates 10 gallons of wastewater per day, for a total of 110 gallons of wastewater per day generated by the project. At most, the septic systems would require emptying by a qualified septic plumber once every 2 years. These systems would collect the wastewater generated by onsite water uses, including wastewater disposal. Other than installing the internal wastewater collection lines, the proposed project is not anticipated to require relocation or construction of new or expanded wastewater collection (sewer) lines that would be required to serve the proposed project, such that a significant impact would occur. No connections to the municipal wastewater collection system or a wastewater treatment plant are required. Therefore, given that the proposed project would not result in significant impacts under any issue, as demonstrated throughout this Initial Study, development of the 28 Palms Ranch Campsite would not result in a significant environmental effect related to the relocation or construction of new or expanded wastewater facilities. Impacts are less than significant.

Stormwater

Less Than Significant Impact – There is no stormwater management system required because it is not anticipated to be water run-off from the site, as all the stormwater will continue percolate through pervious surfaces of the natural desert sand. Therefore, stormwater will be adequately managed on site and as such, development of the project would not result in a significant environmental effect related to the relocation or construction of new or expanded stormwater facilities. Impacts are less than significant.

Electric Power

Less Than Significant Impact – Southern California Edison (SCE) will continue to provide electricity to the site, as existing internal power connections exist to serve the single-family residences and 6 existing operation Yurts. The 5 new/nonoperational Yurts on the westerly parcel will require electricity connections as shown on Figure 9. The project site will also continue to utilize alternative energy sources through the existing and possible planned solar on site. Thus, the power distribution system will be able to supply sufficient electricity. The only construction associated with connecting to the existing electric system is associated with the 5 new/nonoperational Yurts on the westerly parcel, which will each require a new electrical. Therefore, given that the proposed project would not result in significant impacts under any issue, as demonstrated throughout this Initial Study, development of the 28 Palms Ranch Campsite would not result in a significant environmental effect related to the relocation or construction of new or expanded electrical facilities. Impacts are less than significant.

Natural Gas

No Impact – Development of the proposed 28 Palms Ranch Campsite Project would not require a connection to a natural gas utility provider. The new Yurts would not require natural gas connections, as the HomeBiogas generators utilized at each of the 5 new Yurt sites to dispose of wastewater and food products, create a byproduct Biogas, equal to 1,200 liters per day per system, which would be used in support of stoves available to future guests, in addition to the open fire rings provided at each new Yurt. These systems are premade, and therefore beyond the delivery of the HomeBiogas generators to the project site, the project would not result in a significant environmental effect related to the relocation or construction of new or expanded natural gas facilities. No impacts are anticipated.

Telecommunications

No Impact – Development of the proposed 28 Palms Ranch Campsite Project would not require installation of wireless internet service or phone service, as such services are already available for connection at the project site, with no expanded services required to meet demand. Therefore, the

project would not result in a significant environmental effect related to the relocation or construction of new or expanded telecommunication facilities. No impacts are anticipated.

b. *Less Than Significant Impact* – Please refer to the discussion under issues X(b) and XIX(a) above. Utilizing the data compiled in the 2020 TPWD Urban Water Management Plan (UWMP), the maximum amount of water required to operate the proposed project would be 6,885 GPD (135 GPCD x 51 guests/residents = 6,885), equal to 7.72 AFY. This estimate is anticipated to be high for the actual use of the proposed project given that the average number of guests is anticipated to be about ½ of the maximum number of guests, and the water use is anticipated to be lower than that of the typical residential user. Furthermore, the 28 Palms Ranch Campsite, at present, experiences a high season (cooler months) and a low season (warmer months), and thus is not anticipated to be at full capacity throughout the year. The average amount of water required to operate the proposed project would, therefore, be at or less than 3.36 AFY. In 2020, TPWD's demand for potable water was 2,449 AF. By 2045, the anticipated demand is anticipated to increase to 3,200 AF. TPWD anticipates a supply of 6,995 AFY in 2045, which indicates that there is ample supply to accommodate the increase in water demanded by the proposed site use. Based on this information, the proposed 28 Palms Ranch Campsite Project is forecast to be served by TPWD, which has sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. Thus, no significant adverse impacts under this issue are forecasted to occur from implementing the proposed project. No mitigation is required.

c. *No Impact* – The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments, because no municipal wastewater providers exist in the area, so none serve the project site. The project expects to dispose of wastewater through the use of an alternative wastewater disposal system if approved by the County, such as the HomeBiogas system, or if the system is not approved for use as the sole wastewater disposal mechanism, the project will utilize the HomeBiogas systems in conjunction with 4 new onsite septic systems (refer to Table 2). The HomeBiogas systems would connect directly to the septic systems to dispose of the bio-fertilizer that is generated through the HomeBiogas system digestion process, and the greywater generated by the shower systems would either connect to the existing septic tanks as occurs at present or would be disposed of through connections to the 4 new proposed septic tanks. No impacts are anticipated, and no mitigation is required.

d. *Less Than Significant Impact* – Other than the small amount of construction wastes and waste associated with the daily occupancy of the Campsite, the project will not generate a substantial amount of solid wastes and will not adversely affect the existing solid waste disposal system. Based on the CalRecycle Estimated Waste Generation Rates,[9] the proposed project is estimated to generated 2 pounds of waste per room per day, in addition to the waste generated by the existing single-family residences: estimated using the San Bernardino Countywide Plan General Plan EIR at 10 pounds per residence. At present, sewage, food waste and compostables are disposed of using the onsite HomeBiogas generators. Other types of waste are disposed of through municipal solid waste service provided by Burrtec Waste Company. According to the San Bernardino Countywide General Plan EIR, after waste is collected, it is delivered to the Landers Sanitary Landfill. The Landers Sanitary Landfill has adequate capacity to handle the waste generated at the 28 Palms Ranch Campsite. According to the CalRecycle, the maximum permitted capacity of Landers Sanitary Landfill is 13,983,500 Cubic Yards (CY), while its remaining capacity is 11,148,100 CY; the Landers Sanitary Landfill can accept 1,200 tons per day.[10] The County based its environmental impact forecasts on the projected increase in solid waste generation of 280,626 pounds per day at Build-Out of the Countywide Plan in the East Desert Region. The proposed project would generate, in total, 42 pounds of waste per day, which, without the mandatory waste diversion of 75% required to comply with

[9] CalRecycle, 2023. Solid Waste Generation Rates.
https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed 04/20/23)
[10] CalRecycle, 2023. Landers Sanitary Landfill (36-AA-057)
https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1882?siteID=2664 (accessed 04/20/23)

AB 939 and AB 341 by 2020, would consist 0.0037% of the increased solid waste generation within the East Desert Region of the County of San Bernardino at Build-Out.

Construction would not require demolition of any structures, though it would require some vegetation removal which can be transported to a green waste collection facility. There is adequate capacity at the nearest landfill as well as in other landfills that serve the area to handle construction and operational waste from the proposed project. Any hazardous materials collected on the project site during construction of the project will be transported and disposed of by a permitted and licensed hazardous materials service provider. Considering the availability of landfill capacity and the amount of solid waste generation from the proposed project during both construction and operations, project solid waste disposal needs can be adequately met without a significant impact on the capacity of the nearest landfills. Furthermore, new projects will be constructed in accordance with the California Green Building Standards Code, which requires a minimum of 65 percent of the "non-hazardous construction and demolition debris" (by weight or volume) to be recycled or reused. Therefore, it is expected that implementation of the 28 Palms Ranch Campsite Project will be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Any impacts under this issue are considered less than significant.

e. *Less Than Significant Impact* – All collection, transportation, and disposal of any solid waste generated by the proposed project is required to comply with all applicable federal, state, and local regulations. Solid waste produced in this area of the County is collected and transported by the Burrtec. The area is served by several nearby landfills, though the closest is the Landers Landfill, which, as stated under issue XIX(d) above, have adequate capacity to serve the project. New projects will also store and collect recyclable materials in compliance with AB 341. Green waste will be handled in accordance with AB 1826. As this project would be developed after 2022, the project must comply with the County's implementation plan for compliance with SB1383, otherwise known as "California's Short-Lived Climate Pollutant Reduction" law, often called SB 1383, which establishes methane reduction targets for California. California SB 1383 sets goals to reduce disposal of organic waste in landfills, including edible food. [11] The bill's purpose is to reduce greenhouse gas emissions, such as methane, and address food insecurity in California. This requires jurisdictions to implement mandatory organic waste collection and recycling in a statewide effort to divert organic waste from landfills with goals to:

- Reduce organic waste disposal 50% by 2020 and 75% by 2025 and
- Recover at least 20% of currently disposed surplus edible food by 2025.

Any hazardous materials collected on the project site during either construction or operation of the project will be transported and disposed of by a permitted and licensed hazardous materials service provider, as stated under issue VIII, Hazards and Hazardous Materials above. Furthermore, new projects will be constructed in accordance with the California Green Building Standards Code, which, as stated under issue XIX(d), above, requires a minimum of 65 percent of the "non-hazardous construction and demolition debris" (by weight or volume) to be recycled or reused. As such, the construction contract for this project will require concrete, asphalt and base material to be recycled by grinding, which allows reuse of these materials, should any require removal as part of the project. All woods and other vegetation that is reusable shall be recycled or composted, where applicable.

Thus, and the amount and types of wastes that will be generated both during construction and operation of the project, the potential impacts to the waste disposal systems are considered less than significant. Therefore, the project is expected to comply with all regulations related to solid waste under federal, state, and local statutes. No mitigation is necessary.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

[11] County of Santa Clara, 2023. Understand Senate Bill (SB) 1383. https://reducewaste.sccgov.org/food-recovery/understand-senate-bill-sb-1383#3925188384-318395615 (accessed 04/20/23)

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

XX. WILDFIRE

SUBSTANTIATION:

a. *Less Than Significant Impact* – The proposed project area is located in a delineated Moderate Fire Hazard Severity Zone (FHSZ) in an FRA as shown on Figures IX-4 and XX-1. As stated under Section XVII, Transportation, under issue (d), there is an emergency evacuation route located in the vicinity of the project site, which enables travel to the east and west of the project site. This route is Highway 62 and has been delineated an evacuation route on the Evacuation Route Map provided as Figure IX-3. The proposed project is not located along this emergency route, nor would implementation of the project impede emergency response from accessing the site or surrounding area. Additionally, the proposed project would be required to comply with all applicable fire code and ordinance requirements for construction and access to the site. The project is located within a moderate fire hazard severity zone and impacts to emergency response and/or emergency evacuation plans are considered less than significant, especially given the low density of vegetation on and adjacent to the project site. No mitigation required.

b. *Less Than Significant Impact* – The proposed project is located within a partially developed site, which presently supports two single-family residences, 6 operational Yurts, 3 Yurts utilized for storage that are not connected to utilities and are therefore not operational, and native vegetation throughout the site. Once in operation, the proposed project will consist of 11 Yurts and 2 single family residences. The proposed project will remove some vegetation, thereby minimizing the already small potential fire risk within this site. Therefore, given the minimal potential for wildfire within the project site, there is a less than significant potential for the proposed project to expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. Impacts under this issue are considered less than significant. No mitigation is required.

c. *Less Than Significant Impact*– The project will utilize existing utility connections to support the expanded site use. The project will involve installation of new electrical connections and water service connections to the Yurts on the westerly portion of the project site (refer to Figures 8 and 9), in addition to the use of the HomeBiogas system, if approved by the County, or expects to utilize the HomeBiogas system in conjunction with 4 new onsite septic systems, which will connect to each of

the 11 Yurts (refer to Figure 7). As stated above, the project will require removal of some vegetation clearing and grubbing in support of the individual new Yurts, in addition to the areas that will provide access to the new Yurts. This is not anticipated to be a construction activity with significant fire risk, as the natural environment of the site is anticipated to be maintained, and therefore hand tools and small electrical construction equipment would be utilized, which typically present minimal potential to result in a fire hazard. The proposed project would not result in any ongoing impacts to the environment that would exacerbate fire risk. The proposed project would continue to utilize fire rings, which enable individual small fires to be contained within a metal ring, containing iron/metal grills, at each of the 6 Yurts on the easterly parcel, and new fire rings at each of the 2 new and 3 existing Yurts on the westerly parcel. The fire rings will be set back from all vegetation, and the use of the fire rings is monitored by the onsite property manager. Furthermore, the proposed project is a Campsite that will be designed in accordance with fire department recommendations—including ensuring fire extinguishers are available at each Yurt and providing guest signage and/or instruction for safe use on Campsite fire rings—and to County design standards. Therefore, the project would have a less than significant potential to exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Impacts under this issue are considered less than significant.

d. *No Impact* – The proposed project is located within a site that is relatively flat. The discussion under Section VII, Geology and Soils, concluded that the project would not have a significant potential to experience landslides or slope instability, particularly given that this project area has not been delineated as containing potential for landslides or slope instability by the San Bernardino Countywide Plan. The proposed project is located in an area that has not been historically subject to flooding and based on the minimal ground disturbance associated with project construction, it is anticipated that minimal modifications to the existing drainage patterns within the site would occur. Therefore, the development of the 28 Palms Ranch Campsite Project at this site is anticipated to have no potential to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact or Does Not Apply*
XXI. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

SUBSTANTIATION: The analysis in this Initial Study and the findings reached indicate that the proposed project can be implemented without causing any new project specific or cumulatively considerable unavoidable significant adverse environmental impacts. Mitigation is required to control potential environmental impacts of the proposed project to a less than significant impact level. The following findings are based on the detailed analysis of the Initial Study of all environmental topics and the implementation of the mitigation measures identified in the previous text and summarized in this section.

a. *Less Than Significant With Mitigation Incorporated* – The project has no potential to cause a significant impact to any biological or cultural resources. The project has been identified as having no potential to substantially degrade the quality of the natural environment, substantially reduce habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. The project requires mitigation to prevent significant biology impacts from occurring as a result of implementation of the project. Based on the project area, and the site cultural survey for the project site, the potential for impacting cultural or paleontological resources is low. The Cultural and Paleontological Resources Reports determined that no cultural or paleontological resources of importance were found on the ground surface at the project site or in the records search for the site, so it is not anticipated that any cultural or paleontological resources could be affected by the project because no known cultural resources exist. However, because it is not known what could be unearthed upon any excavation activities, contingency mitigation is provided to ensure that, in the unlikely event that any buried resources are found, they are protected from any potential significant impacts. Please see biological and cultural sections of this Initial Study.

b. *Less Than Significant With Mitigation Incorporated* – The project has 6 potential impact categories that are individually limited, but may be cumulatively considerable. These are: Biological Resources, Cultural Resources, Geology & Soils, Hazards & Hazardous Materials, Hydrology & Water Quality, and Tribal Cultural Resources. The project is not considered growth-inducing, as defined by *State CEQA Guidelines*. These referenced issues require the implementation of mitigation measures to reduce impacts to a less than significant level and ensure that cumulative effects are not cumulatively

considerable. All other environmental issues were found to have no potential significant impacts without implementation of mitigation. The potential cumulative environmental effects of implementing the proposed project have been determined to be less than considerable and thus, less than significant impacts.

c. *Less Than Significant With Mitigation Incorporated* – The project will achieve long-term community goals by providing additional opportunities for employment, and revenue generating uses within the Desert Region of San Bernardino County. Furthermore, this project will provide a use consistent with those that serve the recreational needs associated with Joshua Tree National Park. The short-term impacts associated with the project, which are mainly construction-related impacts, are less than significant with mitigation as prescribed, and the proposed project would be compatible with long-term environmental protection. The issues of Geology & Soils and Hazards & Hazardous Materials, require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed project have been determined to be less than significant.

Conclusion

This document evaluated all CEQA issues contained in the latest Initial Study Checklist form. The evaluation determined that either no impact or less than significant impacts would be associated with the issues of Aesthetics, Air Quality, Agriculture, Energy, Greenhouse Gases, Land Use & Planning, Mineral Resources, Noise, Population & Housing, Public Services, Recreation, Transportation, Utilities & Service Systems and Wildfire. The issues of Biological Resources, Cultural Resources, Geology & Soils, Hazards & Hazardous Materials, Hydrology & Water Quality, and Tribal Cultural Resources require the implementation of mitigation measures as prescribed to reduce project specific and cumulative impacts to a less than significant level. The required mitigation has been proposed in this Initial Study to reduce impacts for these issues to a less than significant impact level.

Based on the evidence and findings in this Initial Study, San Bernardino County proposes to adopt a Mitigated Negative Declaration for the 28 Palms Ranch Campsite Project. A Notice of Intent to Adopt a Mitigation Negative Declaration (NOI) will be issued for this project by the County. The Initial Study and NOI will be circulated for 30 days of public comment. At the end of the 30-day review period, a final MND package will be prepared, and it will be reviewed by the County for possible adoption at a future County Planning Commission meeting, the date for which has yet to be determined. If you or your agency comments on the MND/NOI for this project, you will be notified about the meeting date in accordance with the requirements in Section 21092.5 of CEQA (statute).

MITIGATION MEASURES

Any mitigation measures that are not "self-monitoring" shall have a Mitigation Monitoring and Reporting Program prepared and adopted at time of project approval. Condition compliance will be verified by existing procedure.

Air Quality

MM AQ-1 Fugitive Dust Control. The following measures shall be incorporated into Project plans and specifications for implementation:

- Apply soil stabilizers or moisten inactive areas.
- Water exposed surfaces to avoid visible dust leaving the construction site (at least 2-3 times/day).
- Cover any stock piles with tarps at the end of each day and as needed during the construction day.
- Provide water spray during loading and unloading of earthen materials.
- Require the contractor to minimize in-out traffic from construction zone to the extent feasible and enforce a speed limit of 10 MPH on site to avoid dust migration from the site.

