TTM 66842 Project

California Endangered Species Act Section 2081 Incidental Take Permit Application

Submitted to:

California Department of Fish and Wildlife South Coast Region (Region 5)
4665 Lampson Avenue, Suite C, Los Alamitos, CA 90720
Contact: Victoria Tang, Senior Environmental Scientist

Submitted by:

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September 2021

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Environmental Scientists | Planners | Engineers
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1 Introduction

On behalf of MAISON'S RANGE 199, Rincon Consultants, Inc. has prepared this application seeking an Incidental Take Permit (ITP) in conformance with Section 2081(b) of the California Endangered Species Act (CESA). This permit application describes management actions that will be implemented to minimize and fully mitigate the impacts of any take of state-listed species associated with implementation of the Tentative Tract Map (TTM) 66842 Project (Project). Specifically, this application addresses incidental take of the western Joshua tree (*Yucca brevifolia*), currently a CESA candidate species.

2 Applicant Information

Applicant:	MAISON'S RANGE 199
Applicant Representative:	Kevin Harbison
Address:	211 Village Commons, Suite 11, Camarillo, CA 93012
Contact:	310-926-6363
Email:	kevin@ravelloholdings.com

3 Covered Species Name and Status

The following species (Covered Species), subject to the rules and guidelines of Division 3, Chapter 1.5, Sections 2050-2100 of the California Fish and Game Code (CFGC) and Title 14, Sections 783.2-786.6, of the California Code of Regulations (CCR), is determined to occur on or directly adjacent to the proposed Project site and may be at risk of take:

- Western Joshua Tree (*Yucca brevifolia;* WJT) - Candidate

Measures are incorporated to avoid or minimize take to the maximum extent possible; however, the applicant is seeking authorization under Section 2081(b) of the CESA for coverage of incidental take that will result from permanent removal of Western Joshua Tree individuals as a result of planned Project activities.

4 Project Description

The purpose of the project is to develop 199 units of new single-family housing lots in Lancaster, California with rents attainable to the Antelope Valley community and will feature modern single-story one, two, and three bedroom single-family homes for-rent (the homes will be built as detached structures with the one-bedroom units attached to certain of the homes) spaciously spread out on the nearly 20 acre site featuring a community building with a tenant lounge, fitness center and offices as well as outdoor amenities including a pool, grill area and recreational space. In addition to providing much needed attainably priced housing for the community, 100% of the homes in this project will be constructed with rooftop solar and it is the applicant's intention to either achieve or get as close to net zero emissions as possible through the use of roof top solar, energy efficient appliances and the elimination of natural gas as an energy source.

The 20.22-acre project site is located on Assessor Parcel Numbers (APNs) 3153-021-032, 033, 034, 035, 036 and 038 and 3153-046-065 and is surrounded by existing single-family detached neighborhoods on all four sides. Avenue J-8 splits the project with APN 3153-046-065 north of Avenue J-8 and the remaining parcels south of Avenue J-8. To the west is 40th Street West with existing single-family neighborhoods further west and to the south lies an existing single-family neighborhood with multiple north/south running streets terminating at the southern boundary of the project. The project is bordered to the east by approximately 8.76 acres of vacant land which is immediately adjacent to 35th Street West with additional single-family detached housing neighborhoods further east.

Development of the Project will occur under approved TTM #66842, which was approved by the City of Lancaster Planning Commission on December 18, 2017 as an infill development. As part of the approval of the TTM, the Planning Commission also adopted a Mitigated Negative Declaration finding the project would not result in a significant impact on the environment as required under the California Environmental Quality Act (CEQA).

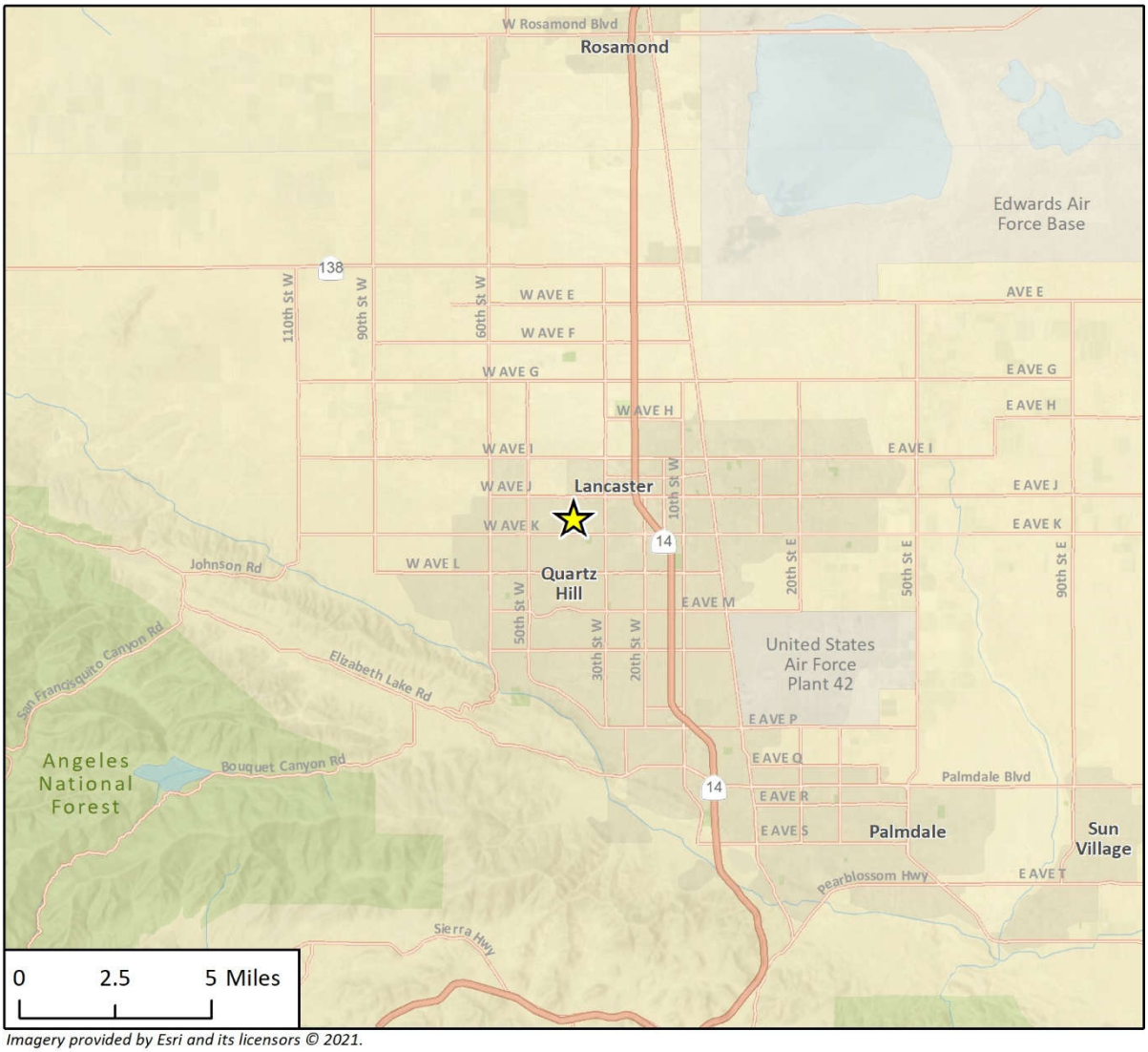
Development of this project will include the construction of affordable single family housing units along with the installation of all infrastructure improvements as conditioned by the City of Lancaster with the TTM approval and will require that the entire project site be graded prior to infrastructure and housing construction activities.

The proposed Project is scheduled to begin construction November 2021 and last approximately 18 months. The cost of the Project is approximately $35,000,000 and is the basis for the applicable permit fee.

