Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

HAN 200008

WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS

PARADISE VALLEY RANCH
CENTER OF EXCELLENCE
RIVERSIDE COUNTY, CALIFORNIA
CUP 210005
HAN 200008
Lot Line Adjustment Plan # LLA210115

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March 1, 2022 (Revision 4)

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1.0 EXECUTIVE SUMMARY

This Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis (Analysis) provides the results of the required MSHCP assessments to determine if HAN 200008; the proposed Center of Excellence and Wildfire Conservancy project (Project), was consistent with the goals and objectives of the MSHCP. The subject property (Property and/or Site), which recently completed a Lot Line Adjustment (LLA), was within a MSHCP Section 6.3.2 *Additional Survey Needs and Procedures* (MSHCP Section 6.3.2) assessment area for Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) (LAPM). The Project also required a MSHCP Section 6.1.2 *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools* (MSHCP Section 6.1.2) assessment, and compliance with MSHCP Section 6.1.4 *Guidelines Pertaining to the Urban/Wildlands Interface* (MSHCP Section 6.1.4).

The Property was located in unincorporated southwest Riverside County, east of the City of Hemet, approximately 4.0 aerial miles east of State Street, at the terminus of Cactus Valley Road. The County of Riverside (County) conditionally approved and recorded the LLA involving three parcels on the Property on November 8, 2021. The final step for the LLA is for the three parcels to be assigned Assessor's Parcel Numbers (APN) by the Office of the County Recorder. One of the three parcels (47.75-acres) will be used for a Conditional Use Permit (CUP) that is required for the proposed Project. This legally recorded parcel will be referred to as "Parcel 3" herein to remain consistent with the legal description.

Parcel 3 was located in the southeastern portion of the San Jacinto Valley Area Plan (SJVAP) within the southeastern portion of Subunit 5 – Mica Butte (SU5). The western portion of Parcel 3 was situated within the southern portion of Cell Group J' and the eastern portion was within the southern portion of Cell Group L'. A Reserve Assembly Analysis determined that Cell Group J' exceeds the targeted Additional Reserve Land (ARL) goals, and that Cell Group L' has the land available to meet the targeted ARL goal without the inclusion of Parcel 3.

Four features were present within Parcel 3 that potentially meet the criteria of a MSHCP Section 6.1.2 Riparian/Riverine Area. The Project will avoid impacts to the four potential Riparian/Riverine Areas.

Parcel 3 was located within an assessment area for LAPM. Some undeveloped portions of Parcel 3 were determined to provide potentially suitable habitat for LAPM, and a 500-trap night focused survey was conducted from May 24 to May 29, 2021, to sample the potentially suitable habitat. Six individual LAPM were detected in areas determined to consist of Moderate habitat suitability for LAPM; therefore, the 11.66-acres of Moderate quality habitat was determined to have long-term conservation value for LAPM per the MSHCP. The Project will impact 0.75-acre of the long-term conservation value habitat which accounts for 6.4% of that habitat within Parcel 3. This is within the 10% impact threshold described in the MSHCP, and therefore, a Determination of Biologically Equivalent or Superior Preservation (DBESP) and mitigation are not required.

The Project within Parcel 3, with only 8.59-acres proposed for grading/new development (18% of Parcel 3), is consistent with the goals and objectives of the MSHCP.

2.0 INTRODUCTION

The purpose of this MSHCP Analysis was to summarize the biological data for the Project, and to document the Project's consistency with the goals and objectives of the MSHCP. According to the RCA's MSHCP Information Application (Regional Conservation Authority, 2021), the Project required a:

1. MSHCP LAPM assessment.

In addition, the Project required a MSHCP Section 6.1.2 assessment and compliance with MSHCP Section 6.1.4.

The Property was located in unincorporated southwest Riverside County, east of the City of Hemet, approximately 4.0 aerial miles east of State Street, at the terminus of Cactus Valley Road. The Site address was 43700 Cactus Valley Road. The County conditionally approved and recorded the LLA involving three parcels on the Property on November 8, 2021 (Assessor Parcel Numbers [APN] 569-020-024, -025, and -026). The final step for the LLA is for the three parcels to be assigned Assessor's Parcel Numbers (APN) by the Office of the County Recorder. One of the three parcels (47.75-acres) will be used for a Conditional Use Permit (CUP) that is required for the proposed Project. This legally recorded parcel will be referred to as "Parcel 3" herein to remain consistent with the legal description which is included as Appendix A of this document. *Figure 1 - Regional Map* (Page 3) and *Figure 2 - Vicinity Map* (Page 4) depict the location of the Property.

Parcel 3 was geographically located in Township 6 South, Range 1 East, Section 8 of the Hemet 7.5 Minute United States Geological Survey (USGS) California Quadrangle according to *Figure 3 - USGS Topographic Map* (Page 5). The Universal Transverse Mercator (UTM) coordinates of the center of Parcel 3 was Zone 11S; 509,091-meters East; 3,725,328-meters North; North American Datum 1983 (NAD83).