MM AQ-2 Exhaust Emissions Control. The following measures shall be incorporated into Project plans and specifications for implementation:

- Utilize off-road construction equipment that has met or exceeded the maker's recommendations for vehicle/equipment maintenance schedule.
- Contactors shall utilize Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

MM AQ-3 The Project shall incorporate Energy Star heating, cooling, lighting devices, and appliances, where applicable.

Biological Resources

MM BIO-1 Pre-Construction Desert Tortoise Clearance Survey

A pre-construction clearance survey be conducted thirty (30) days prior to ground disturbing activities in undeveloped areas to confirm the absence of desert tortoise within the boundaries of the survey area. Survey transects should be spaced at 10-meter (33-foot) intervals throughout the undeveloped portions of the project area to provide 100 percent visual coverage and increase the likelihood of locating desert tortoise and/or sign. All burrows, if present, will be thoroughly inspected for the presence of desert tortoise or evidence of recent use using non-intrusive methods (i.e., mirror, digital camera). Burrow characteristics including class, shape, orientation, size, and evidence of deterioration will be recorded on field data sheets.

Although not anticipated, if desert tortoises are found onsite during the pre-construction clearance survey, coordination will need to occur with the USFWS and CDFW to determine if avoidance and minimization measures can be implemented to avoid any direct or indirect impacts to desert tortoise, or if "Take" permits will need to be obtained prepared and approved by the USFWS and CDFW.

MM BIO-2 Pre-Construction Nesting Bird Clearance Survey

All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA) and California Fish and Game Code Sections 3503, 3511 and 3513. The MBTA governs the taking and killing of migratory birds, their eggs, parts, and nests and prohibits the take of any migratory bird, their eggs, parts, and nests. Compliance with the MBTA shall be accomplished by completing the following:

Construction activities involving vegetation removal shall be conducted between September 1 and January 31. If construction occurs inside the peak nesting season (between February 1 and August 31), a pre-construction survey by a qualified Biologist shall be conducted within 72 hours prior to construction activities to identify any active nesting locations. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur.

If the Biologist finds an active nest within the pre-construction survey area and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. The size of the buffer shall be determined by the Biologist and shall be based on the nesting species, its sensitivity to disturbance, expected types of disturbance, and location in relation to the construction activities. These buffers are typically 300 feet from the nests of non-listed species and 500 feet from the nests of raptors and listed species. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a Biological Monitor shall take place within the buffer zone until the nest is vacated. The Biologist shall serve as a Construction Monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the Property Owner/Developer and the County of San Bernardino. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds.

Cultural Resources

MM CR-1 During Grading an archaeological monitor shall be present. In the event of an archaeological discovery, either historic or prehistoric, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

MM CR-2 If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

Geology and Soils

MM GEO-5 In the event of any fossil discovery, regardless of depth or geologic formation, construction work will halt within a 50-ft. radius of the find until its significance can be determined by a Qualified Paleontologist. Significant fossils will be recovered, prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility in accordance with the standards of the SVP (2010) and BLM (2009). A repository will be identified, and a curatorial arrangement will be signed prior to collection of the fossils. Although the San Bernardino County Museum is specified as the repository for fossils found in the county in the current General Plan (San Bernardino County, 2007), the museum may not always be available as a repository. Therefore, any accredited institution may serve as a repositor.

Hydrology and Water Quality

MM HYD-1 The Applicant shall require that the construction contractor to implement specific Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters. These practices shall include a Plan that identifies the methods of containing, cleanup, transport and proper disposal of hazardous chemicals or materials released during construction activities that are compatible with applicable laws and regulations. BMPs to be implemented by the District include the following:

- The use of silt fences or coir rolls;
- The use of temporary stormwater desilting or retention basins;
- The use of water bars to reduce the velocity of stormwater runoff;
- The use of wheel washers on construction equipment leaving the site;
- The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;
- The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and
- Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.

Tribal Cultural Resources

MM TCR-1 The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in CR-1, of any pre-contact and/or historic-era cultural resources discovered during project implementation and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

MM TCR-2 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

PROJECT-SPECIFIC REFERENCES

California Air Resources Board (5/4/16); Victorville Station: Ozone, CO, NO2, PM-10, PM-2.5; data: www.arb.ca.gov/adam/

CalRecycle, 2023. Landers Sanitary Landfill (36-AA-057) https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1882?siteID=2664 (accessed 04/20/23)

CalRecycle, 2023. Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed 04/20/23)

CRM TECH, "*Phase I Historical/Archaeological Resources Survey 28 Palms Ranch Campsite Expansion Project Assessor's Parcel Numbers 0609-121-14 and -15 Desert Heights Area, San Bernardino County, California"* dated April 16, 2023

CRM TECH, "*Paleontological Resources Assessment Report 28 Palms Ranch Campsite Expansion Project Assessor's Parcel Numbers 0609-121-14 and -15 Desert Heights Area, San Bernardino County, California"* dated April 16, 2023

Department of Water Resources, 2023. Groundwater Sustainability Act Map Viewer. https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true (accessed 04/20/23)

ELMT Consulting, Inc., "*Twentynine Palms Yurt Campground San Bernardino County, California (Assessor Parcel Number 0609-121-15-00100, Totaling 5 Acres) Biological Resources Assessment" (BRA)* dated March 2023

Email conversation between Kaitlyn Dodson Hamilton (Tom Dodson & Associates), the Applicant, and Reginald Tan of the RWQCB dated April 18, 2023

HomeBiogas, 2023. http://homebiogas.com/ (accessed 04/20/23)

National Cooperative Soil Survey, 2023. Cajon Series. https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CAJON.html (Accessed 05/30/23)

San Bernardino County, 2020. San Bernardino Countywide Plan. http://countywideplan.com/theplan/ (accessed 04/20/23)

San Bernardino County, 2020. *San Bernardino Countywide Plan, Final Environmental Impact Report.* https://countywideplan.com/resources/document-download/ (accessed 05/17/23)

County of Santa Clara, 2023. Understand Senate Bill (SB) 1383. https://reducewaste.sccgov.org/food-recovery/understand-senate-bill-sb-1383#3925188384-318395615 (accessed 04/20/23)

Dennis Silverman, UC Irvine, October 2007. *Southern California Household Energy Savings* https://www.physics.uci.edu/~silverma/actions/HouseholdEnergy.html (accessed 05/17/23)

TPWD, 2021. Twentynine Palms Water District 2020 Urban Water Management Plan Update https://29palmswater.com/wp-content/uploads/TPWD-2020-UWMP-Update-FINAL_Appendices-Included.pdf (accessed 04/20/23)

Urban Crossroads, *"Victorville Residential Air Quality Impact Analysis City of Victorville"* dated November 16, 2021

Urban Crossroads, *"Victorville Residential Greenhouse Gas Impact Analysis City of Victorville"* dated November 16, 2021

Urban Crossroads, *"Mesa Drive Yurts Noise Impact Analysis, County of San Bernardino"* dated April 18, 2023

Western Municipal Water District, 2023. Sustainable Groundwater Management Act https://www.wmwd.com/461/Sustainable-Groundwater-Management-Act (accessed 04/20/23)

FIGURES

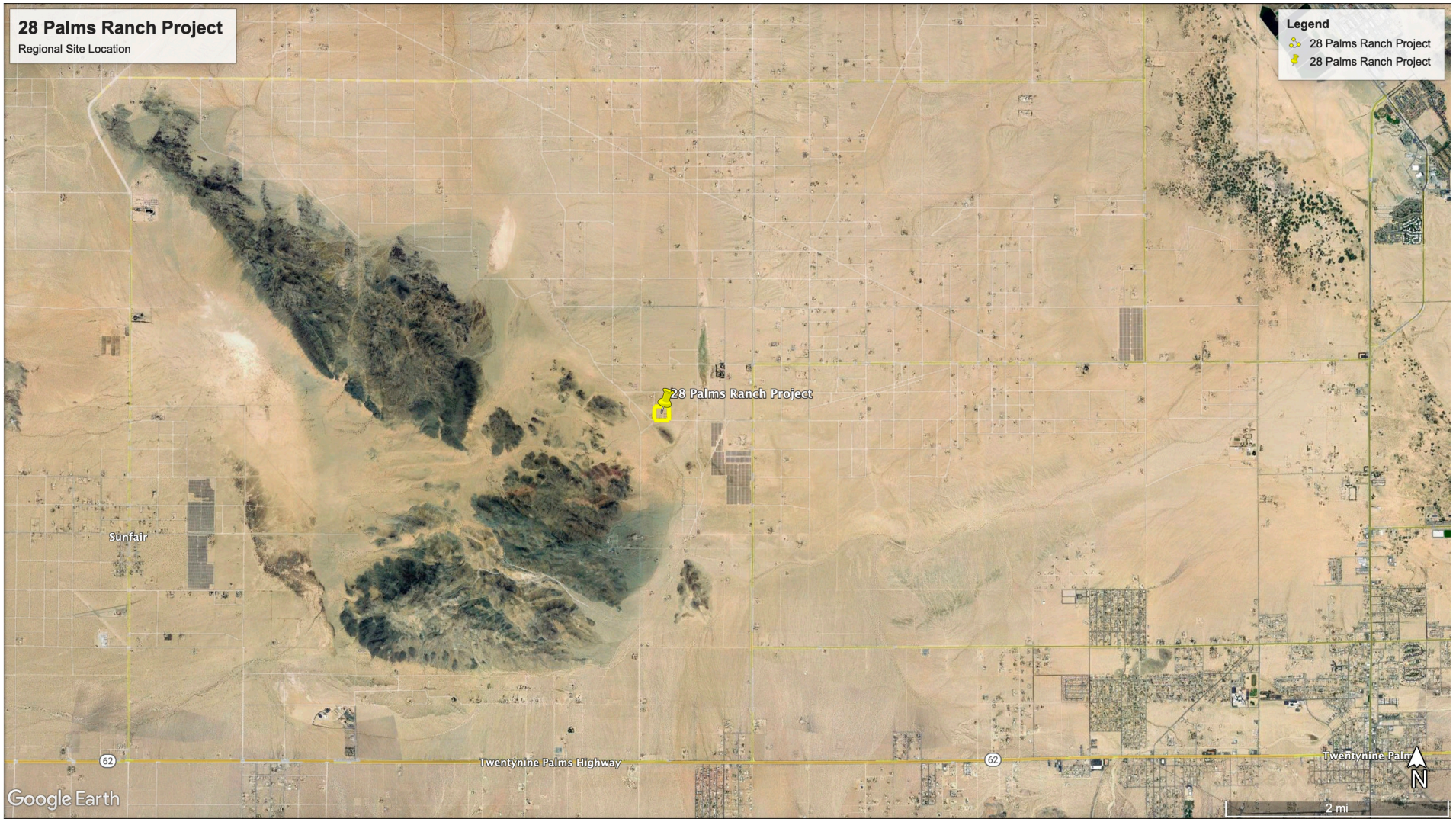


FIGURE 1

Tom Dodson & Associates
Environmental Consultants

Regional Location Map

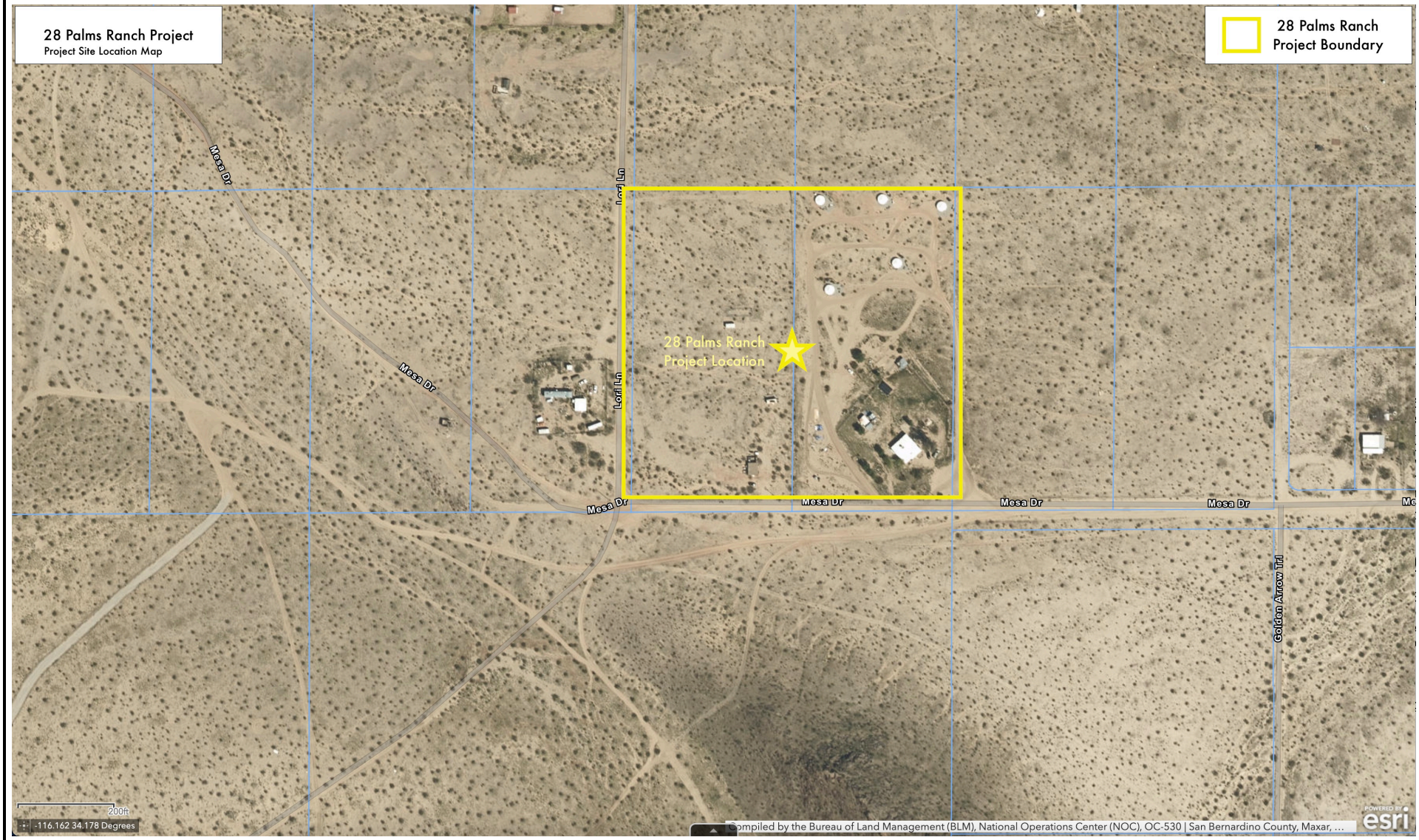


FIGURE 2

Tom Dodson & Associates
Environmental Consultants

Site Location Map

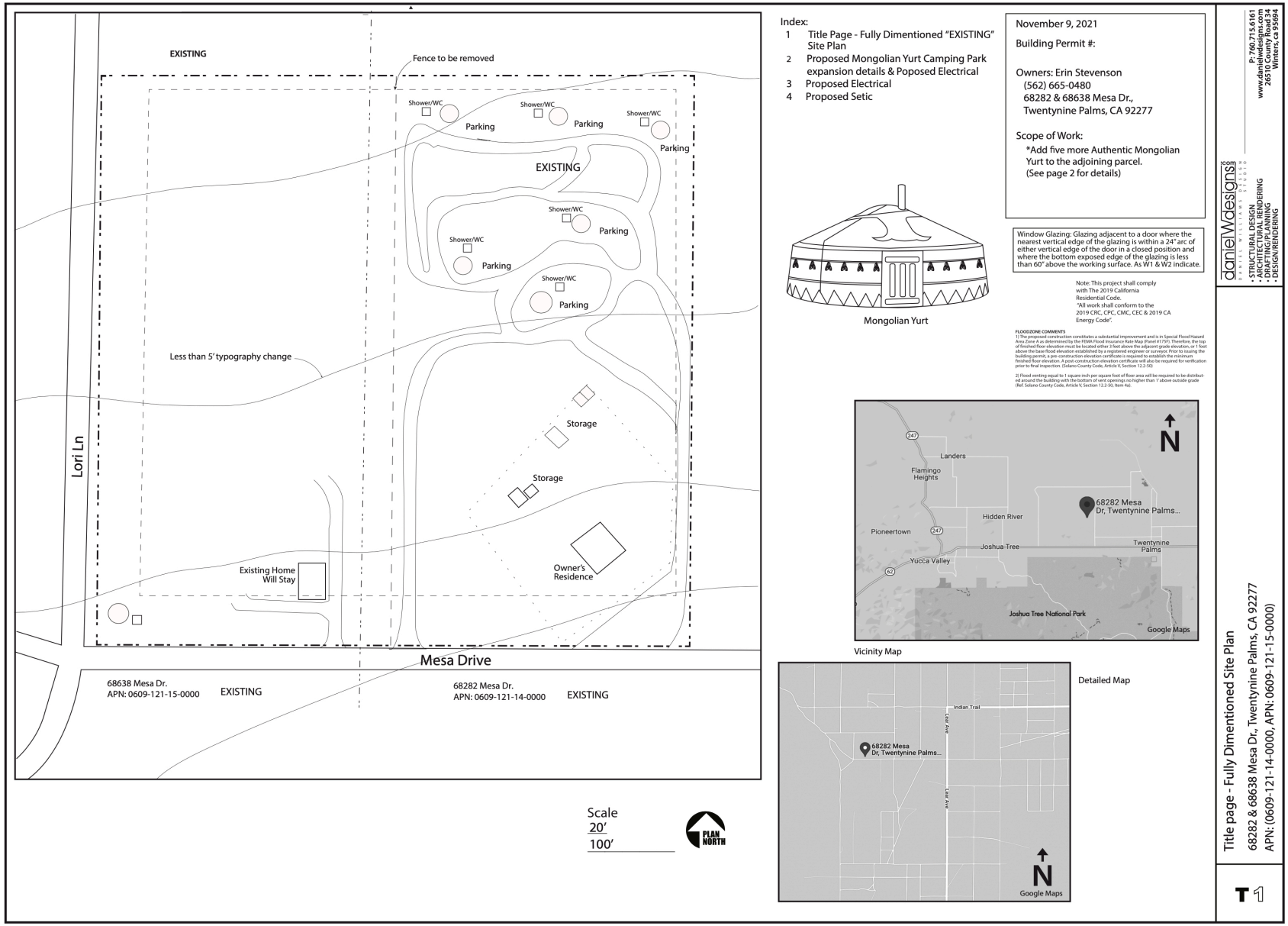


FIGURE 3

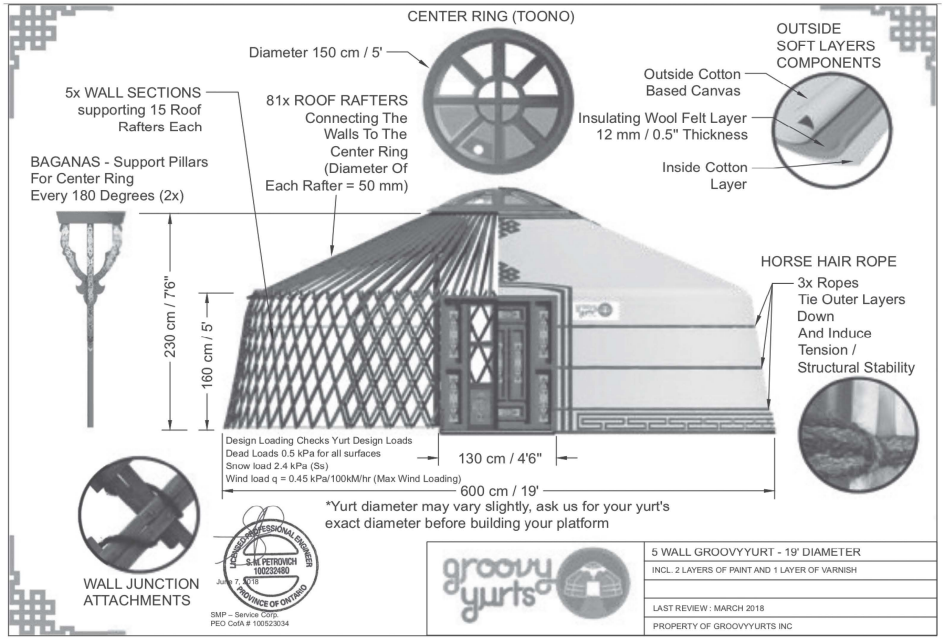
Tom Dodson & Associates
Environmental Consultants