5 Project Location

The Project is located within the City of Lancaster, Los Angeles County, California. Specifically, it is located east of 40th Street West, with land areas on both the north and south sides of Avenue J-8 (Figure 1). The Project site is designated Assessor's Parcel Numbers 3153-021-032, 033, 034, 035, 036, 038 and 3153-046-065, and is approximately 20.22-acres. The parcel is depicted within the *Lancaster West, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangles, in Township 07N, Range 12W, Section 19, San Bernardino base and meridian (Figure 2). The Project site is located at latitude 34.681866°N and longitude -118.198783°W (WGS-84 datum).

Figure 1 Project Vicinity



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Project Location

N

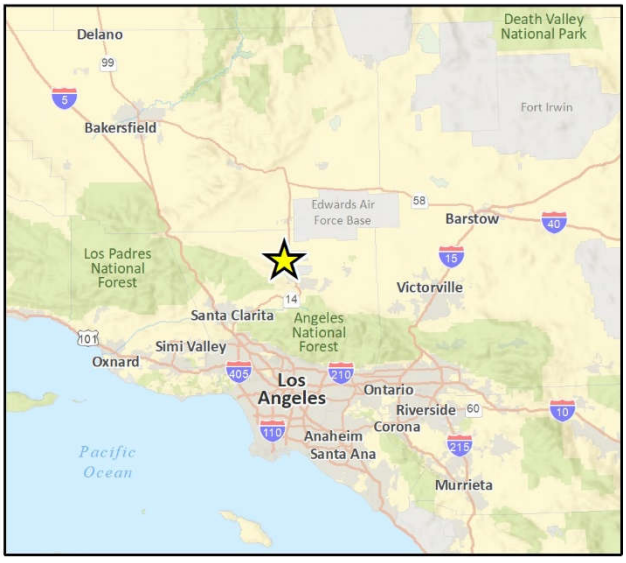

Figure 2 Project Location and Elevation

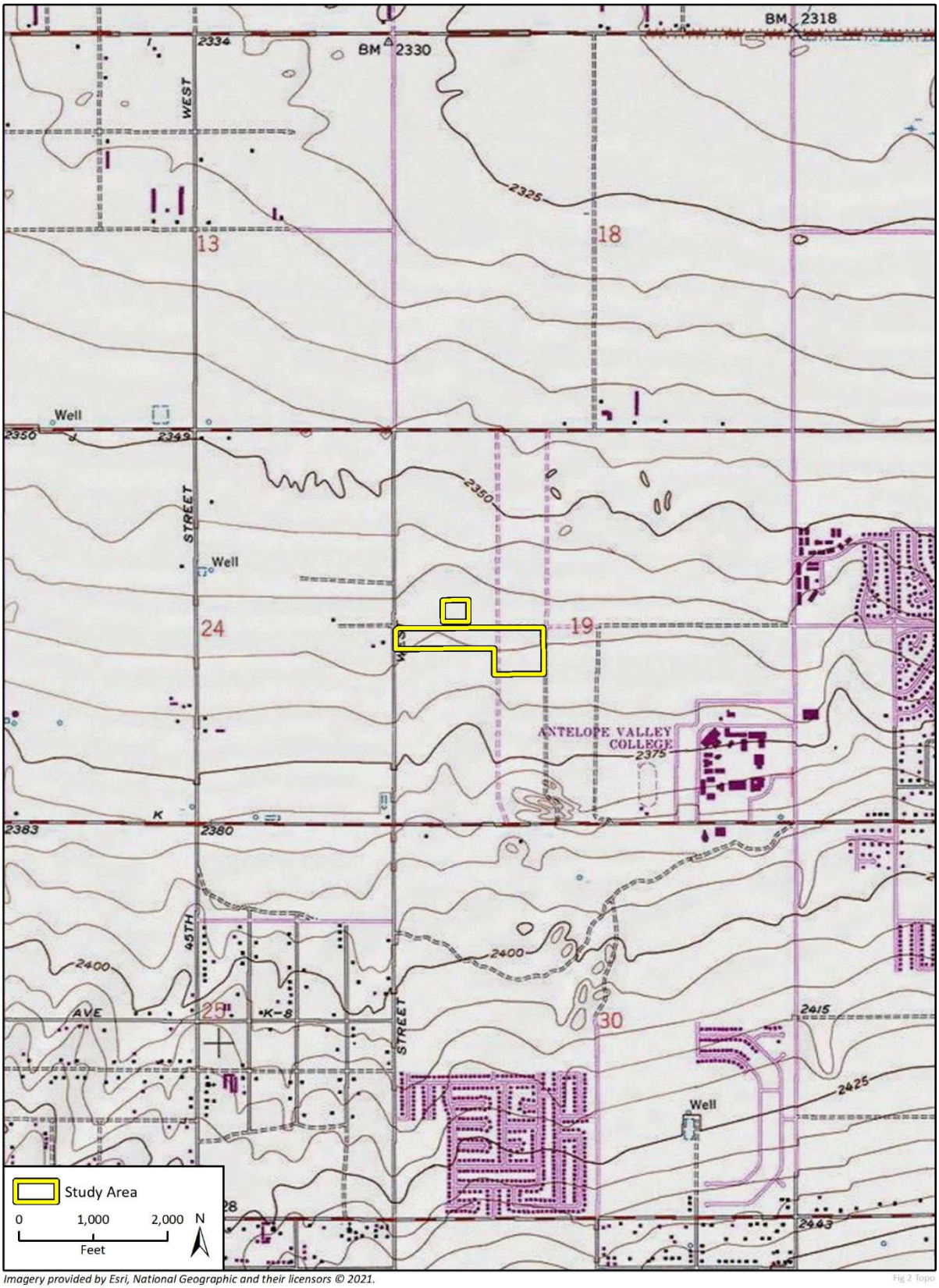

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Fig 2 Topo

6 Environmental Setting

The Project is located within the City of Lancaster. Parcels included in the tract are located to the east of 40th Street West and on both the north and south sides of Avenue J-8. The region is largely composed of mid-elevation desert scrub with areas of residential and industrial infrastructure.

6.1 Topography

The Project site ranges from approximately 720 to 725 meters above mean sea level. The parcel is relatively flat.

6.2 Hydrology

A roadside drainage, oriented north south, exists in the middle of the Project site. The channel receives residential landscape runoff and stormwater drainage off 37th Street West and runs parallel to a dirt access road that bisects the property. Water was present within the drainage during a site visit conducted on July 22, 2021.

6.3 Geology and Soils

According to the USDA Natural Resources Conservation Service (USDA NRCS) Web Soil Survey data for Los Angeles County, California (2021), two soil map units occur within the Project area: Sunrise loamy fine sand (80%), and Sunrise sandy loam (20%).

Sunrise Series

The Sunrise series is a soil series composed of deep, well drained soils that formed in material from mixed alluvium. The soil type is not extensive in range but common in areas of the Mojave Desert. Sunrise soil is typical in locations with arid climates with hot, dry summers and somewhat moist winters. Average annual precipitation is 3 to 8 inches, mostly in the form of winter rain. Sunrise soils are well drained and are negligible to low runoff. Vegetation supported is typically Atriplex and Creosote bush, with some scattered annual grasses.

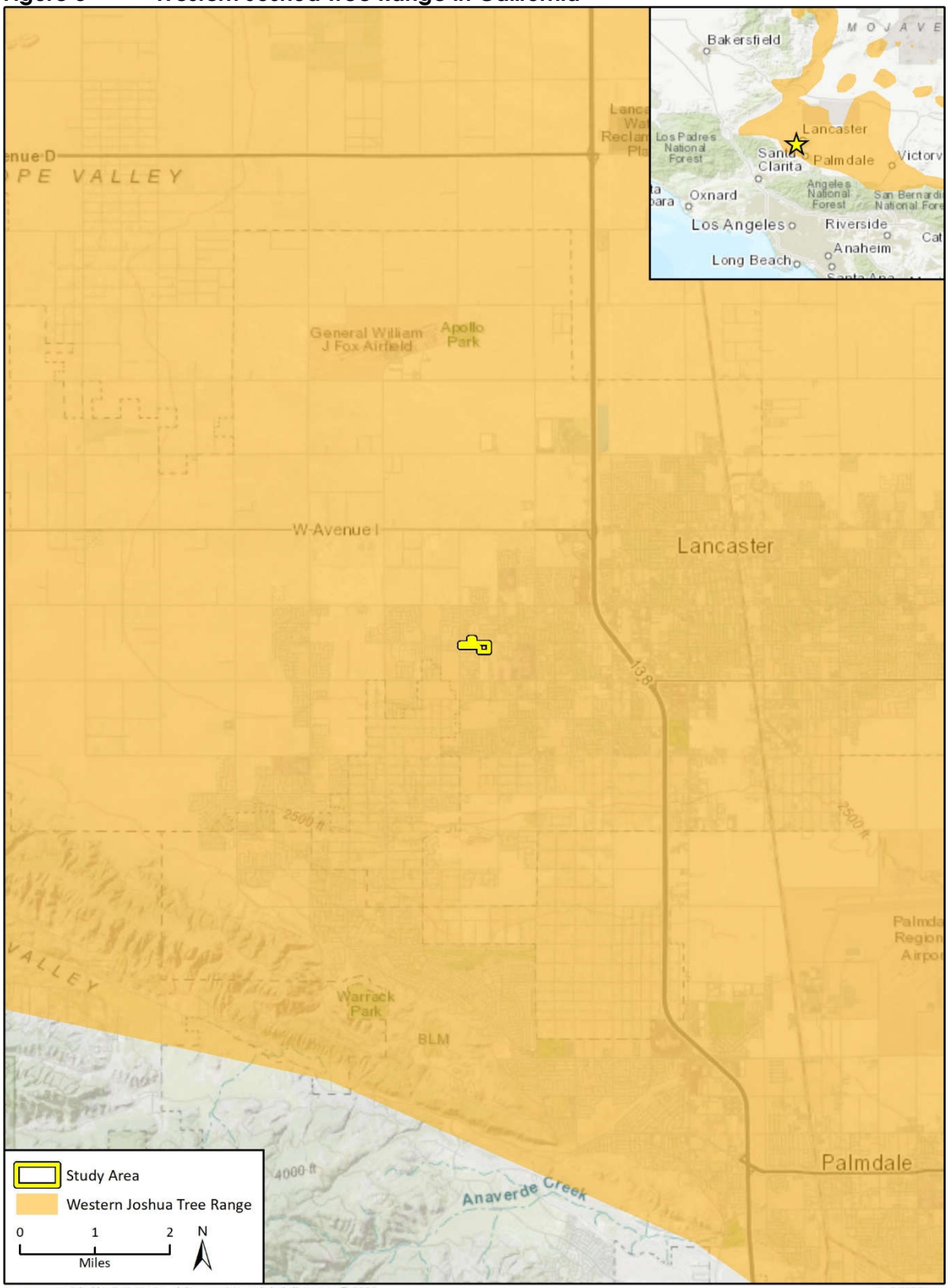
6.4 Vegetation Communities

WJT's were previously mapped within the parcels along with desert mixed scrub species (Conservation Biology Institute 2013). The Project site falls within current mapped WJT distribution in California (**Figure 3**). The site is located within the greater Mojave Mid-Elevation Mixed Desert Scrub, characterized by extensive desert scrub in the transition zone above *Larrea tridentata – Ambrosia Dumosa* desert scrub and below the lower montane woodlands that occurs in the eastern and central Mojave Desert.

A survey conducted by Rincon Consultants on July 22, 2021, indicated that the parcel contains WJTs along with desert scrub species (Figure 4). The survey followed California Department of Fish and Wildlife (CDFW) protocol for floristic-based field mapping (CDFW 2018a) and utilized the Manual of California Vegetation (Sawyer et al. 2009). A total of 29 species were documented during the survey and these included *Ephedra nevadensis*, *Atriplex canescens, Euphorbia albomarginata*, *Sisymbrium*

altissimum, Croton setiger, *Bromus tectorum, Tetradymia comosa*, *Melilotus alba, Eriastrum densifolium*, *Ambrosia acanthicarpa, Sisymbrium irio*, *Heliotropium curassavicum*, *Cynosurus echinatus*, *Polypogon monspeliensis*, *Tetradynmia comosa*, *Echinochloa cru-galli*, *Typha* sp., *Persicaria lapathifolia*, *Bolboschoenus robustus*, *Eleocharis macrostachya*, *Juniperus californica, Distichlis spicata*, *Artemisia tridentata*, *Salsola tragus, Lactuca serriola, Lycium cooperi, Juncus torreyi, Gutierrezia microcephala* and *Yucca brevifolia*.

Figure 3 Western Joshua Tree Range in California



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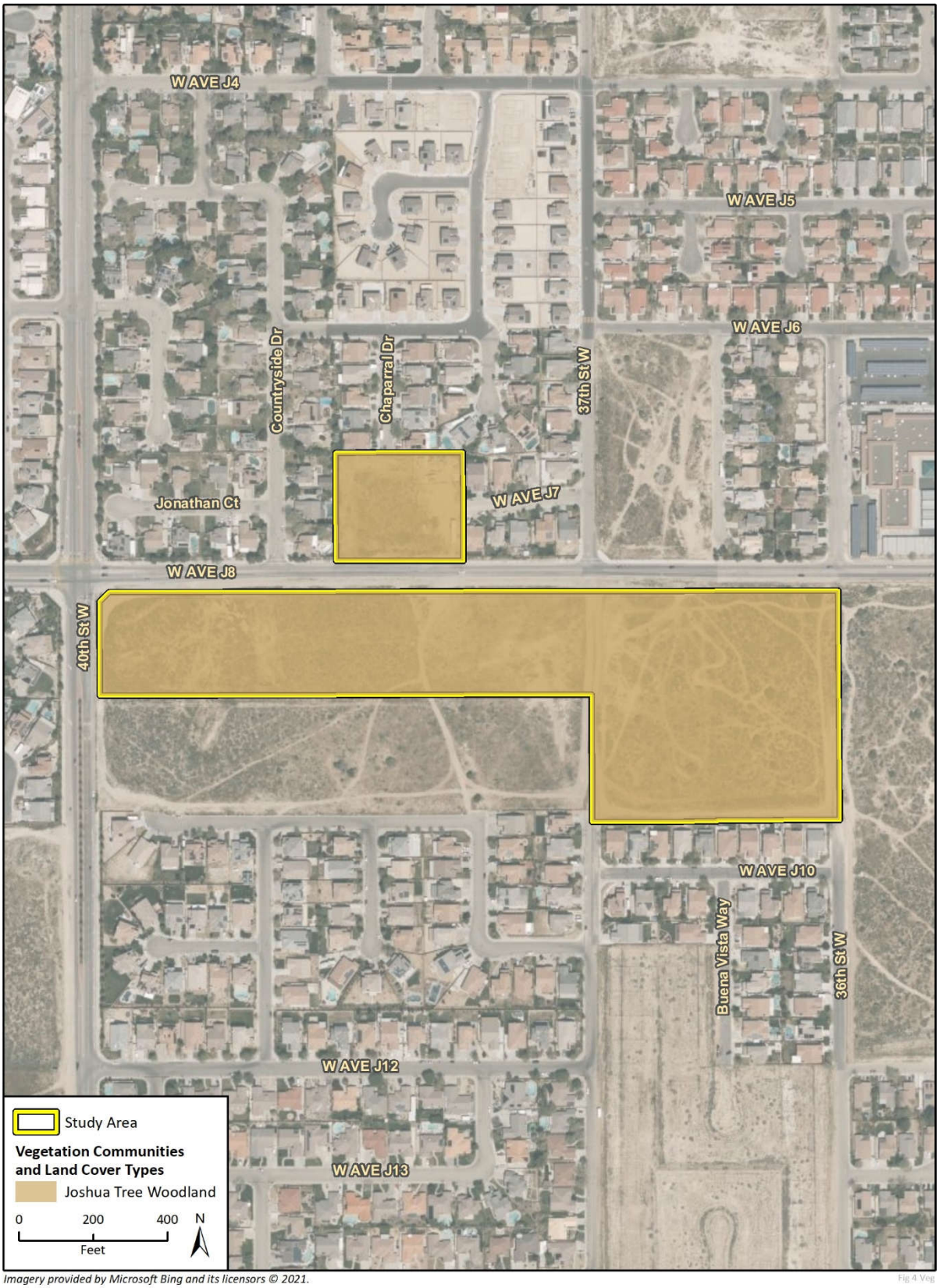
Additional data provided by USGS/Cole, K., 2021.