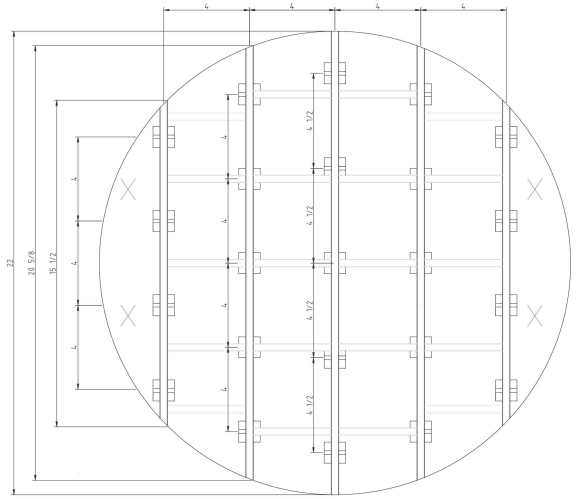
Existing Site Plan

FIGURE 4

Tom Dodson & Associates
Environmental Consultants

Aerial View of Yurt Configuration on Easterly Parcel





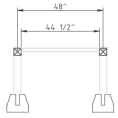
You might need extra support. Doesn't have to be as strong as the rest: 2 legs with 2x4 on top is suffiencient.

Deckblock

2 x 4 P.T. (Pressure treated) flatside

4x4 P.T. (Pressure treated)

4x4 P.T. (Pressure treated) Legs if needed - If longer than 2' you will need braces



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DANIEL WILLIAMS DESIGN
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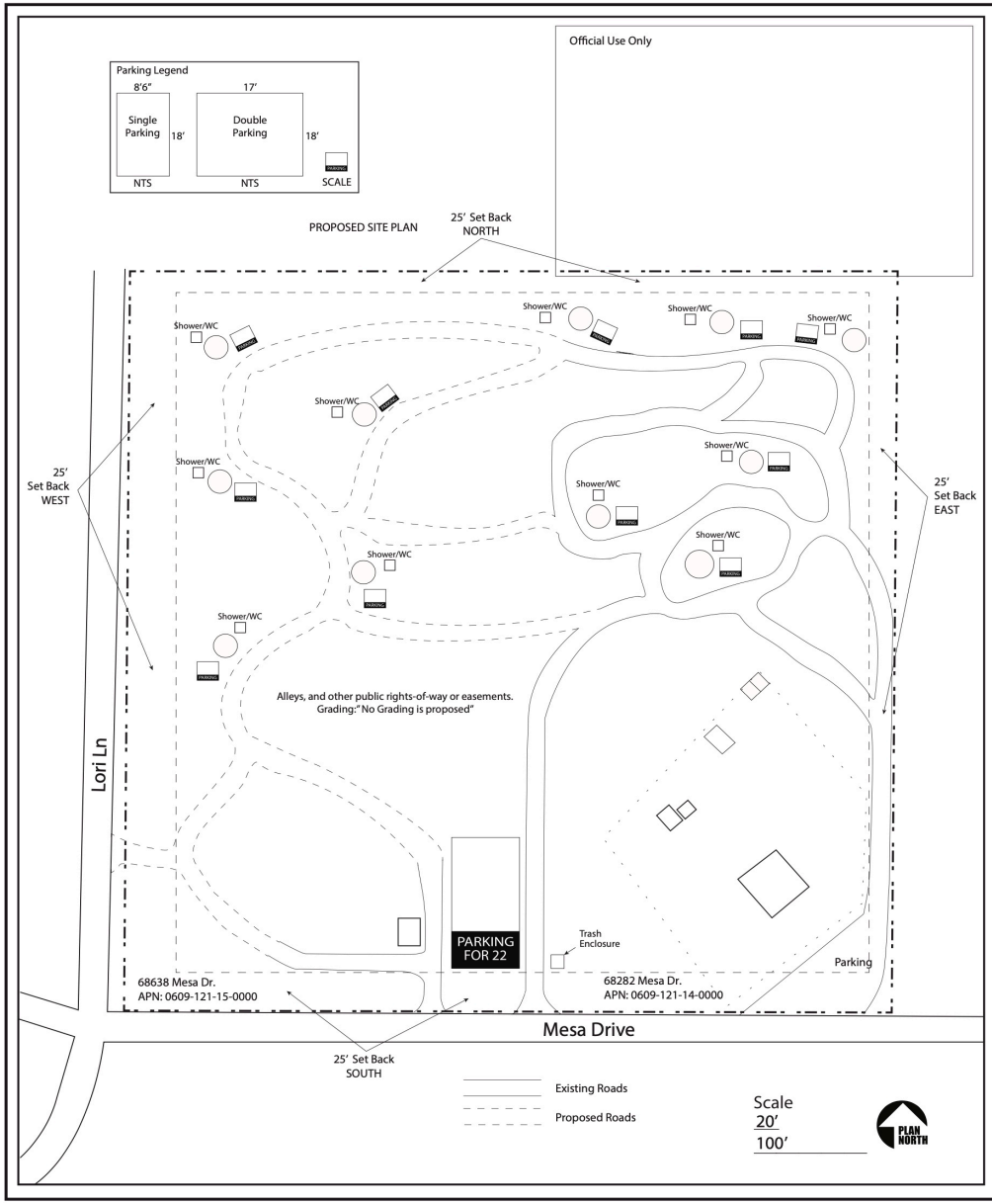
• ARCHITECTURAL RENDERING
• DRAFTING/PLANNING
• DESIGN/REBUILDING

Owner Contact #'s
Erin Stevenson (760) 362-4028
Jon Stevenon (562) 644-1894

Manufacturer's Mongolian Yurk Specifications
68282 & 68638 Mesa Dr., Twentynine Palms, CA 92277
APN: (0609-121-14-0000, APN: 0609-121-15-0000)

3

FIGURE 5



The project proponent has developed the subject property as an Authentic Mongolian Yurt camping destination with six existing Yurts and a desire to add five more to the adjoining parcel. The applicant owns both 5 acre parcels and resides at 68282 Mesa Dr., Twentynine Palms, CA 92277. The subject property is located at 68282 Mesa Dr. and 68638 Mesa Dr. respectively and the APN' are 0609-121-14-0- 000 and 0609-121-15-0-000 and consists of 2/5 acre adjoining parcels. Each five-acre parcel currently has a single-family residence on the premises. There are a few outbuildings and a covered carport along with a ground mounted solar array. Limited native vegetation is present within a fenced enclosure however the vegetation in the remainder of the property is relatively undisturbed. The CUP applicant desires to convert these two sites into a premier glamping campground site.

Most of the electrical needs are met with onsite solar production. Restroom facilities utilize above ground biogas generators to dispose of waste and food products, there is no in-ground septic system needed for camp sites. The only septic systems on site are for the primary residence. Water is provided by City supply and all current water and electric connections were pre-existing from former owner's campground use.

The proposed use will consist of multiple Mongolian Yurts with full camping accommodation including but not limited to barbecue's, covered picnic tables, outdoor showers, and restrooms and open fire pits. All Yurts have smoke/co2 detectors and fire extinguishers. The Yurts are made in Mongolia and are structurally engineered to withstand the harsh Mongolian climate with certified blueprints including wind and snow load. There is ample guest parking to accommodate all visitor needs. Ingress and egress roads are clearly marked and illuminated with solar lighting for evening use.

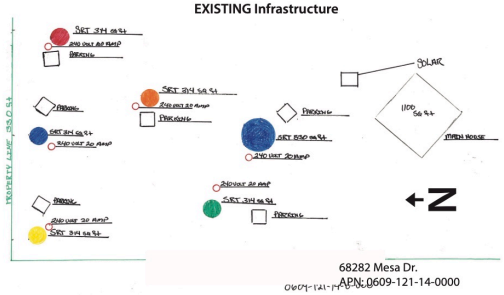
The property is currently insured with a 1 million (twice a year occurrence) insurance policy as well as Airbnb's Million-dollar overlay. The insurance policy covers my guests even in the park, so if they were

to get bit by a snake in the park, my insurance would cover them.

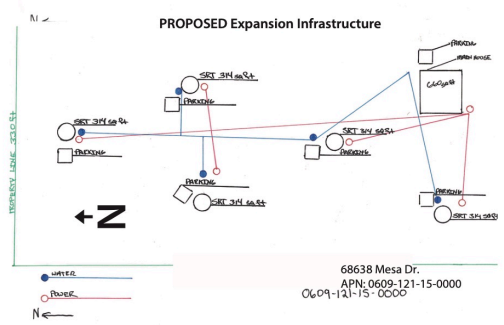
My reviews on Airbnb are all 5 star and I am a Super host. https://www.airbnb.com/performance/quality/overall/reviews/review/445642080403964027

If you have any questions, please contact me at erin@28palmsranch.com.

EXISTING Infrastructure



PROPOSED Expansion Infrastructure



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• DESIGN/RENDERING

Owner Contact #'s
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Jon Stevenson (562) 644-1894

Proposed Mongolian Yurt Camping Park expansion details
68282 & 68638 Mesa Dr., Twentynine Palms, CA 92277
APN: (0609-121-14-0000, APN: 0609-121-15-0000)