Fig 3 WJT Range

Figure 4 Vegetation Communities



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7 Species Take and Impact Analysis

7.1 Species Account

The WJT is a plant species that occurs in the desert regions of the southwestern U.S and is currently designated as a candidate species under the California Endangered Species Act.

WJTs are tall, evergreen monocots with somewhat spongy fruit. Mature trees range from 5-12 meters (16-40 feet) and leaves range from 7.5-15 inches long. Radial and vertical growth is simultaneous (Simpson 1975) with branching only occurring after flowering occurs. WJTs occur between 600-2200 meters (1900-7200 feet) of elevation and between 34° and 38° latitude (Rowlands 1978). Currently, the species is found almost exclusively within the Mojave Basin and Range ecoregion. Within this ecoregion, the species is split into two populations, the Northern population and Southern population.

The Southern population spans from Ridgecrest to the little San Bernardino Mountains in Joshua Tree National Park. This population includes WJTs in the city of Lancaster, as well as other population centers including Palmdale, Hesperia, Victorville and Yucca Valley. The Southern population is characterized by a wide range of elevations (2461 ft – 7218 ft), the greatest of the five regional populations (Rowlands 1978), and varying densities throughout the low-density development of regional cities. The areas surrounding Lancaster, in which WJTs inhabit, include alluvial plains, fans and bajadas that lie between the mountain ranges of the area.

Major threats to the species include loss of habitat from invasive species and urban development, as well as shifts in climate trends in the ecoregion, including increased maximum/minimum temperatures and extended drought periods. WJTs do not occur in hotter and dryer, lower elevation areas within the Mojave Desert, as maximum/minimum temperatures constrain the distribution of the species. A study in Joshua Tree National Park, predicted a 90% decline in WJTs with a 3° C increase in summer temperature (Barrows and Murphy-Mariscal 2012). Historically, the Southern population is acclimated to warmer temperatures than the Northern population, but this could indicate that with changing temperature profiles, a population shift may occur to more northern or higher elevation areas that satisfy the climatic needs of the species.

Prolonged periods of drought, influenced by increased temperatures and lower levels of precipitation in the Mojave Basin and Range, are also influencing the demography of WJTs, especially in reducing the survival rates of juveniles (Defalco et. al 2010). Prolonged negative effects on germination and recruitment will be potentially detrimental to the species in these areas.

Urban expansion and development, including residential development, military activities and renewable energy site development, have the potential to negatively influence the entire WJT population. As of 2018, only 2.2 percent of the range of *Y. brevifolia* overlapped with metropolitan areas but continued expansion and development of these areas has removed more habitat (USFWS 2018). Although currently the City of Lancaster does not have a city ordinance protecting and preserving desert vegetation, projects within the city follow all regional and state regulations regarding the protection of WJTs.

Prolonged droughts and overall habitat loss will lead to an increase in invasive grass species that are adapted to re-colonize disturbed habitat. Invasive grass colonization may lead to more frequent, and larger, fires occurring in the range of *Y. brevifolia*.

7.2 Onsite Population and Impact Assessment

As previously noted, WJTs were documented on the parcel during the site assessment conducted by desert botanist Kipp Marzullo for Rincon Consultants on July 22, 2021. One vegetation community was documented on the 20.22-acre site: WJT woodland. Within this community, a total of 36 WJTs were recorded within the Project area (Figure 5). Attributes recorded for each individual tree included: single tree or clonal, height/age class; number of branching terminal panicles and phenophase (Appendix A). Of the WJTs observed on site, 31 (86%) were characterized as single-growth trees while 5 (14%) were characterized as clonal (Table 1Summary of Proposed ImpactsTable 1).

Mature and immature trees were designated in the field and a 186-foot radius buffer around each impacted mature tree was applied to calculate total impact area on site (CDFW 2021, Table 1, Figure 6). Mature trees were defined as trees close to, or at, their maximum height and width (16-40 feet tall and 1-3 feet in diameter) with bare trunks and branches. Mature trees have the ability to reproduce and produce a seed bank. Seedlings/juvenile trees were defined as individuals not close to their maximum heights with leaves covering all or nearly all the trunks and branches.

Table 1 Summary of Proposed Impacts

Joshua Tree Type	Total Number	Single	Clonal	Proposed Impact Area (Acres)
Mature	18	16	2	14.68
Seedling/Juvenile	18	15	3	-
Total	36	31	5	14.68

Implementation of the proposed Project would result in permanent direct impacts to all WJTs on site, as the entire Project area is subject to clearing and grading. The loss of 18 mature trees, and their associated 186-foot radius seed bank buffer, would result in 14.68 acres of permanent impact to WJT woodland. A total of 18 juveniles/seedlings will be permanently impacted as well.

Figure 5 Tree Locations

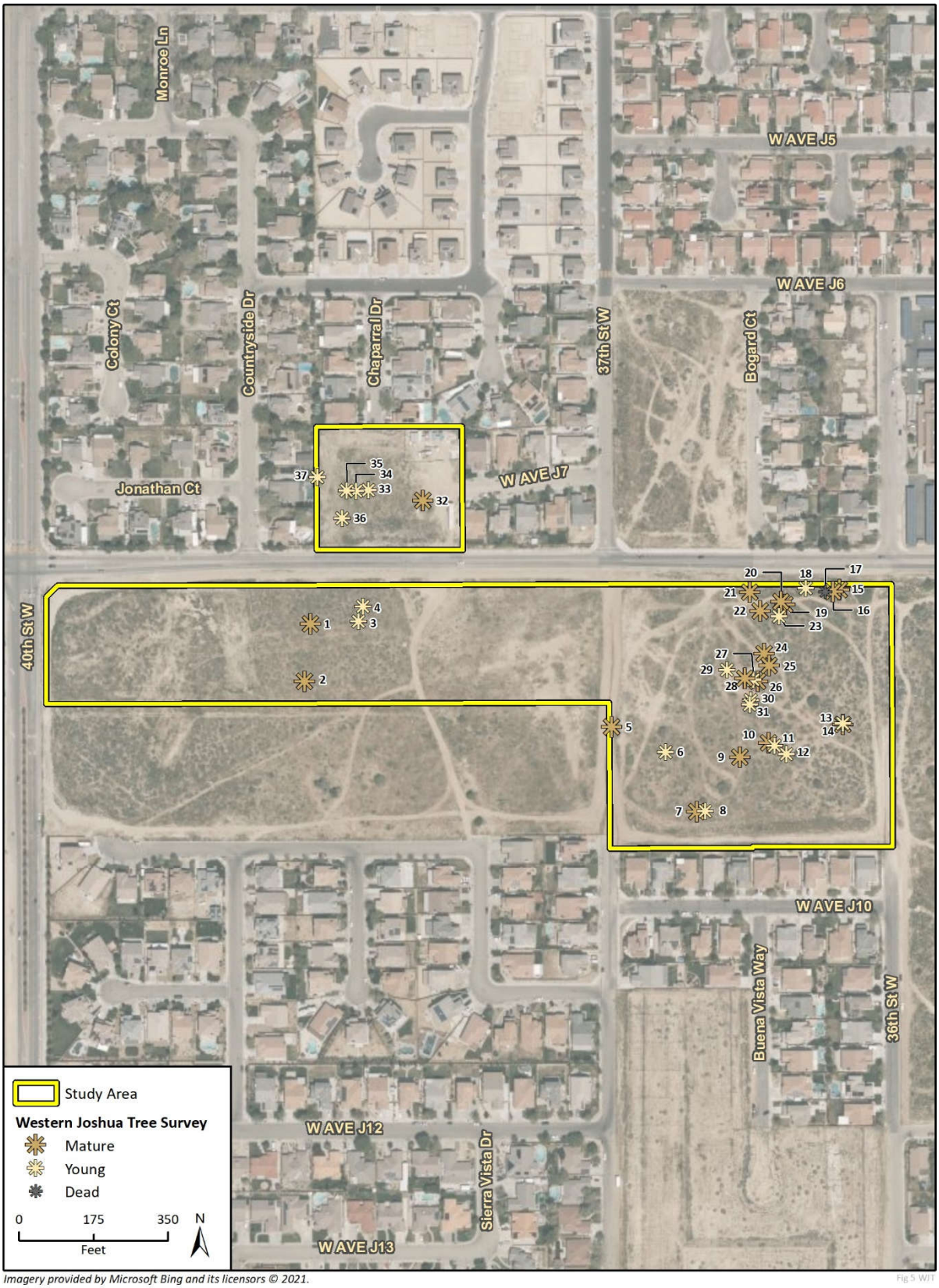
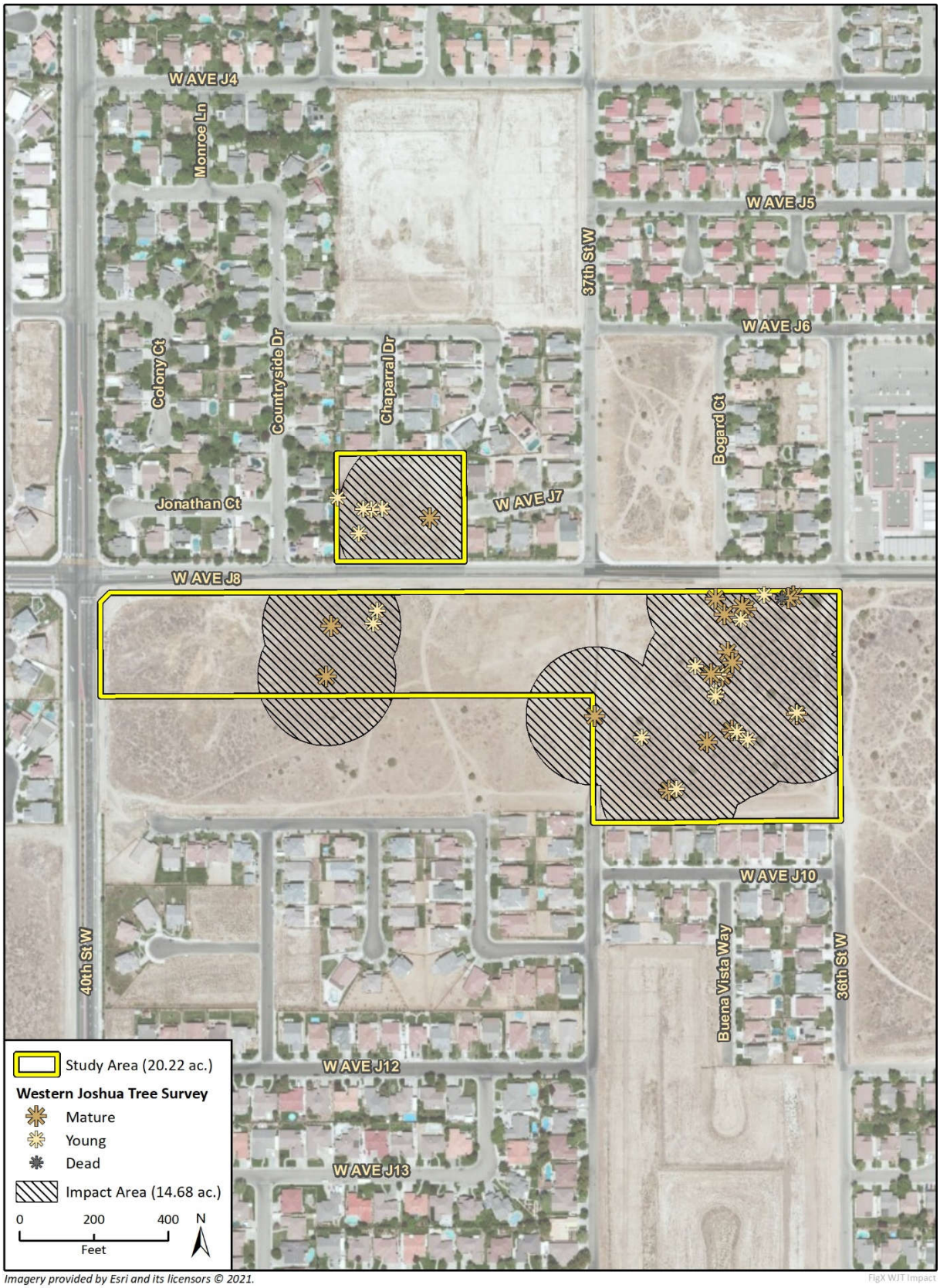


Figure 6 Impact Analysis Map



8 Analysis of Whether Issuance of Incidental Take Permit Would Jeopardize the Continued Existence of the Species

As described above, WJTs are slow-growing trees that occur in desert regions of the southwestern U.S. Populations occur between 660-2200 meters of elevation and strictly between 34° and 38° latitude (Rowlands 1978). As stated in Section 7.1, major threats to the species include climatic changes in the region as well as urban expansion and development. The WJTs found within the Project site are part of three population groups of different sizes: *Y. brevifolia* (species level), the Southern population (regional population), and the population within the Antelope Valley and city of Lancaster (local population). The loss of 36 WJTs on site will be analyzed through the lens of each of these populations below.

Species Level. At the species level, changing climatic factors, including increased maximum temperatures, decreased minimum temperatures and an overall decrease in precipitation in the ecoregion, will influence the geographic distribution of the species. As the climate continues to change, the range of WJTs is expected to shift to more northern areas or to higher elevations to satisfy their species climatic needs. The proposed Project site is highly disturbed and occurs at a relatively low elevation profile, providing low quality habitat for the individuals on site. Additionally, the habitat on site represents land that will most likely continue to decline in habitat quality as climate change intensifies.

The proposed Project is considered an urban development within an overall urban and disturbed metropolitan area. WJTs within urban and metropolitan areas comprise a small proportion of the overall WJT habitat (USFWS 2018). The Project site is surrounded by residential uses and is not connected to large areas of highly suitable habitat for WJTs. The permanent loss of 36 WJTs (mature, juvenile and seedling) from this location will not jeopardize the species, *Y. brevifolia*.

Regional Population. The Southern population spans from Ridgecrest to the little San Bernardino Mountains in Joshua Tree National Park. The population is characterized by a wide range of elevations and by overlap with the cities of Palmdale, Lancaster, Hesperia, Victorville and Yucca Valley. This regional population includes 1.2 million acres of area and, even when considering the stressors mentioned above, very high numbers of individuals are expected to survive and reproduce throughout the next century (USFWS 2018). The Project area (20.22 acres) represents 0.0017% of the total acreage of the Southern population.

The continued success of the Southern population is not dependent on WJTs within urban areas and as of 2018, only 2.2 percent of the range of *Yucca brevifolia* overlapped with urban areas (USFWS 2018). The proposed Project is surrounded by residential areas and vacant parcels that are subject to further urban developments. A loss of 14.68-acres of WJT woodland within a highly disturbed, low quality habitat area in the city of Lancaster, surrounded by current and future development, will not jeopardize the Southern population as a whole, or the smaller regional population of the Antelope Valley. Continued urban expansion within the Antelope Valley, especially in Lancaster and Palmdale, may lead to an increasingly fragmented Southern population, however. Mitigation efforts for this Project, and for all development within the region, will be focused on the acquisition of mitigation lands that are connected to adjacent WJT woodlands and/or high-quality desert habitat to minimize the effect of fragmentation in the regional population.