2

FIGURE 6

Tom Dodson & Associates
Environmental Consultants

Site Plan

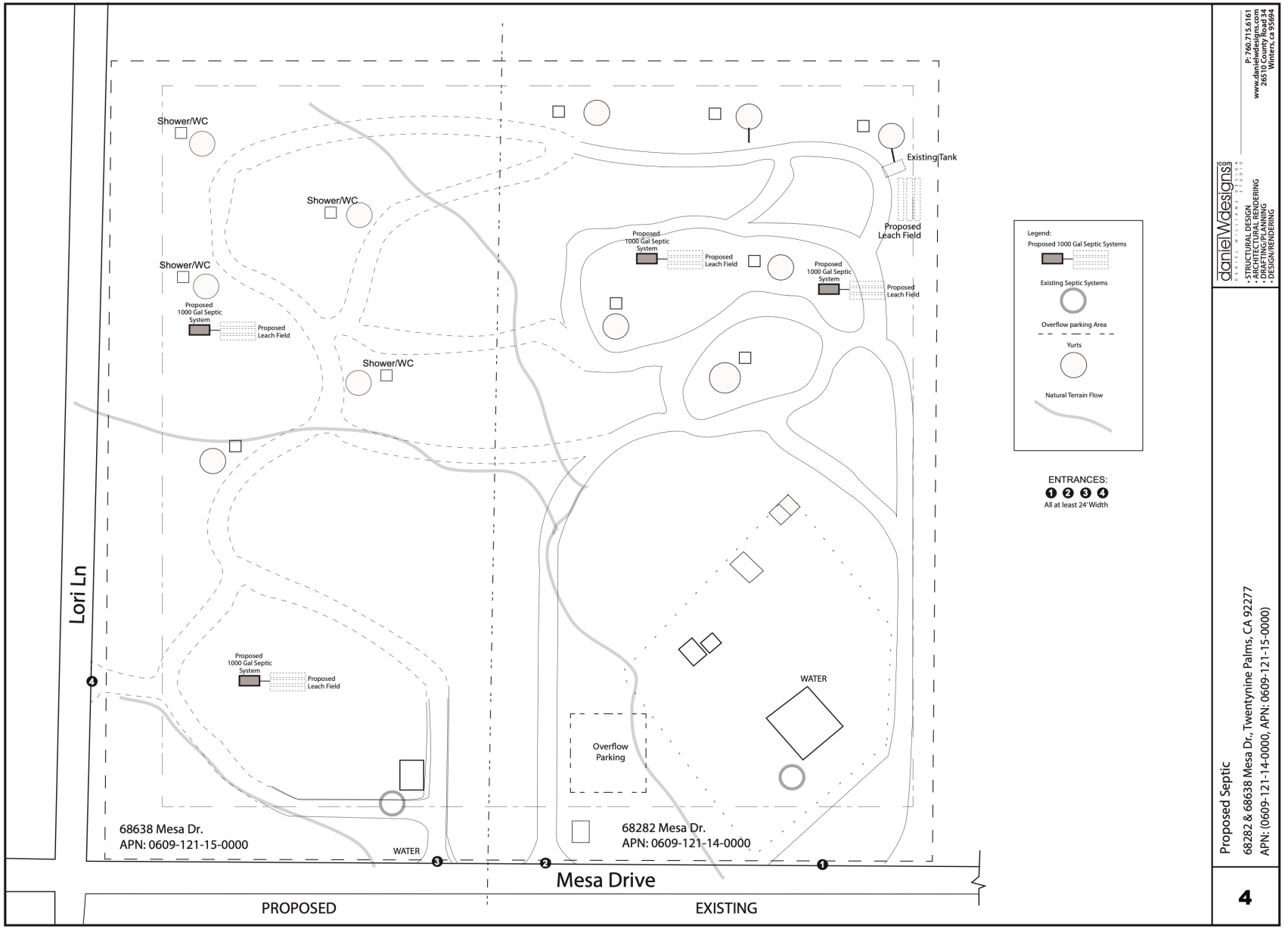


FIGURE 7

Tom Dodson & Associates
Environmental Consultants

Septic System

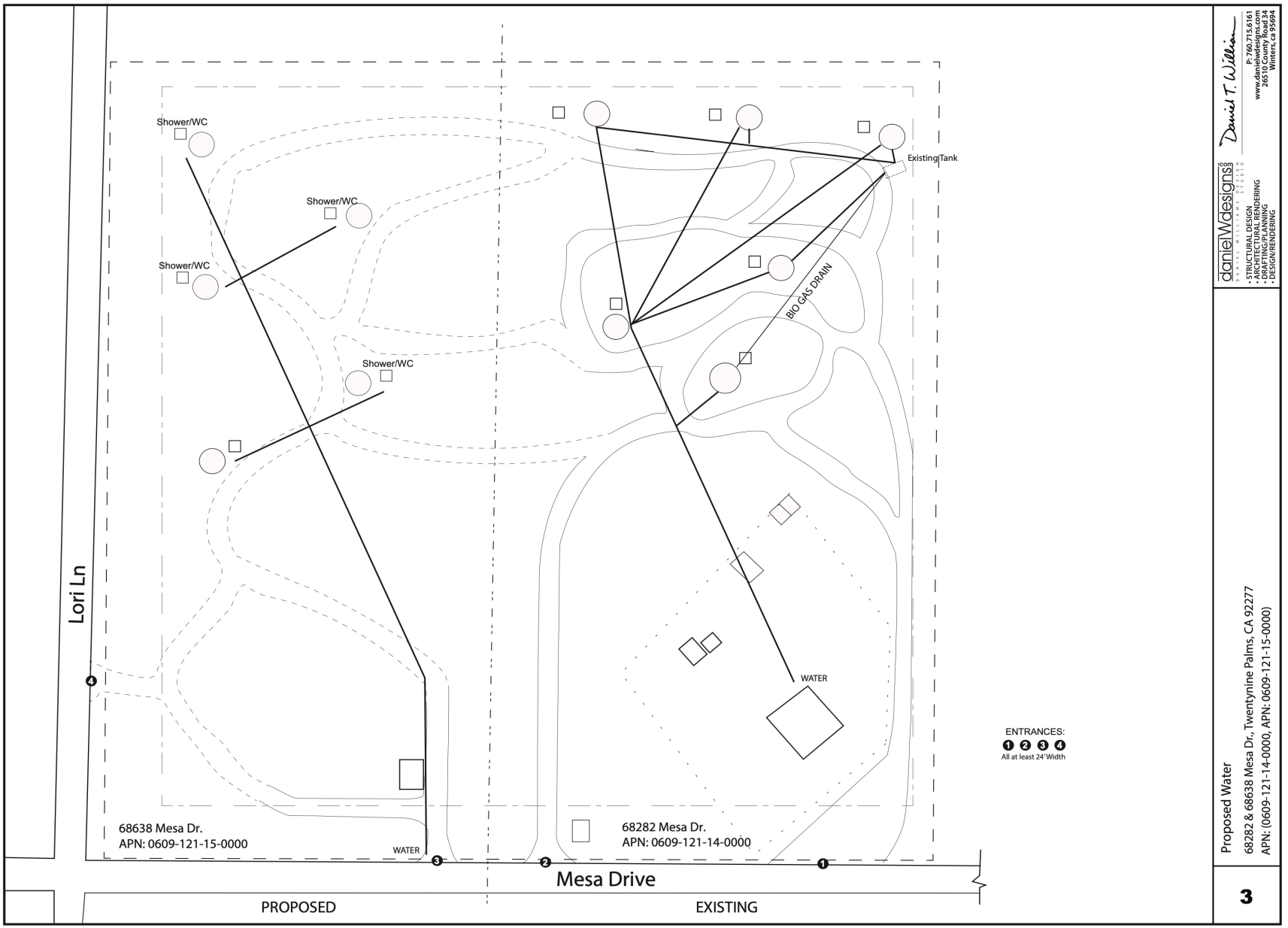
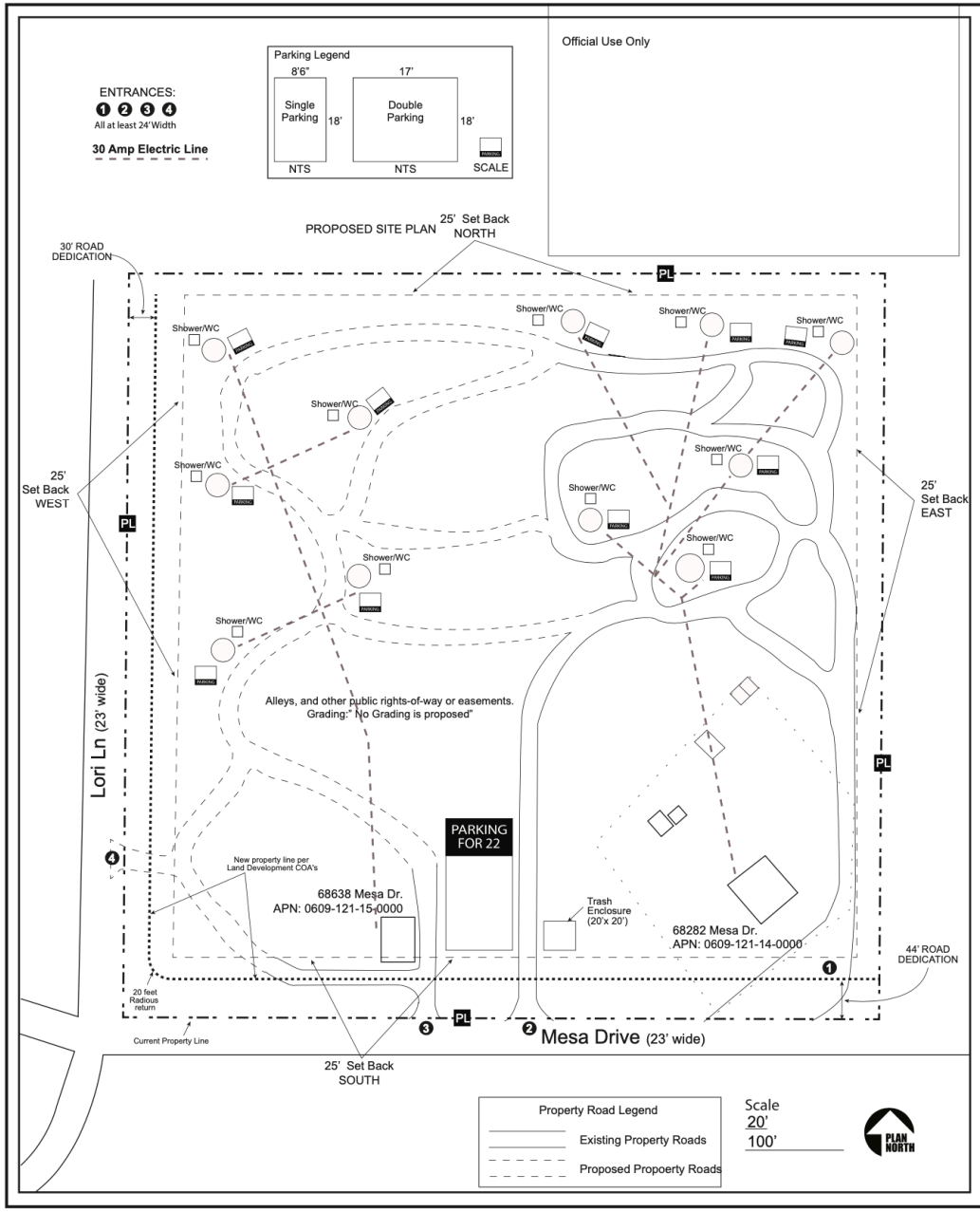


FIGURE 8

Tom Dodson & Associates
Environmental Consultants

Water Plan



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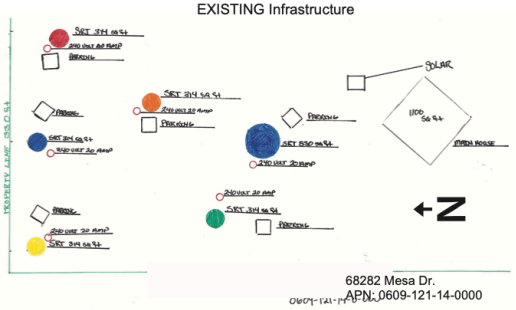
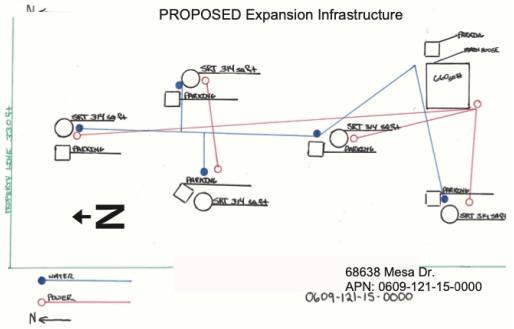
If you have any questions, please contact me at erin@28palmsranch.com.

EXISTING Infrastructure



PROPOSED Expansion Infrastructure



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Proposed Electrical & Parking
68282 & 68638 Mesa Dr., Twentynine Palms, CA 92277
APN: (0609-121-14-0000, APN: 0609-121-15-0000)

2

FIGURE 9

Tom Dodson & Associates
Environmental Consultants

Electrical and Parking Plan

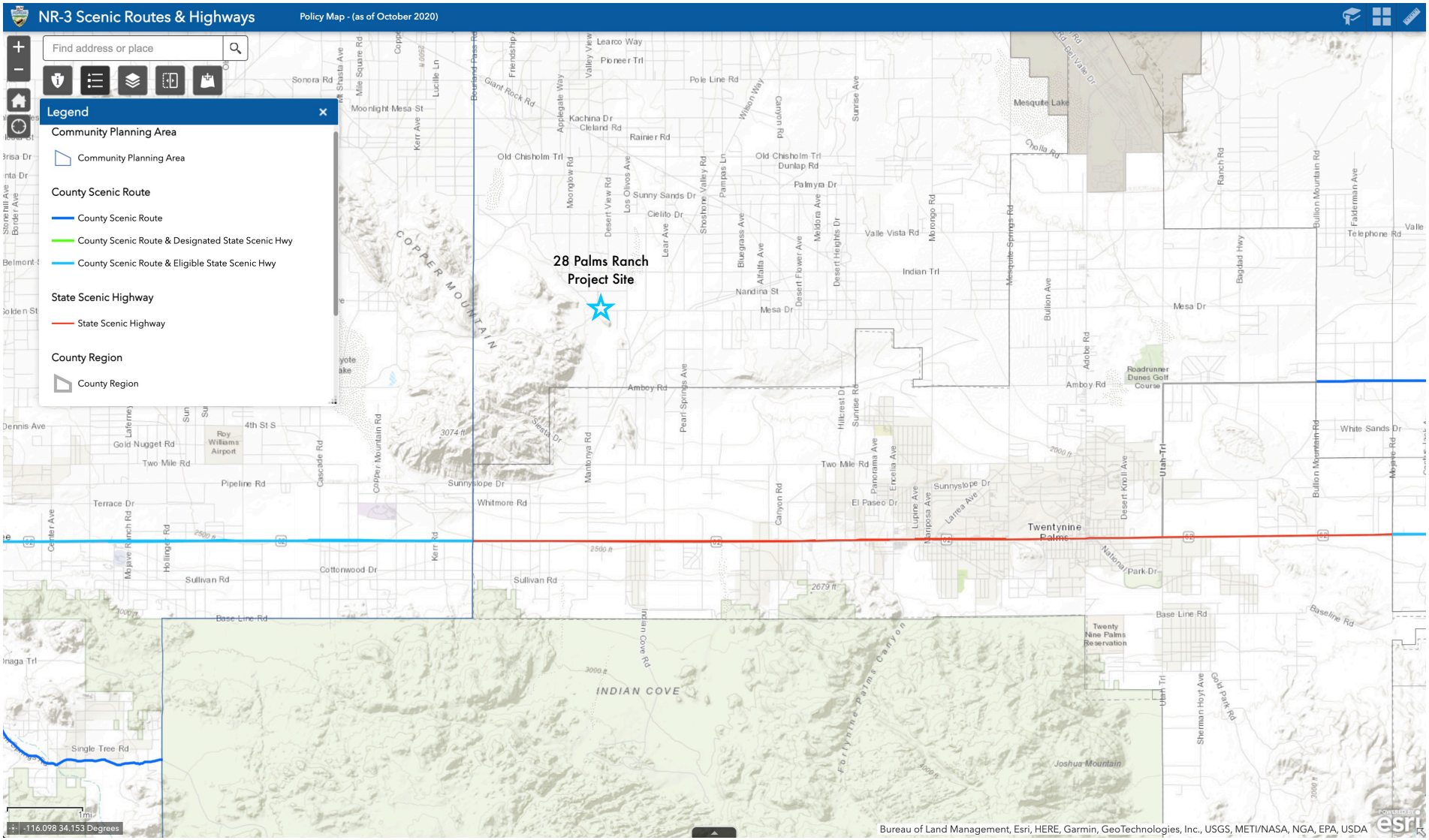


FIGURE I-1

Tom Dodson & Associates
Environmental Consultants

Scenic Routes and Highways

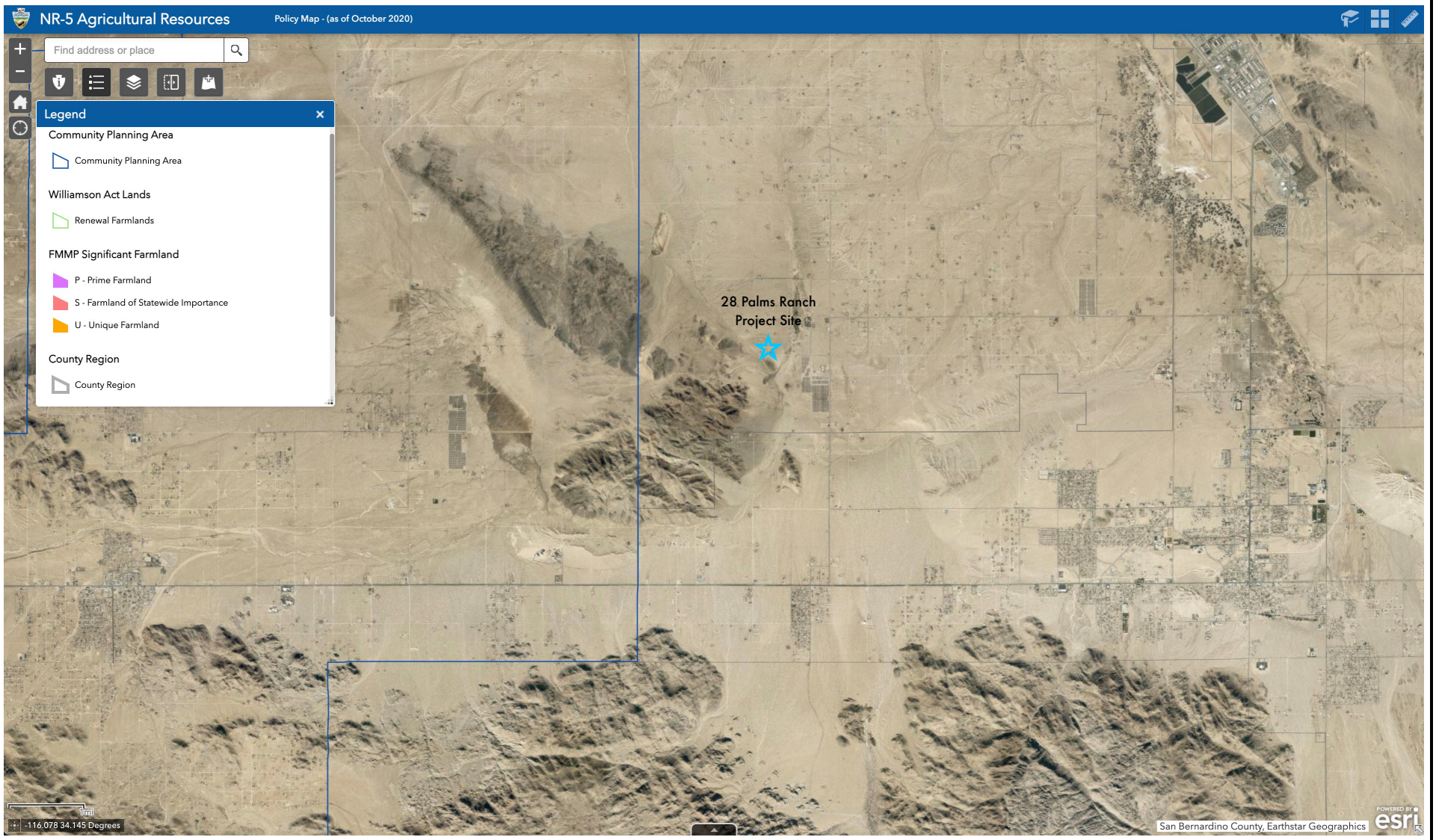
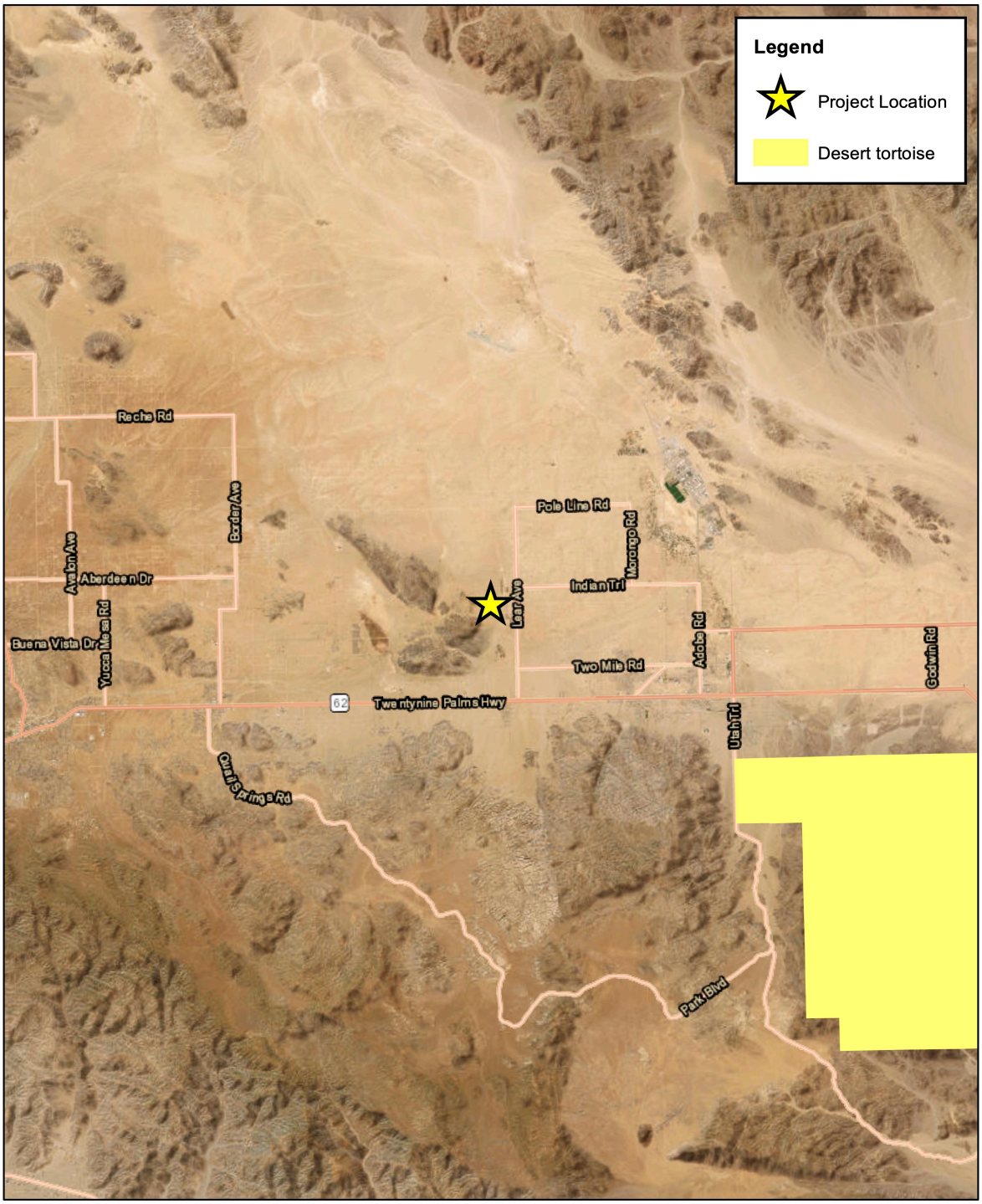