The permanent loss of 36 WJTs (mature, juvenile and seedling) from this location will not jeopardize the Southern population.

Local Population – WJTs within the City of Lancaster are part of a fragmented population within a metropolitan area. The Project site is surrounded by current residential development and all areas not currently developed, are zoned to be developed in the future. The local WJT population within the Antelope Valley is not heavily located in urban areas, as stated previously, and development in the metropolitan areas within the Antelope Valley will have a limited impact on the health of the overall local population, especially with continued mitigation and restoration in surrounding areas.

The majority of development within Lancaster is relatively low-density residential development and this style of urban expansion will not completely exhaust the resource needs to maintain local populations with proper mitigation and preservation practices. Due to recent implementation of regional and state legislation in regard to WJTs, USFWS (2018) predicts 21.7 percent of habitat loss within urban developments will support WJTs but at lower densities. Of the 36 WJTs located within the Project site, only 18 (50%) are mature, meaning the genetic stock on site is limited in size when comparing to the areas surrounding the city of Lancaster.

Although the implementation of this proposed Project will permanently impact the trees on site, the low-density trend in local development and the enforcement of state regulations protecting and preserving local WJTs will help offset larger single family development projects. Additionally, the lack of current and future quality habitat found within the Project site and the lack of connectivity to other Joshua tree woodlands indicates the Project site is a population sink and the removals will not jeopardize the local population within Lancaster and the Antelope Valley, as a whole.

Mitigation efforts will focus on the acquisition of lands within the regional and/or local areas to provide preservation and stewardship of highly suitable and geographically connected land areas that can contain WJT woodlands of greater value than found on the Project site.

The permanent loss of 36 WJTs (mature, juvenile and seedling) from this location will not jeopardize the local population.

9 Proposed Measures to Minimize and Fully Mitigate the Impacts of the Proposed Taking

The applicant intends to mitigate for the permanent loss of 14.68 acres of impacted WJT habitat with the acquisition of off-site Habitat Management (HM) lands at a ratio of 3:1. To meet this requirement, the applicant shall either purchase 44.04 acres of Covered Species credits from a CDFW-approved conservation bank or shall provide for both the permanent protection and management of 44.04 acres of HM lands. Permanent protection and funding for perpetual management of compensatory habitat will be complete before starting Covered Activities, or within 18 months of the start of Covered Activities if securities in the form of an irrevocable letter of credit or another form of security approved by CDFWs Office of the General Counsel is provided.

HM land selection will occur within the known WJT range in the Mojave Desert and will focus primarily on habitat suitability for WJTs but will also take into consideration the connectivity to quality desert habitat in adjacent areas. Ideal characteristics for potential HM land(s) include:

- Located within known WJT range in the Mojave Desert
- WJT individuals currently located on site, with an emphasis on single growth trees over clonal trees
- High quality desert habitat within the site; providing habitat and growth potential for not only WJTs but for a multitude of desert vegetation and wildlife species
- Connectivity to adjacent desert habitat (within WJT range, primary desert scrub habitat, critical habitat for sensitive species, etc.)
- Located in areas of low current development
- Located in areas of low future development
- Large enough in size to mitigate for the entire proposed Project

Land(s) found with the characteristics mentioned above will aid in the protection of WJTs at the species, regional and local population level, providing land and habitat that will be managed and conserved into perpetuity. Proper stewardship and management of mitigation habitat that is connected to areas of low development will allow WJTs to grow and spread organically throughout their natural range.

As mentioned in Section 6.1., the Project site is located at between 720-725 meters, which is considered a low-elevation area within WJT range. Low-elevation habitat areas within the WJT range (<980 meters) are often dominated by creosote bush (*Larrea tridentata*), saltbush (*Atriplex spinifera*) and other desert scrub species. However, WJTs are not restricted to any one scrub community and are known to be found in a wide variety of desert plant alliances (Rowlands 1978). The most important criterion when selecting HM land, will be an active WJT population on site. Along with WJT individuals on site, the applicant will focus on parcels that reflect the native plant species found within the Project site and other native desert plant species that are known to successfully cohabitate with WJTs, including juniper trees (*Juniperus californica*).

Approximately 78% of the current distribution of WJTs is owned by federal or state agencies (USFWS 2018), which limits options for quality WJT habitat as mitigation. If conservation bank credits are

unavailable, the applicant plans on utilizing private landowners to purchase mitigation lands that have the desirable habitat and acreage required for proper mitigation. The applicant will evaluate potential HM parcels both within Los Angeles County and Kern County that are within known WJT range.

Although parcels within Kern County may be slightly farther away from the Project site, they provide habitat at slightly higher elevations which provide more resilient habitat to an intensifying climate regime for WJTs. As maximum temperatures increase and precipitation levels continue to decrease, the southern portions of WJT range are hypothesized to slowly creep north (USFWS 2018), which could lead to an increased population within the southeast areas of Kern County and Mojave Basin. Targeting these areas in Kern is ideal for finding lands that not only fit the ideal listed mitigation characteristics but provide quality desert habitat for WJTs and other desert species to expand in to as low-elevation areas continue to become hotter and drier.

Along with land acquisition, proposed measures listed below are intended to avoid, minimize, and fully mitigate impacts to covered species to the maximum extent practicable.

Mitigation Measure (MM)-1. The applicant will designate Authorized Biologist(s) and Biological Monitor(s) that are responsible for monitoring Project activities to help minimize or avoid take of individual WJTs and their associated habitat. These individuals will be knowledge and experience in the biology of WJTs and their associated habitat.

MM-2. Prior to the start of construction-related activities, protective fencing will be installed around habitat clearly defining the limits of work within the Project site.

MM-3. CDFW staff will be granted access to the Project and mitigation lands to ensure compliance and effectiveness of mitigation.

MM-4. The mitigation parcel(s) acquired will be approved by CDFW and managed and protected from future development in perpetuity. After the acquisition of approved HM land, the applicant will establish a conservation easement with CDFW established as a beneficiary, appoint an interim and/or long-term land manager, and draft a long-term management plan, to be approved by CDFW. An endowment fund will be calculated by conducting a Property Analysis Record (PAR) to ensure the long-term management of the HM land acquired.

MM-5. The applicant will provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval) (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing, if warranted; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage.

MM-6. The applicant will provide for the interim management of the HM lands. The applicant shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management. Applicant shall either (1) provide a security to CDFW for the minimum of three years of interim management that the land owner, applicant, or land manager agrees to

manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.

COST ESTIMATES

- Land acquisition costs for HM lands are estimated at $8,000/acre, and at 44.04 acres, making the estimated cost of acquisition **$352,320**.
- Start-up costs for HM lands, including initial site protection and enhancement costs are estimated at $1,000/acre for 44.04 acres: **$44,040**.
- Interim management period funding is estimated at $1000/acre for 44.04 acres: **$44,040**
- Long-term management funding is estimated at $2,000/acre for 44.04 acres: **$88,080**
- Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW is estimated at **$50,000**.

10 A Description of the Funding Source for Implementation of the Minimization and Mitigation Measures

MAISON'S RANGE 199, as the Project applicant, will provide financial assurances in the form of an irrevocable letter of credit or another form of security approved by CDFWs Office of the General Counsel to guarantee that an adequate level of funding is available to implement all mitigation measures identified in the California Endangered Species Act Section 2081 ITP. Land acquisition costs for HM lands are estimated at $8,000/acre, and at 44.04 acres, making the estimated cost of acquisition $352,320. The applicant will ensure funding, or security, of this amount before Covered Activities begin. The security shall be held by CDFW or in a manner approved in advance in writing by CDFW. The security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the applicant has failed to comply with Conditions of Approval of the ITP. Once CDFW has conducted on-site inspections and received confirmation of HM land acquisition, the security will be released to MAISON'S RANGE 199. If WJT is delisted as a candidate under the CESA prior to the acquisition of HM lands, the security will be released to MAISON'S RANGE 199 and no further mitigation for impacts to WJT will be required. HM land acquisition will occur no later than 18 months from the start of Covered Activities.