FIGURE II-1

Tom Dodson & Associates
Environmental Consultants

Agricultural Resources



TWENTYNINE PALMS YURT CAMPGROUND
BIOLOGICAL RESOURCES ASSESSMENT

Critical Habitat

Exhibit 5

SOURCE: ELMT Consulting, Inc., *"Biological Resources Assessment"* dated March 2023

FIGURE IV-1

Tom Dodson & Associates
Environmental Consultants

Critical Habitat

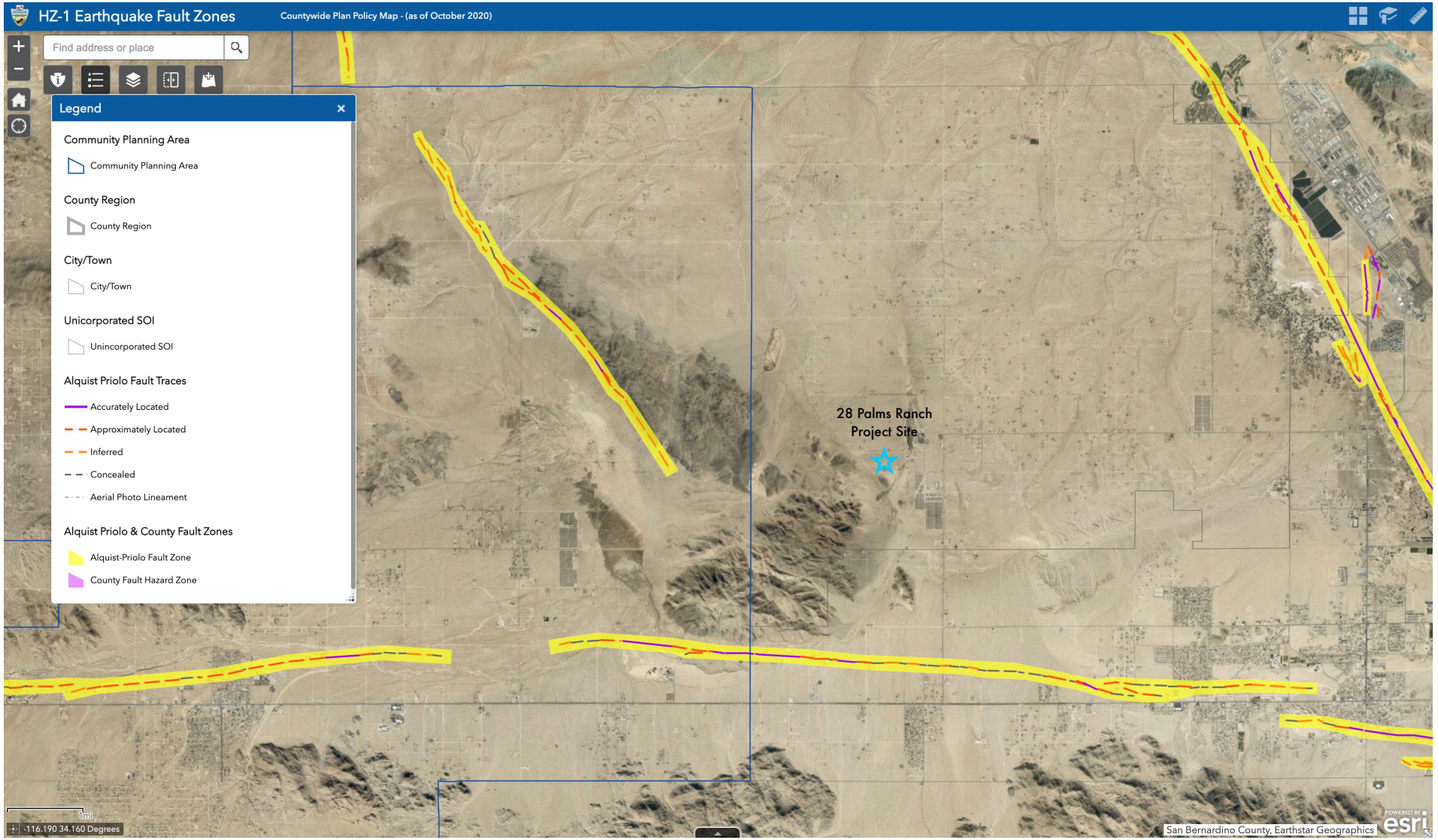


FIGURE VII-1

Tom Dodson & Associates
Environmental Consultants

Earthquake Fault Zones (Alquist Priolo)

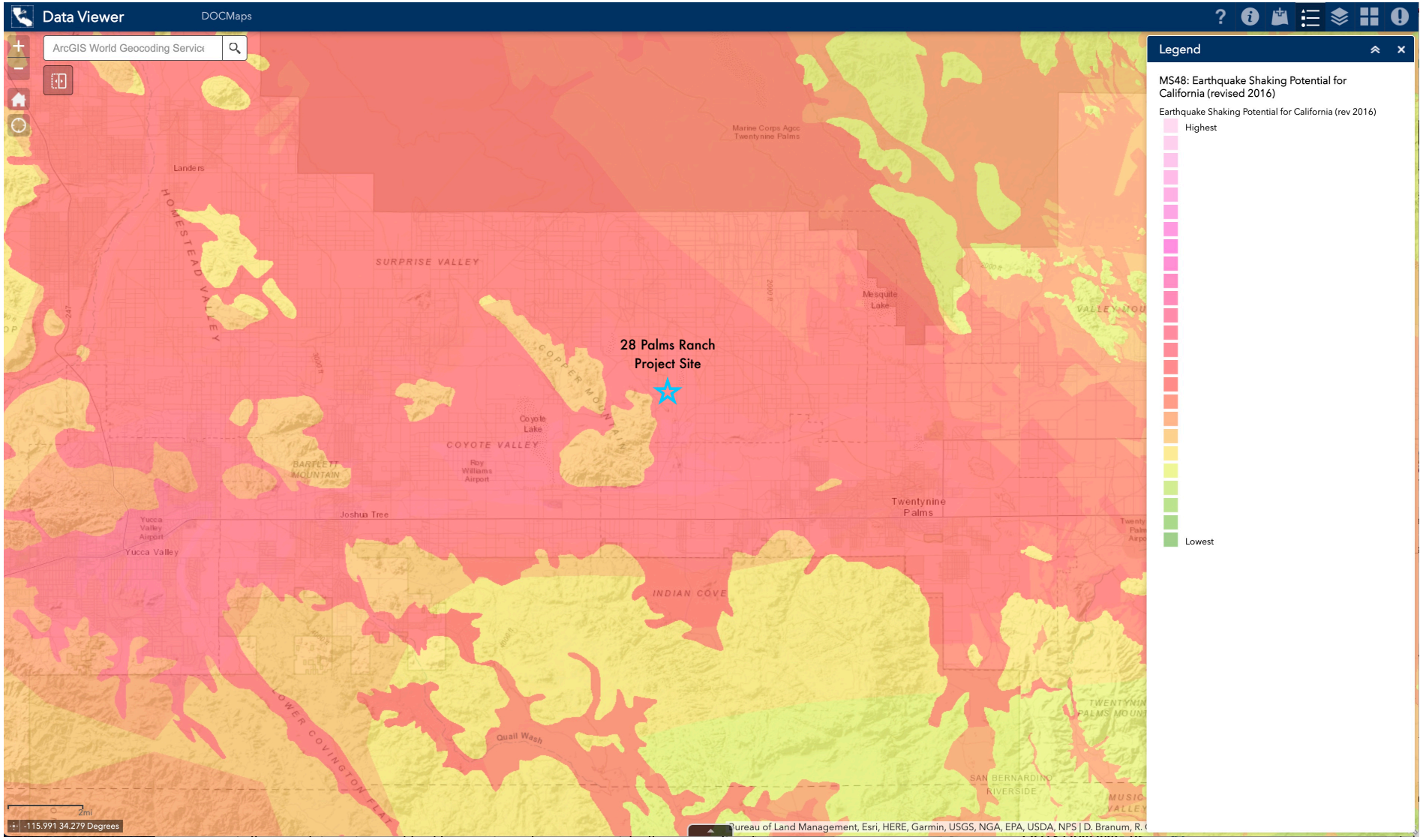


FIGURE VII-2

Tom Dodson & Associates
Environmental Consultants

Earthquake Shaking Potential

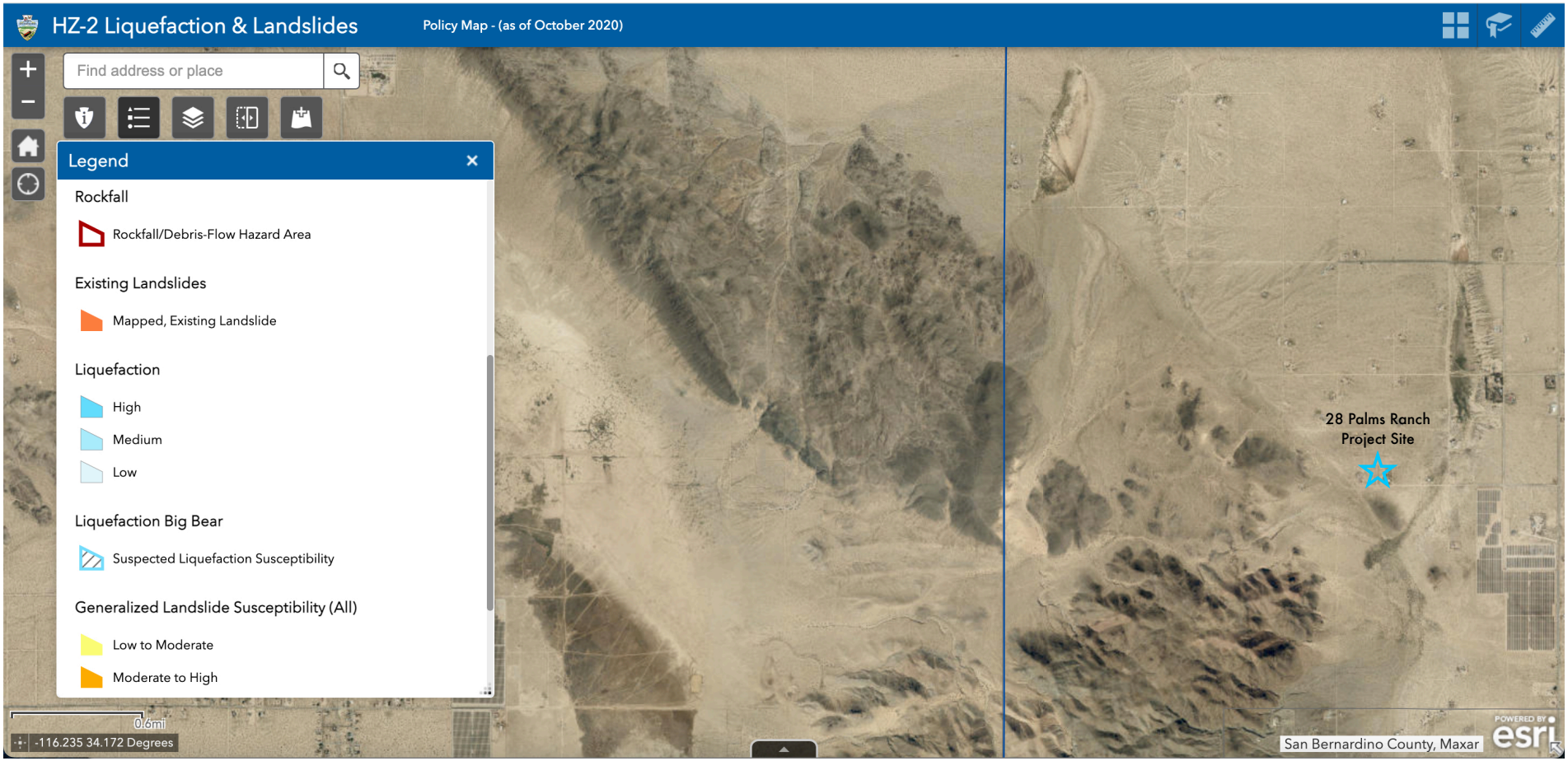


FIGURE VII-3

Tom Dodson & Associates
Environmental Consultants

Liquefaction and Landslides

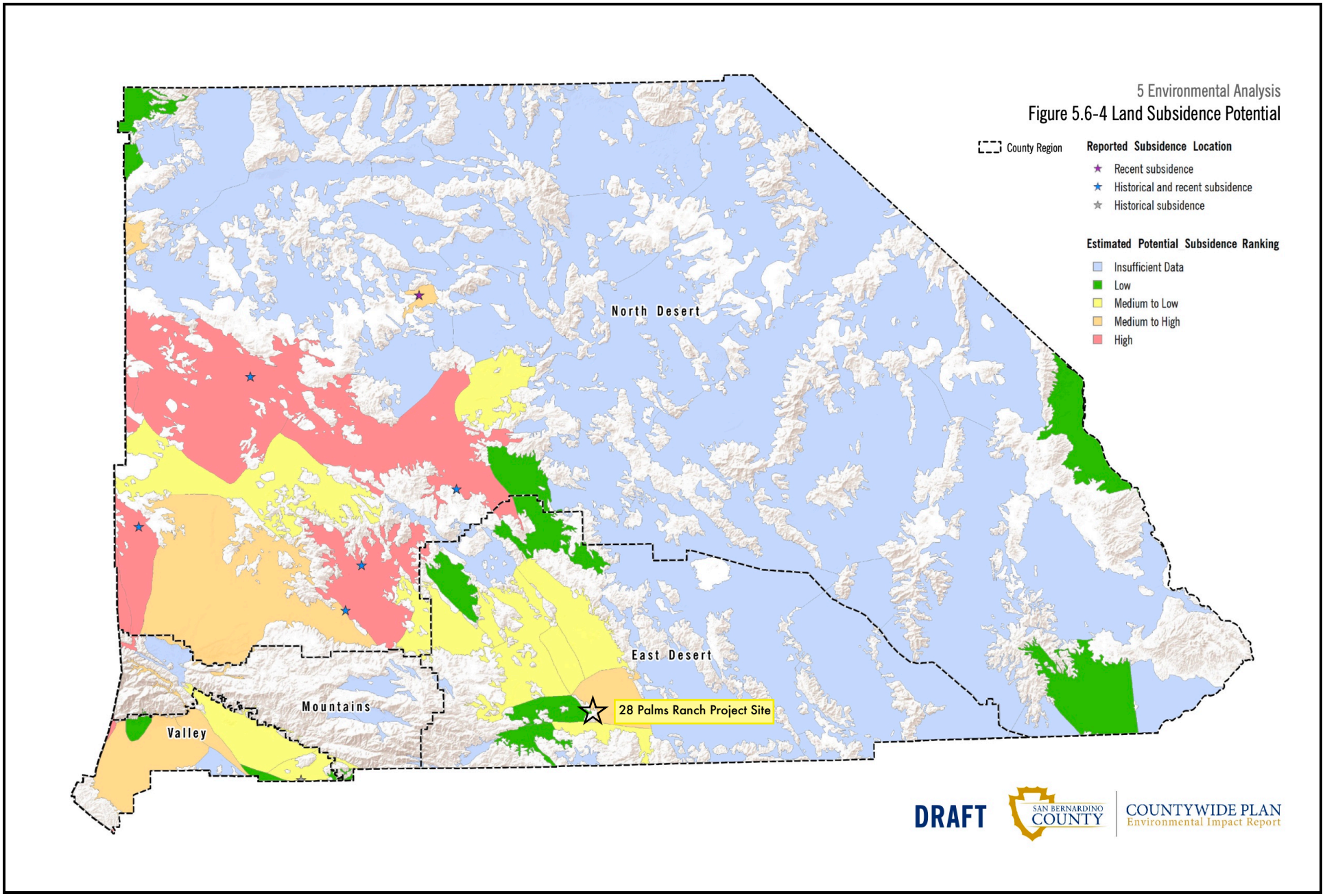
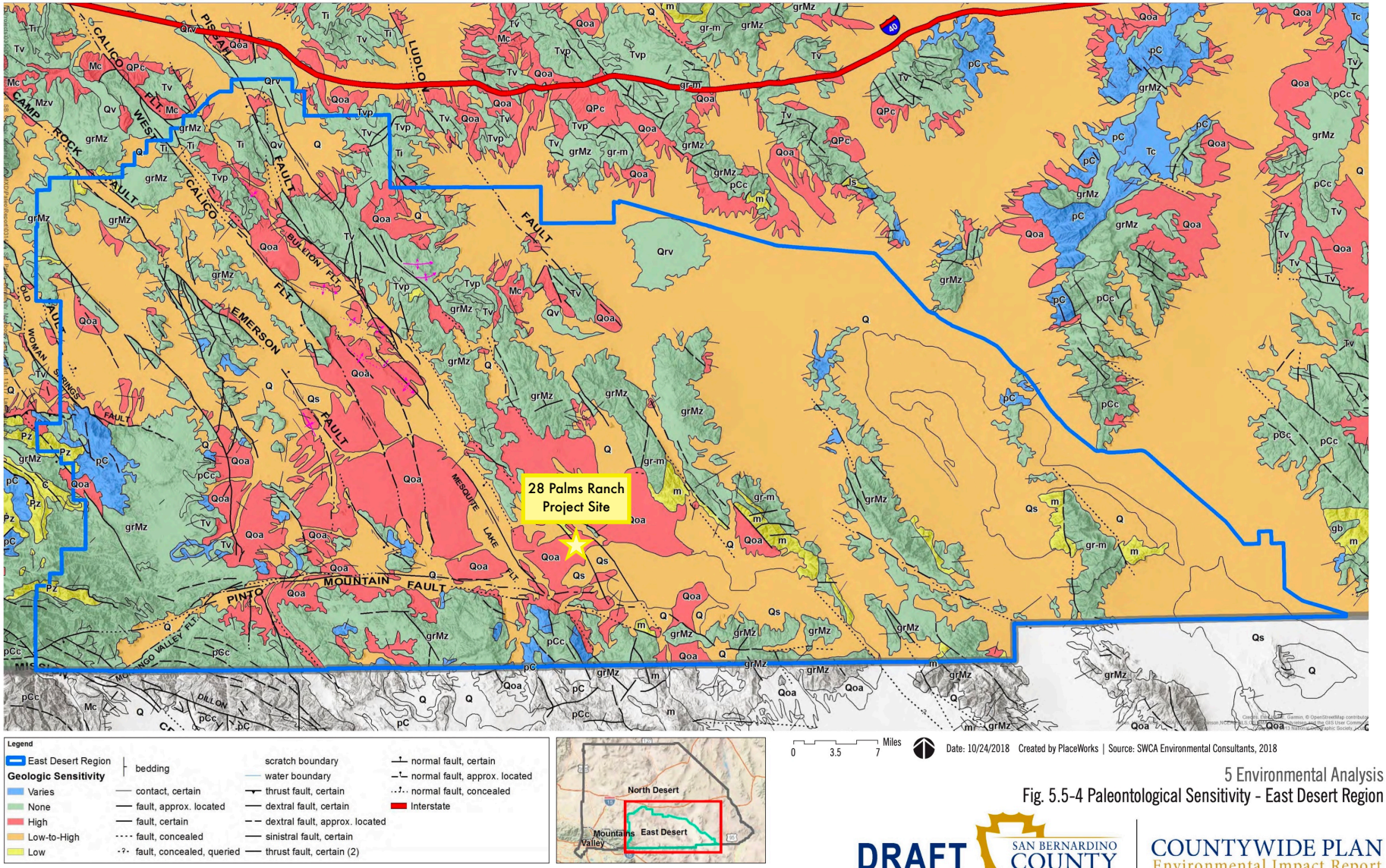