11 Certification

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

Kevin Harbison, MAISON'S RANGE 199, LLC

September 8, 2021

Date

12 References

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Appendix A

Attributes of Western Joshua Trees within the Project Area

WJT ID	Height Class	Type	Age Class	Number of Branches	Phenophase	Notes
1	1-5meters	Single	mature	3	vegetative	
2	1-5meters	Clonal	mature	8	vegetative	4 trunks and 2 sprouts
3	1-5meters	Single	seedling/juvenile	2	vegetative	two sprouts at base
4	1-5meters	Single	seedling/juvenile	0	vegetative	2 trunks
5	1-5meters	Single	mature	0	vegetative	
6	1-5meters	Single	seedling/juvenile	0	vegetative	
7	1-5meters	Single	mature	2	vegetative	2 trunks
8	1-5meters	Single	seedling/juvenile	0	vegetative	
9	1-5meters	Single	mature	3	vegetative	
10	1-5meters	Single	mature	3	vegetative	2 sprouts within 2 meters
11	1-5meters	Single	seedling/juvenile	0	vegetative	
12	1-5meters	Single	seedling/juvenile	2	vegetative	2 sprouts at base
13	1-5meters	Single	mature	7	vegetative	2 trunks and 4 sprouts within 2 meters
14	<1meter	Single	seedling/juvenile	0	vegetative	
15	1-5meters	Single	mature	5	vegetative	2 trunks
16	1-5meters	Single	mature	2	vegetative	
17						DEAD
18	1-5meters	Single	seedling/juvenile	2	vegetative	
19	1-5meters	Single	mature	2	vegetative	
20	1-5meters	Single	mature	2	vegetative	
21	1-5meters	Clonal	mature	6	vegetative	4 trunks in line 4 meters long
22	1-5meters	Single	mature	2	vegetative	
23	1-5meters	Single	seedling/juvenile	2	vegetative	
24	1-5meters	Single	mature	3	vegetative	
25	1-5meters	Single	mature	2	vegetative	
26	1-5meters	Single	mature	6	vegetative	
27	1-5meters	Single	seedling/juvenile	2	vegetative	
28	1-5meters	Single	mature	4		
29	1-5meters	Single	seedling/juvenile	0	vegetative	
30	1-5meters	Single	seedling/juvenile	3	vegetative	

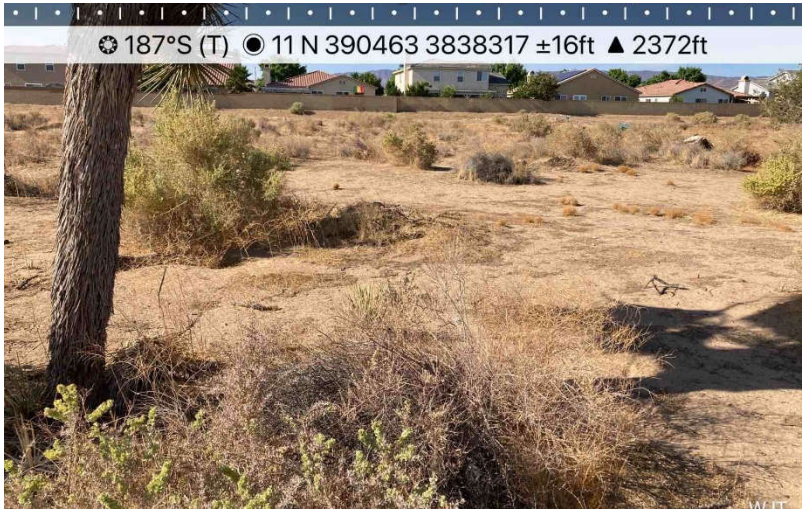
31	1-5meters	Single	seedling/juvenile	2	vegetative	
32	1-5meters	Single	mature	2	vegetative	
33	<1meter	Clonal	seedling/juvenile	0	vegetative	4 sprouts from. base of dead tree
34	1-5meters	Single	seedling/juvenile	2	vegetative	9 sprouts at base
35	1-5meters	Clonal	seedling/juvenile	2	vegetative	4 trunks and 7 sprouts at base
36	1-5meters	Single	seedling/juvenile	2	vegetative	
37	1-5meters	Clonal	seedling/juvenile	4	vegetative	5 trunks and 2 sprouts

Appendix B

Site Photographs

Photograph 1. View of site facing north

Photograph 2. View of site facing north; representative view of mature, single growth WJT



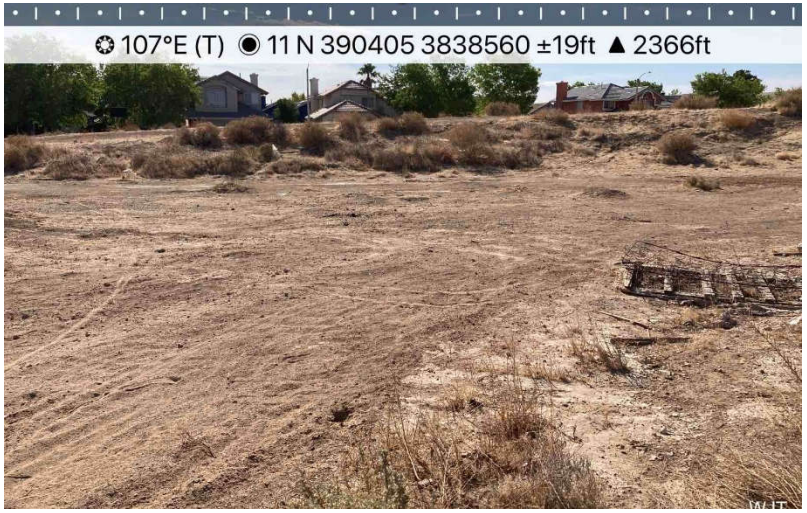
Photograph 3. View of site facing north; representative view of mature, single growth WJT on left, clonal growth WJT in middle right

Photograph 4. View of single growth mature trees, facing north.

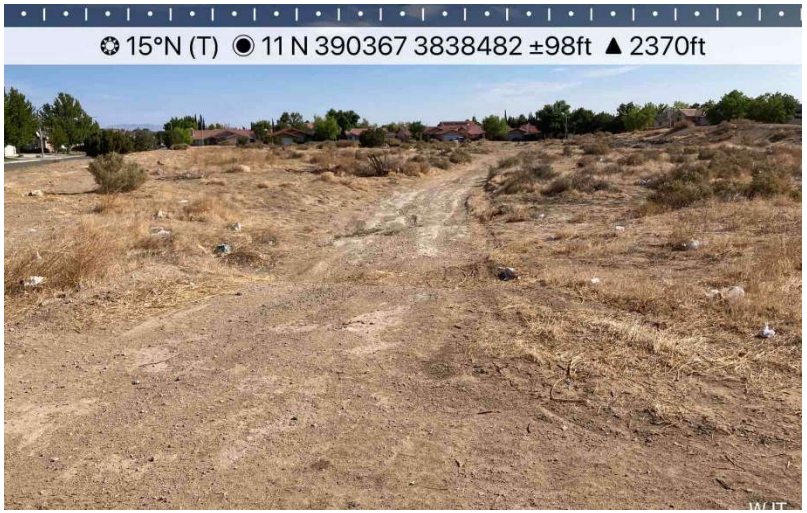
Photograph 5. View of site facing east.

Photograph 6. Representative view of juvenile WJT; facing north.

Photograph 7. View of site facing south.



Photograph 8. View of site facing south.



Photograph 9. View of site facing south; view of single growth and clonal growth WJTs

Photograph 10. View of site; facing north.

Photograph 11. View of site facing northwest.

Photograph 12. View of site facing south.

Photograph 13. View of site facing south; view of juvenile WJT on right.

Photograph 14. View of site; facing northeast

Photograph 15. View of site facing northeast.

Photograph 16. View of site facing west.

Photograph 17. View of site facing south; view of clonal growth mature WJT on right.

Photograph 18. View of site; facing south

Photograph 19. View of site facing southwest.

Photograph 20. View of site facing west.

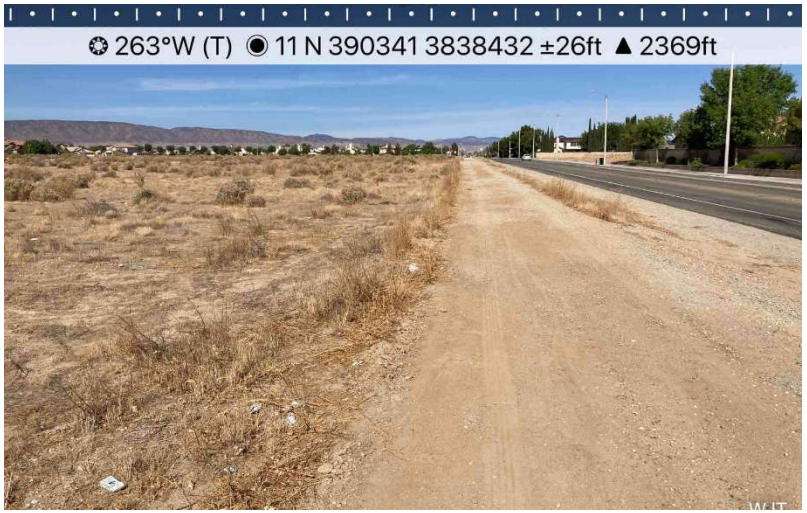
Photograph 21. View of site facing east.

Photograph 22. View of site; facing west

Photograph 23. View of site facing south.

Photograph 24. View of site facing southeast.

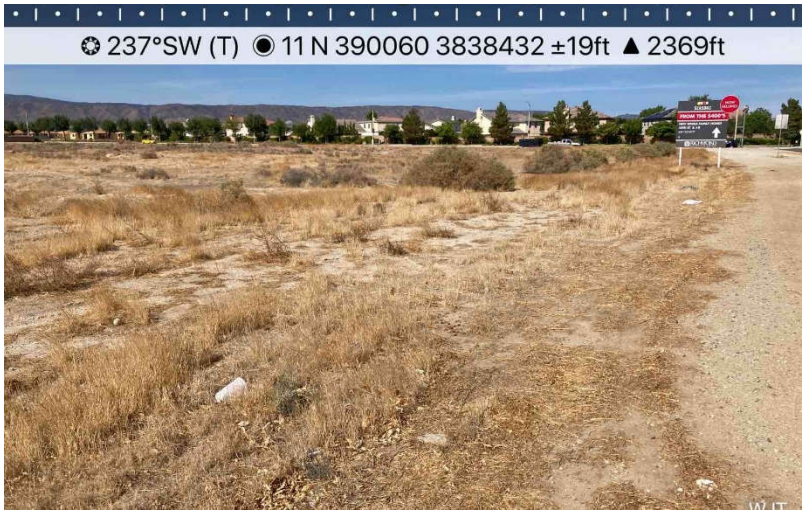
Photograph 25. View of site facing east.



Photograph 26. View of site; facing south.

Photograph 27. View of site facing northeast.

Photograph 28. View of site facing North.



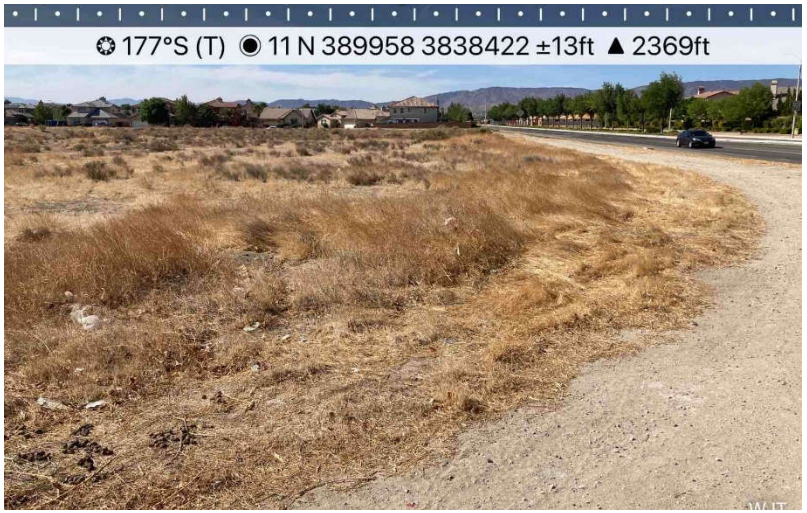
Photograph 29. View of site facing southeast

Photograph 30. View of site; facing southwest

Photograph 31. View of site facing east.

Photograph 32. View of site facing south.

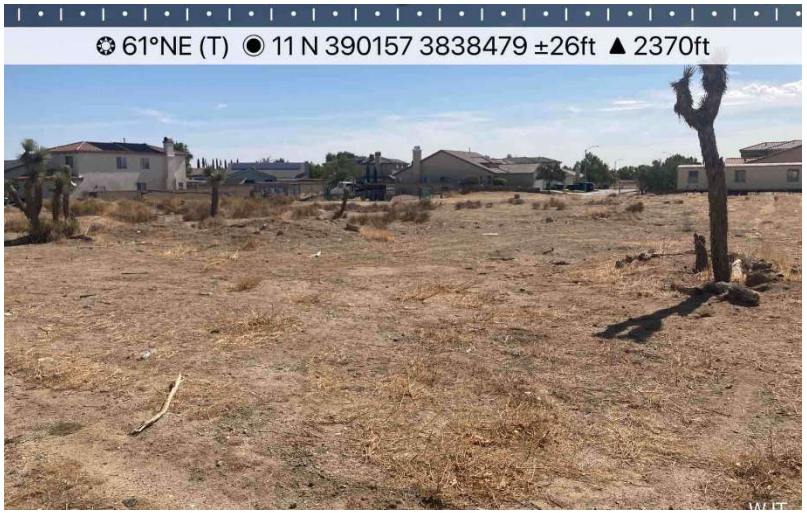
Photograph 33. View of site facing southeast



Photograph 34. View of site; facing southwest

Photograph 35. View of site facing east.

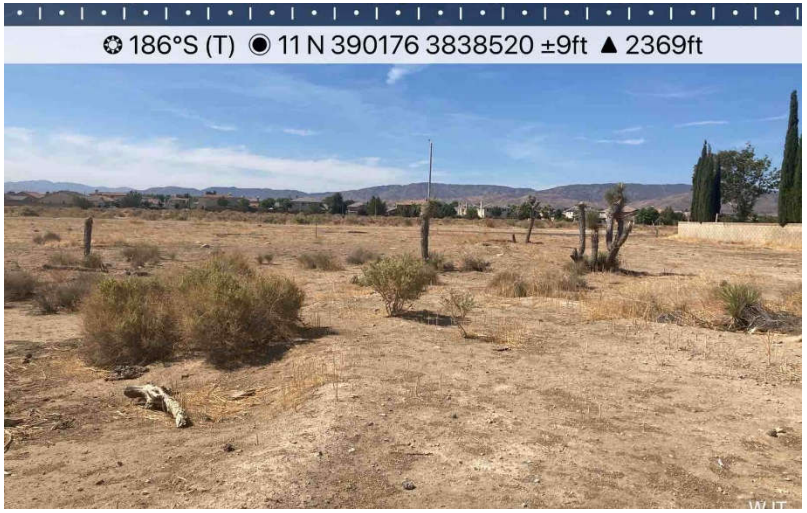
Photograph 36. View of site facing south.



Photograph 37. View of site facing southeast

Photograph 38. View of site; facing southwest

Photograph 39. View of site facing east.



Photograph 40. View of site facing south.

Photograph 41. View of roadside drainage; facing southeast

Photograph 42. View of the roadside drainage; facing southwest

Photograph 43. View of vegetation within the roadside drainage; facing east.

Photograph 44. View of roadside drainage; facing south.