FIGURE VII-4

Tom Dodson & Associates
Environmental Consultants

Land Subsidence Potential



5 Environmental Analysis

Fig. 5.5-4 Paleontological Sensitivity - East Desert Region

DRAFT

SAN BERNARDINO COUNTY

COUNTYWIDE PLAN
Environmental Impact Report

FIGURE VII-5

Tom Dodson & Associates
Environmental Consultants

Paleontological Sensitivity – East Desert Region

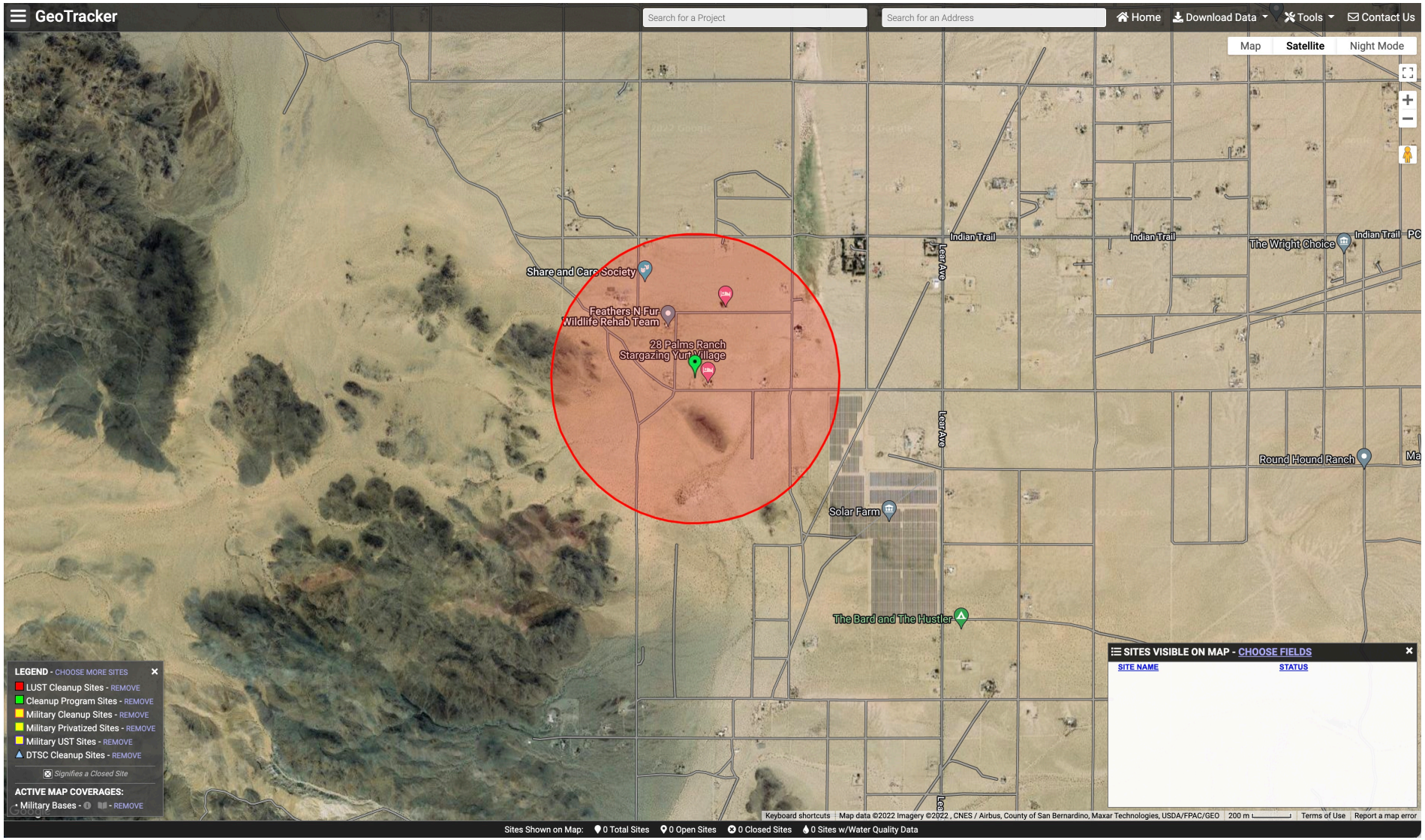


FIGURE IX-1

Tom Dodson & Associates
Environmental Consultants

GeoTracker

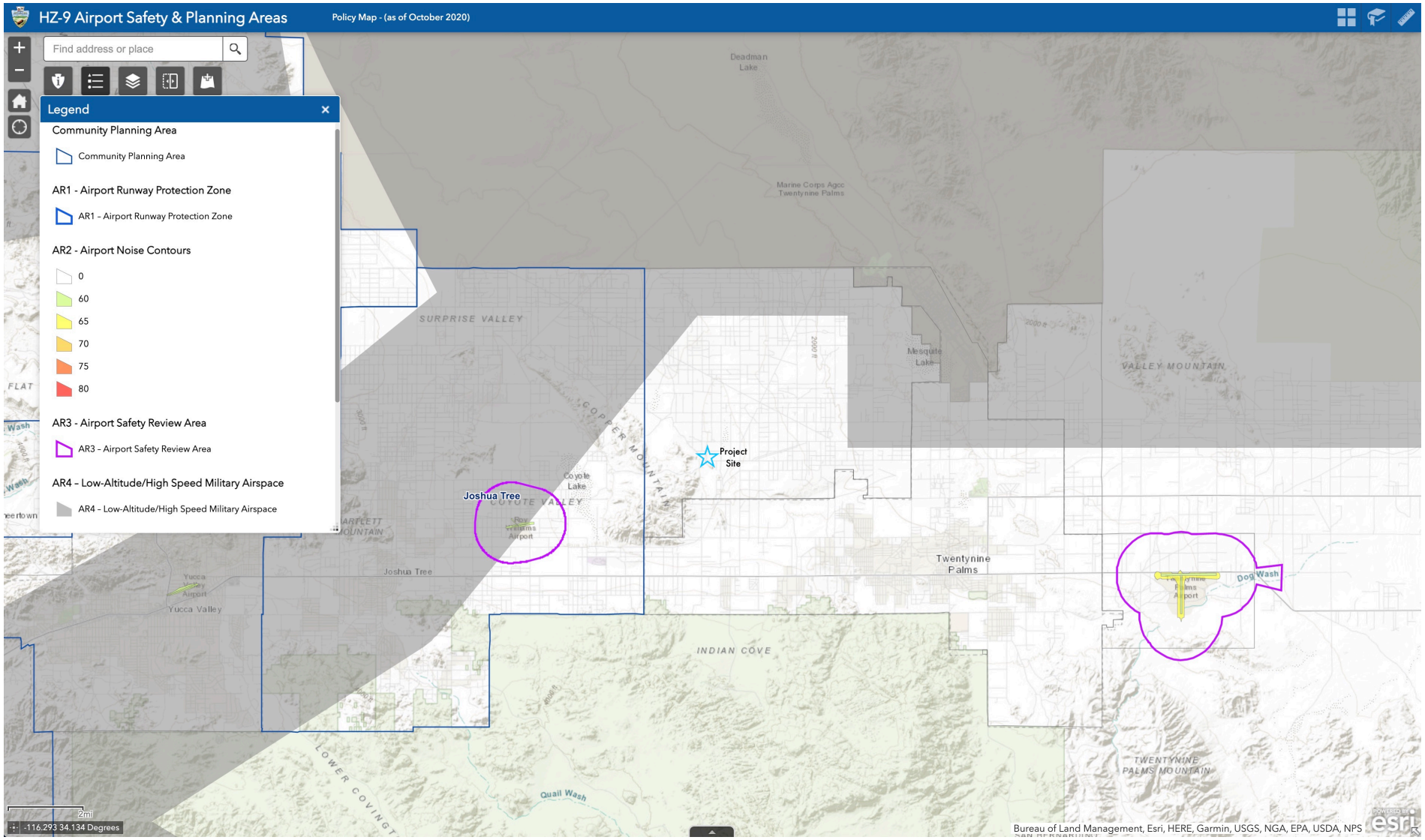


FIGURE IX-2

Tom Dodson & Associates
Environmental Consultants

Airport Safety and Planning Areas

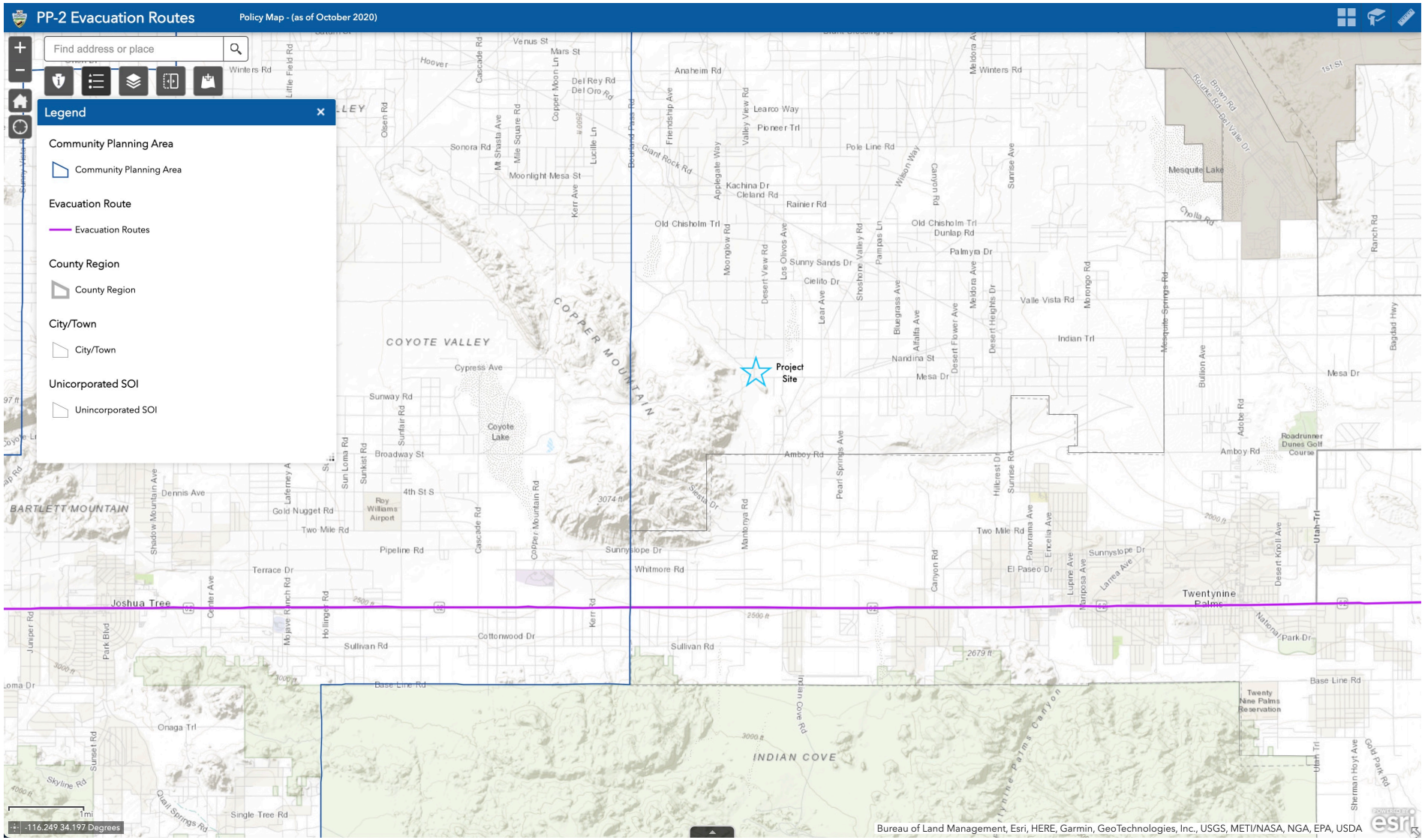


FIGURE IX-3

Tom Dodson & Associates
Environmental Consultants

Evacuation Routes

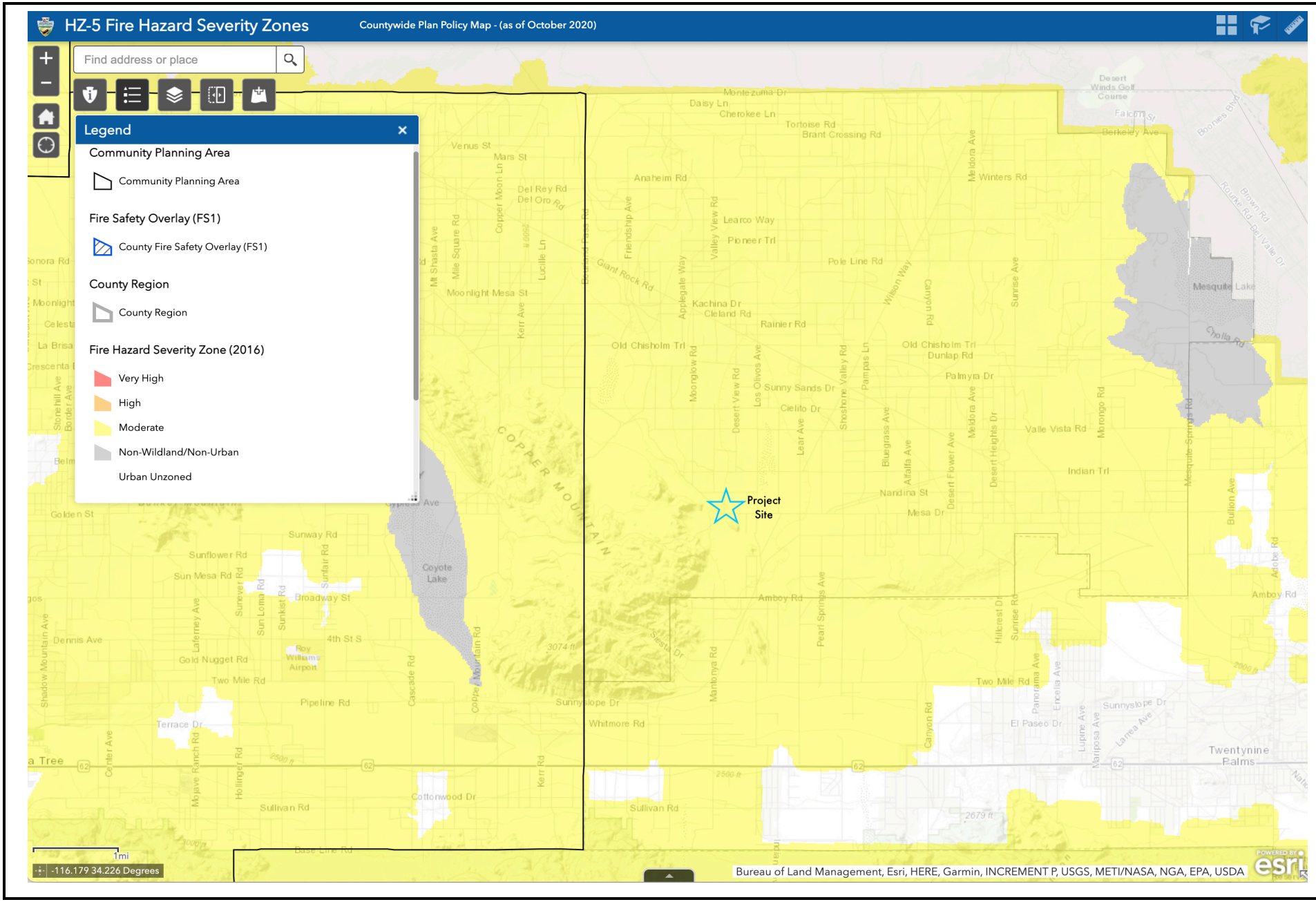


FIGURE IX-4

Tom Dodson & Associates
Environmental Consultants

Fire Hazard Severity Zones

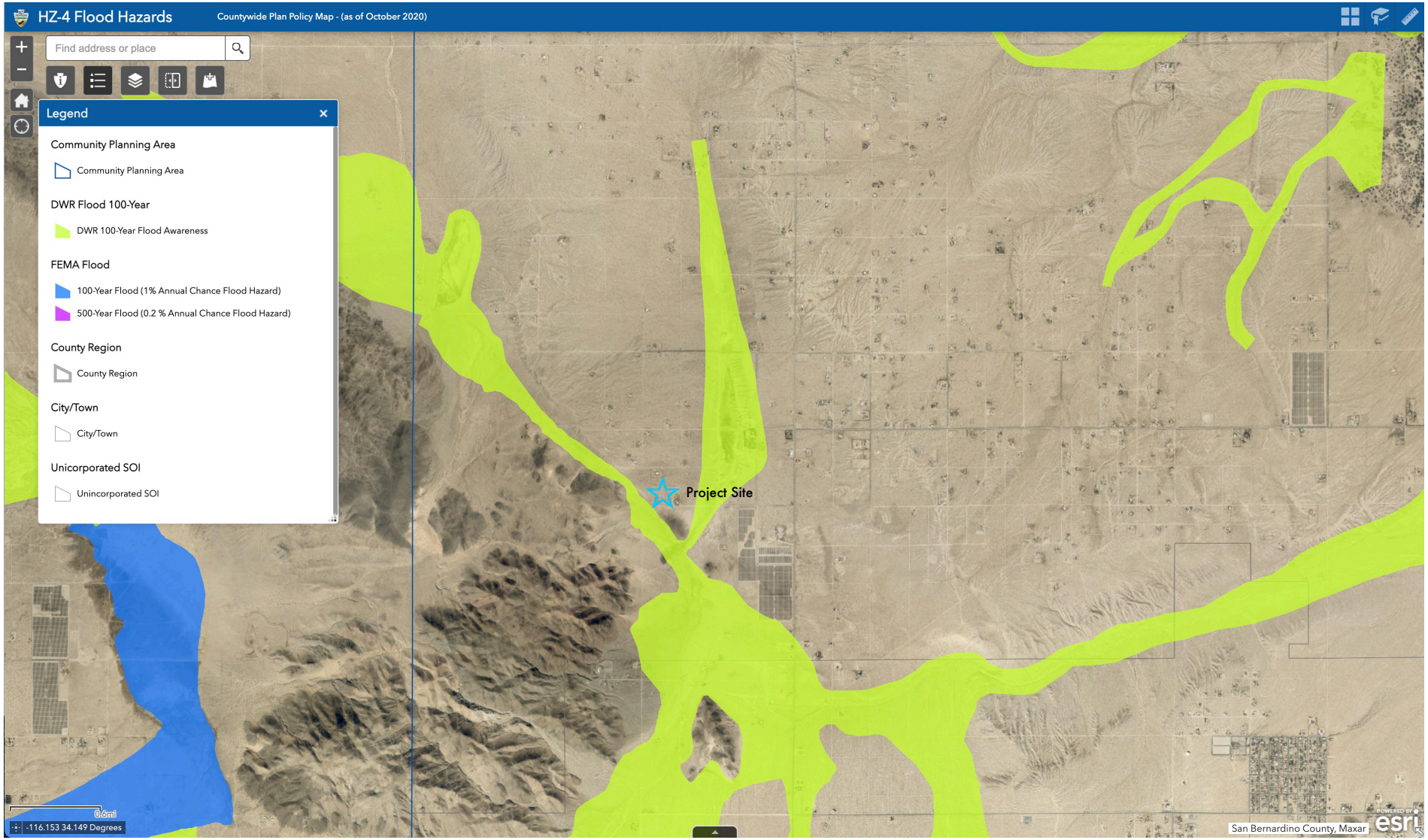


FIGURE X-1

Tom Dodson & Associates
Environmental Consultants

Flood Hazards

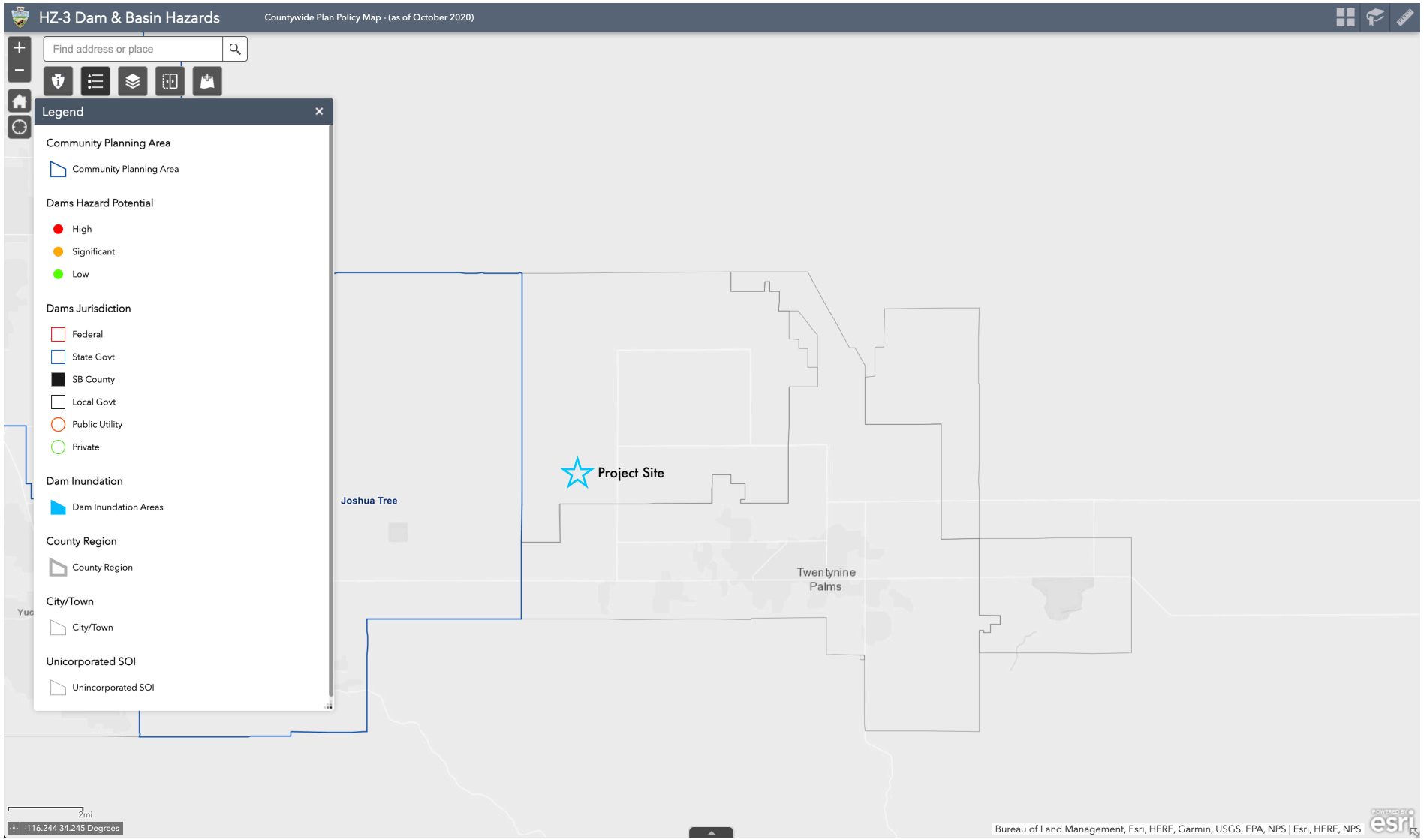


FIGURE X-2

Tom Dodson & Associates
Environmental Consultants

Dam and Basin Hazards

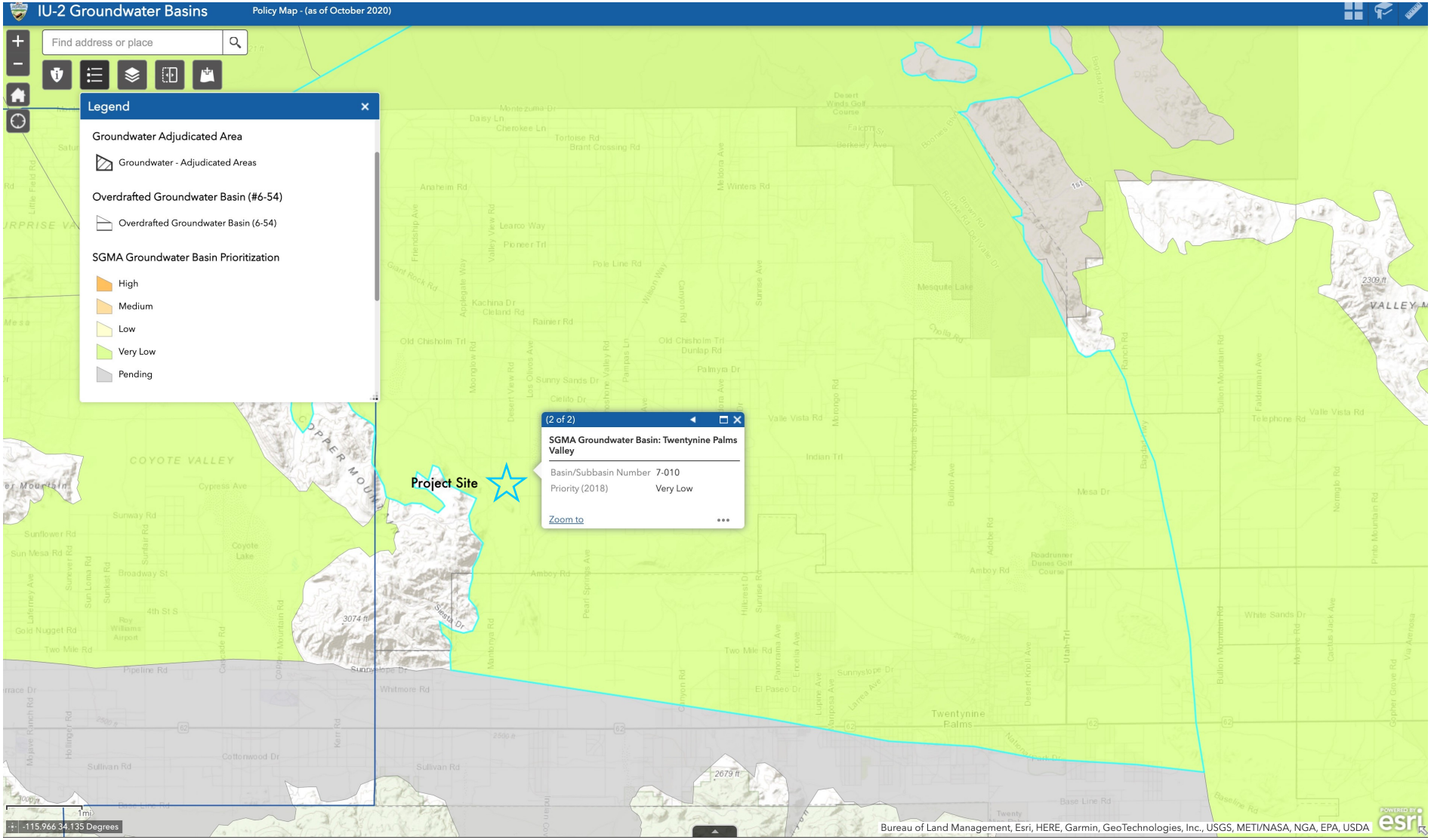


FIGURE X-3

Tom Dodson & Associates
Environmental Consultants

Groundwater Basins

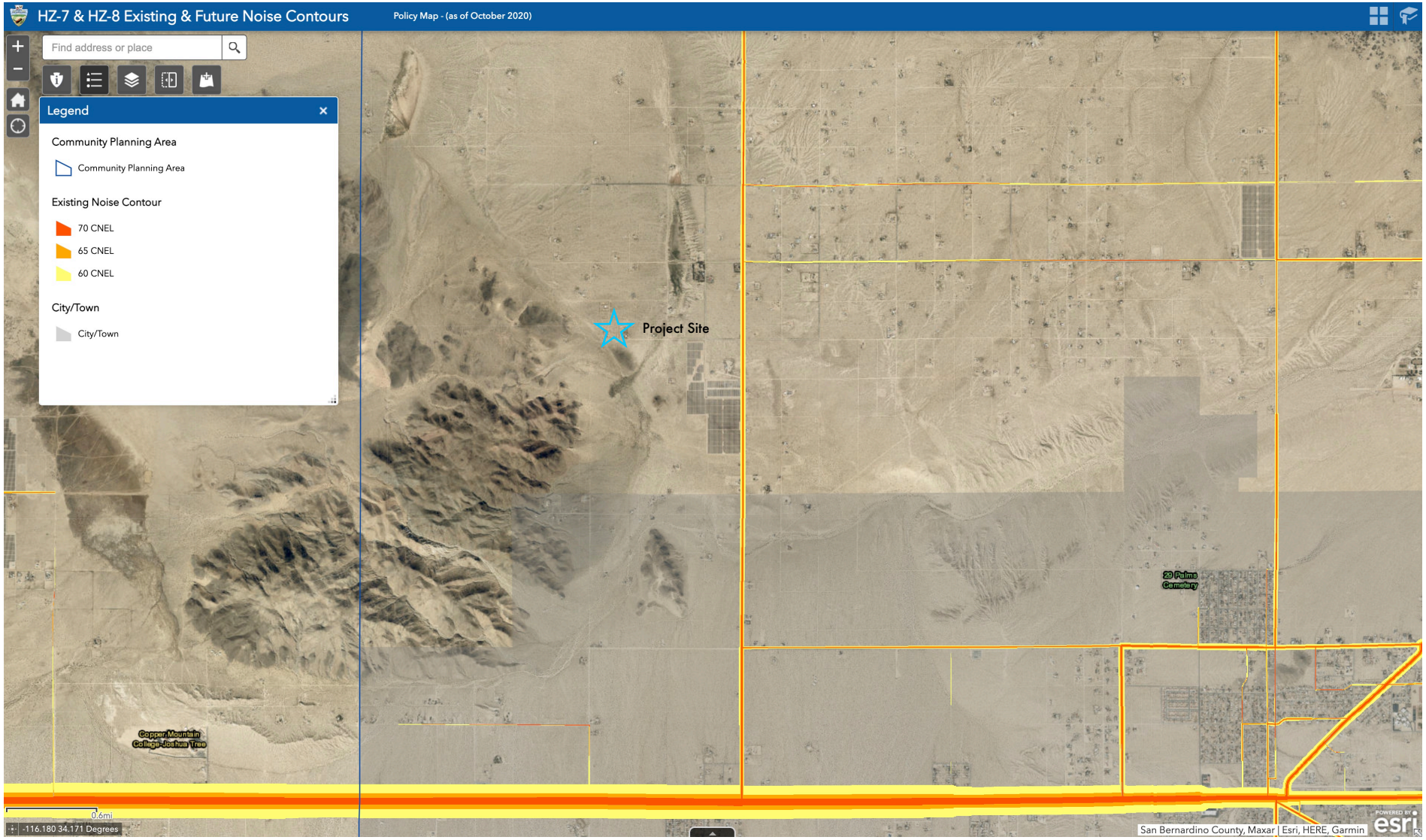


FIGURE XIII-1

Tom Dodson & Associates
Environmental Consultants

Existing Noise Contours

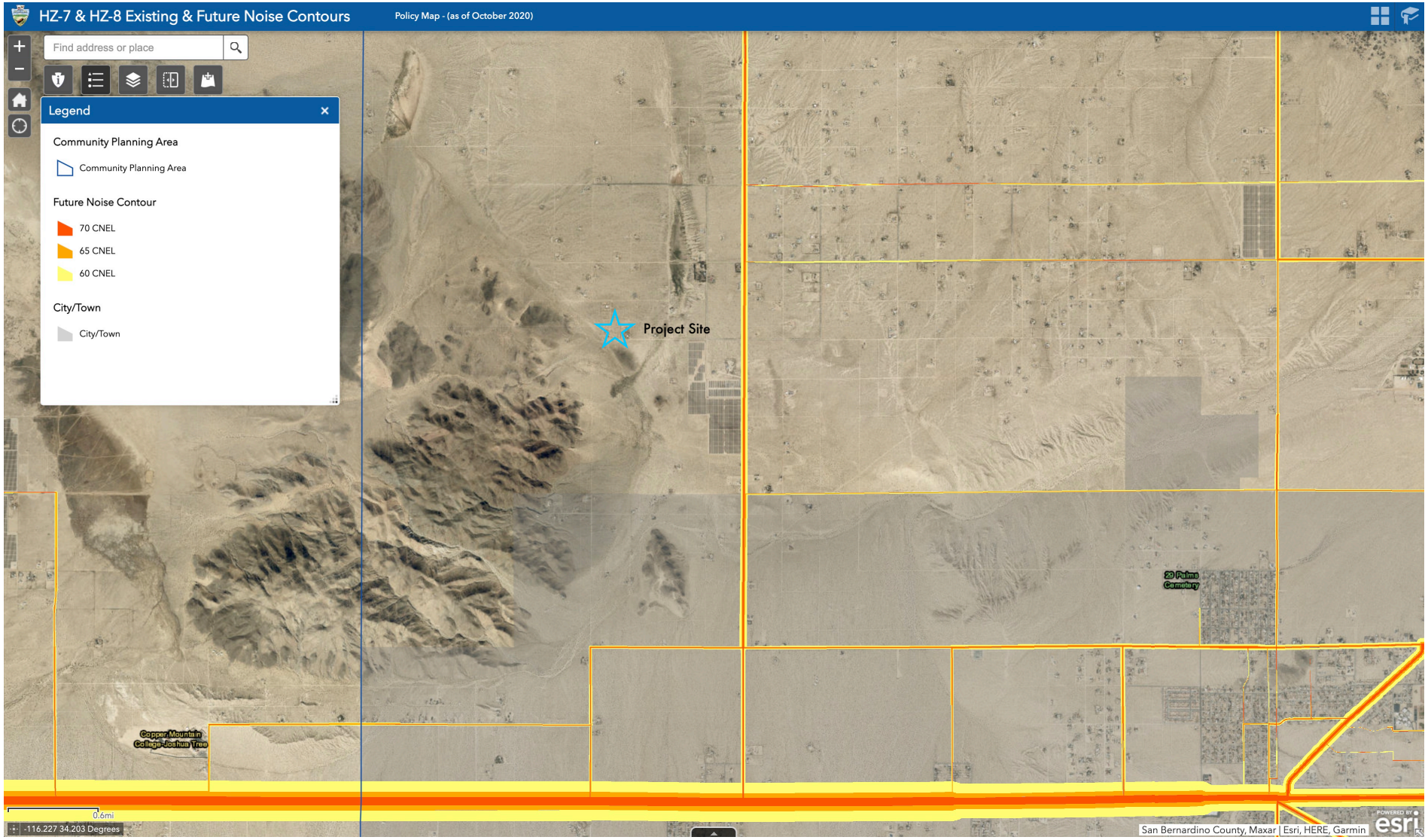
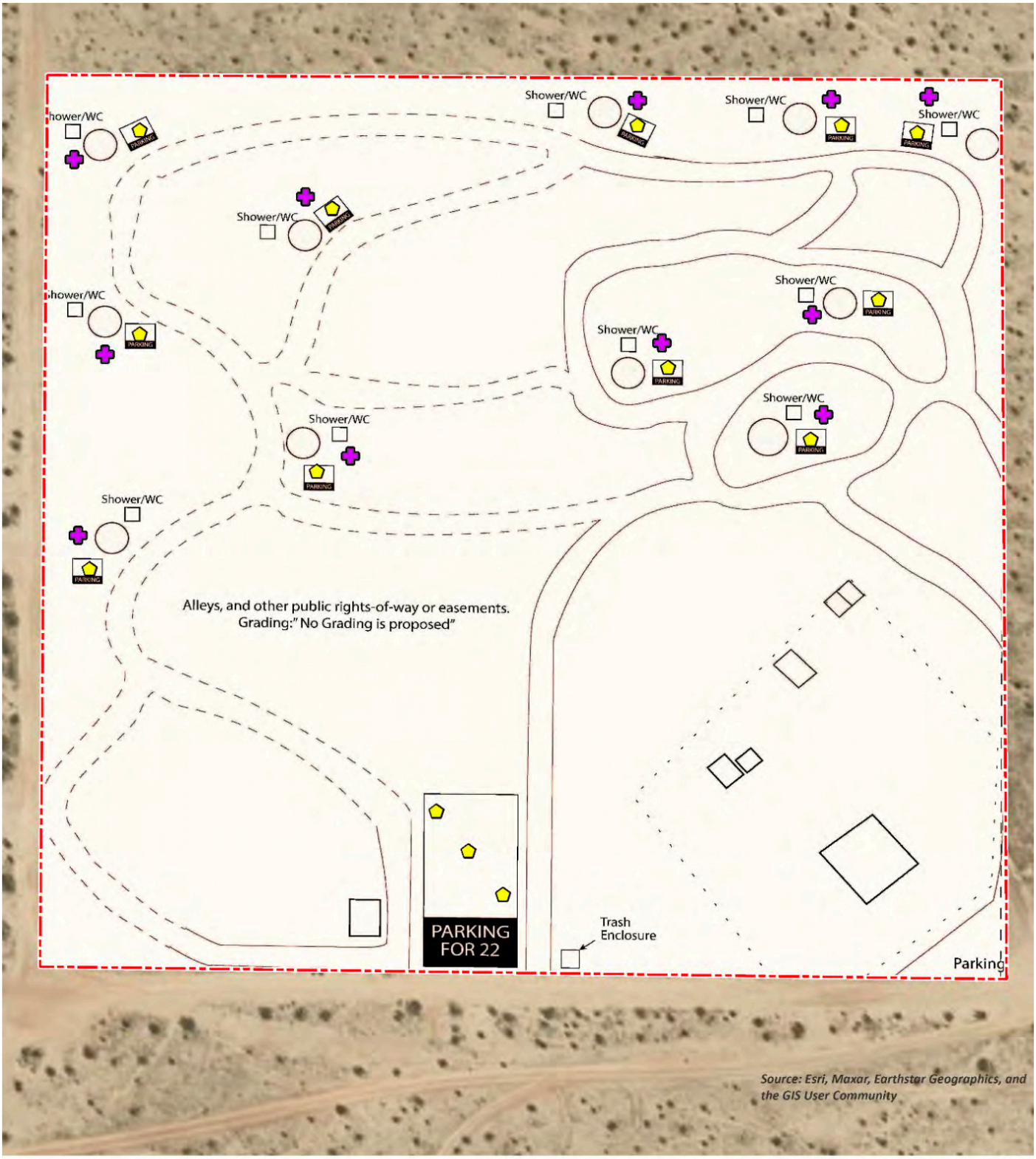


FIGURE XIII-2

Tom Dodson & Associates
Environmental Consultants

Future Noise Contours

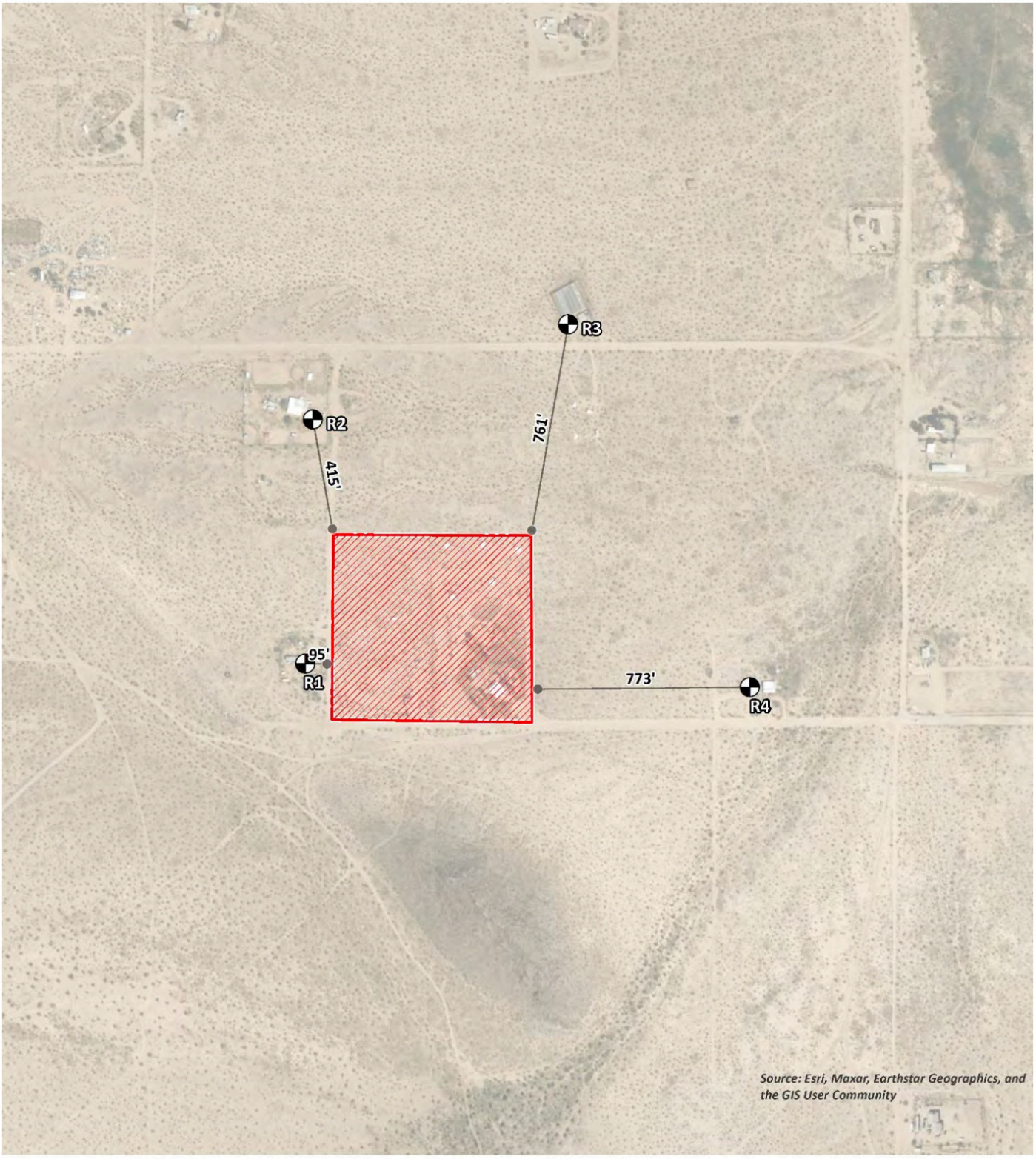


SOURCE: Urban Crossroads, *"Noise Impact Analysis"* dated April 20, 2023

FIGURE XIII-3

Tom Dodson & Associates
Environmental Consultants

Representative Receiver & Noise Source Locations



SOURCE: Urban Crossroads, *Noise Impact Analysis"* dated April 20, 2023

FIGURE XIII-4

Tom Dodson & Associates
Environmental Consultants

Construction Noise Source Activity Location

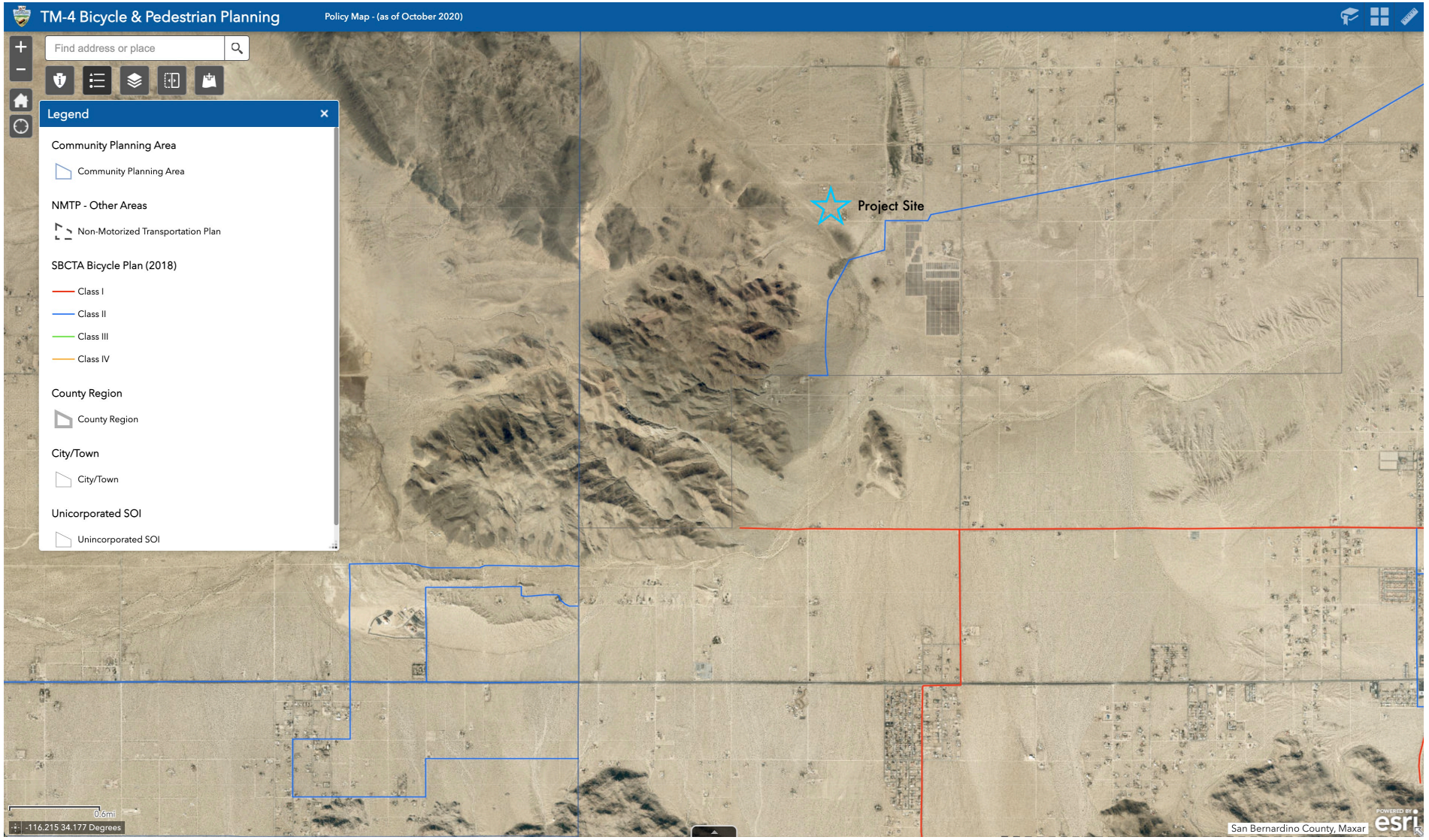


FIGURE XVII-1

Tom Dodson & Associates
Environmental Consultants

Bicycle and Pedestrian Planning

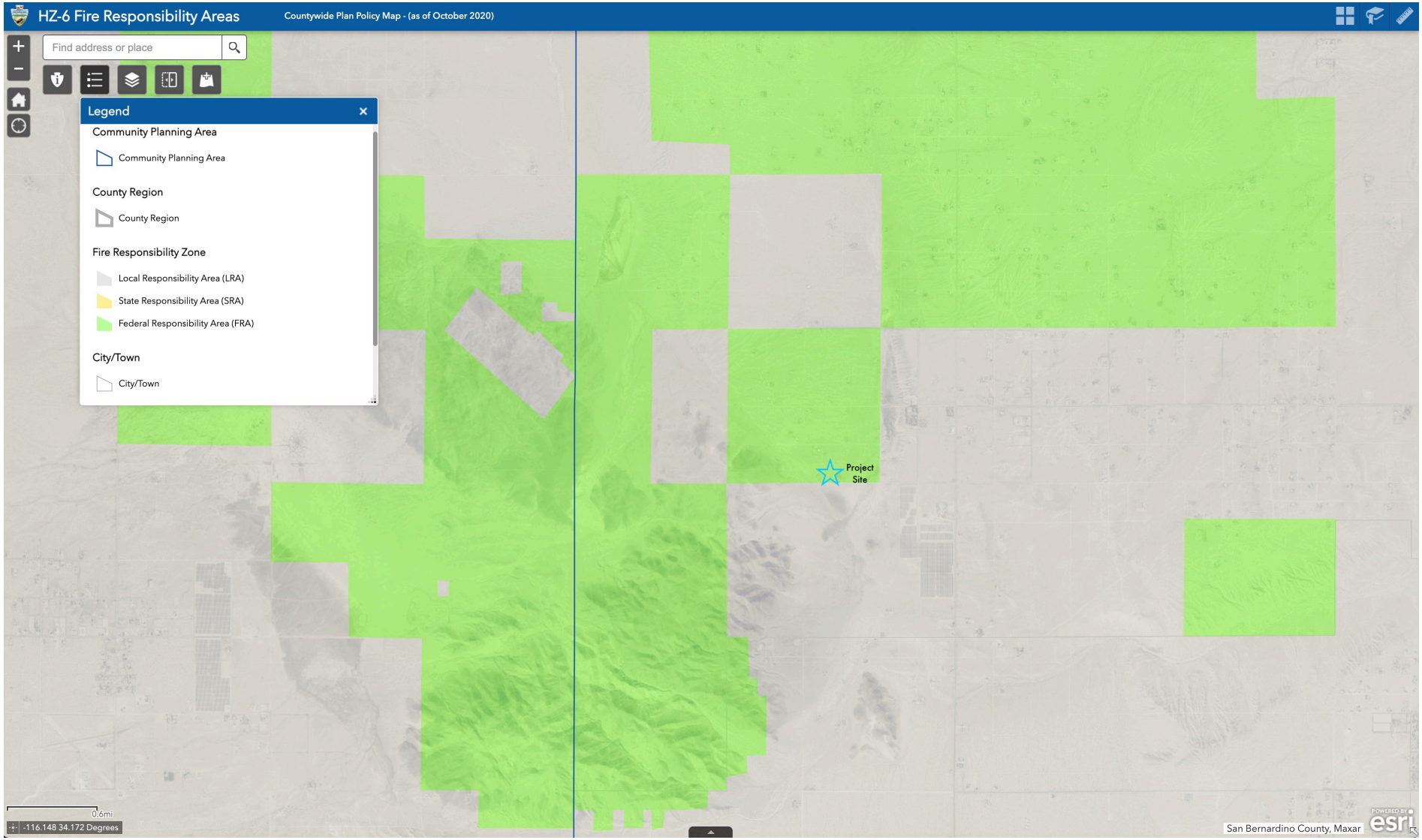


FIGURE XX-1

Tom Dodson & Associates
Environmental Consultants

Fire Responsibility Areas