2.1 Project Area

The Project was located within Parcel 3 and consisted of new grading for temporary trailers, associated parking, and associated water quality management plan (WQMP) basin (Phase 1B; 3.11-acres); grading for new decomposed granite (DG) driveway on existing roads, new Lodge/Office Administration Building and associated WQMP basin (Phase 2; 0.83-acre); and existing circulation roads. A portion of the existing roads (1.04-acres) were already paved and no new grading will be associated with this area. The existing dirt roads that are part of the CUP circulation will be surfaced with DG and will require widening in some locations to meet the County's 20-foot and/or 24-foot required width. The grading associated with those areas will be completed during the precise grading plan, and therefore, those exact areas are unknown at this time. For the purpose of this Analysis, that road alignment is depicted at the required widths with a five-foot buffer on each side of the road for associated grading. It is important to note that the area will ultimately be less than what is depicted herein per the Project's engineer 4M Engineering and Development (4M) (3.17-acres) since the dirt roads already exist. These areas have been reduced in three locations where these areas intersect with potential MSHCP Section 6.1.2 Riparian/Riverine Area bed and bank resources to avoid impacts to said resources. The Project will also consist of both ground mounted and rooftop solar to aid in powering the existing and new facilities. The proposed ground mounted solar areas are depicted and totaled 1.27-acres), and new/expanded septic facilities (0.20-acre) to accommodate the needs of the Project.

All Project development acreages throughout this document were based on the Project's AutoCAD file prepared by 4M, which was converted for ArcGIS use by Searl Biological Services (SBS). *Figure 4 – Project Area* (Page 6) depicts the areas described above. Parcel 3 totaled 47.75-acres[1] . The total area proposed for the Project was 9.62-acres. The total area for grading/new development minus the existing

[1] All acreages throughout this document were based on an AutoCAD file of the legal surveyed property boundary from 4M that was converted by SBS using ESRI ArcMap (GIS). Acreages may not be exact and may not match other sources (i.e., county APNs) due to the conversion process and the fact that these acreages are based on a legal survey.

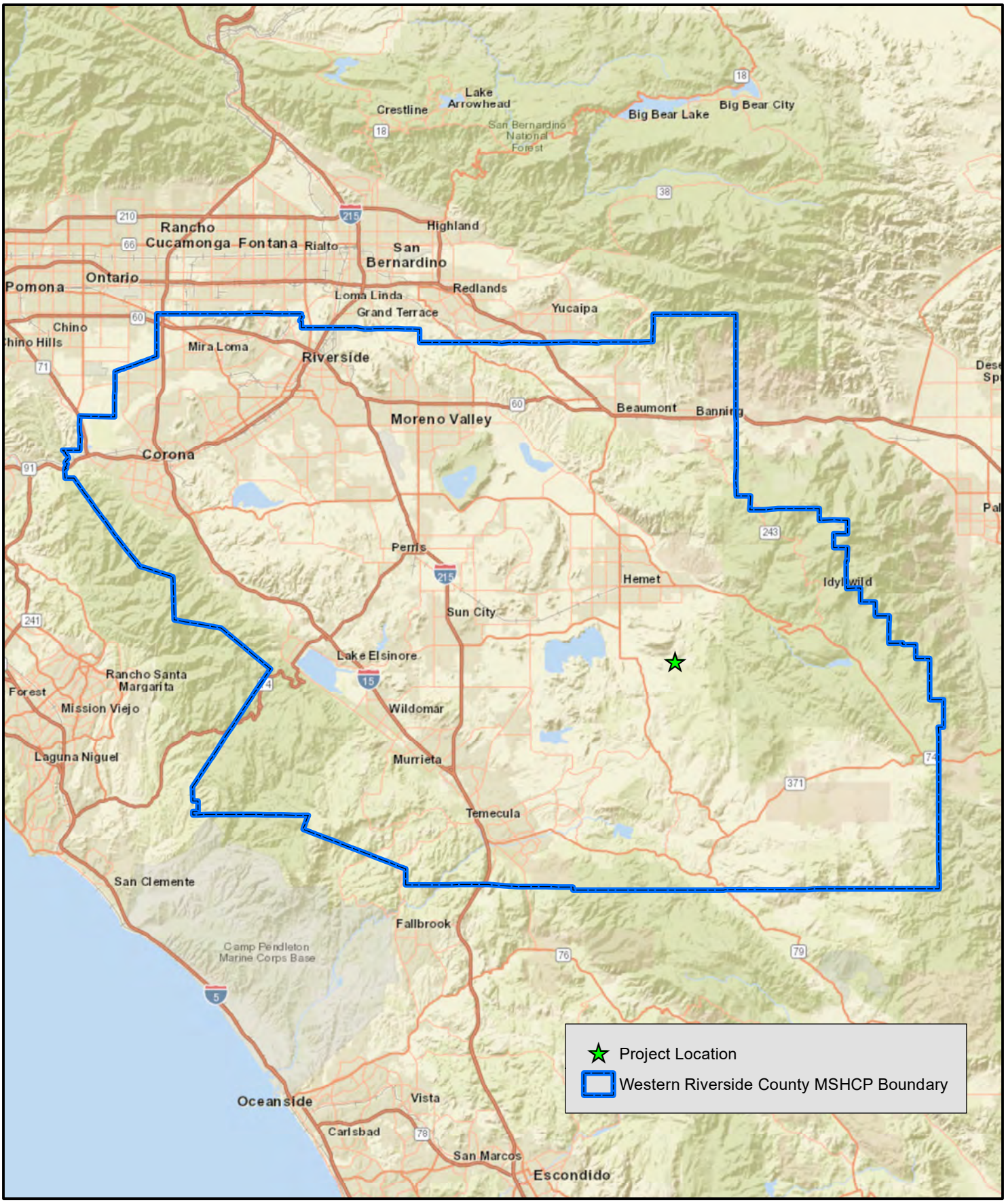

FIGURE 1
Regional Map

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 UTM Zone 11
SOURCE: ESRI World Street Map, 4M

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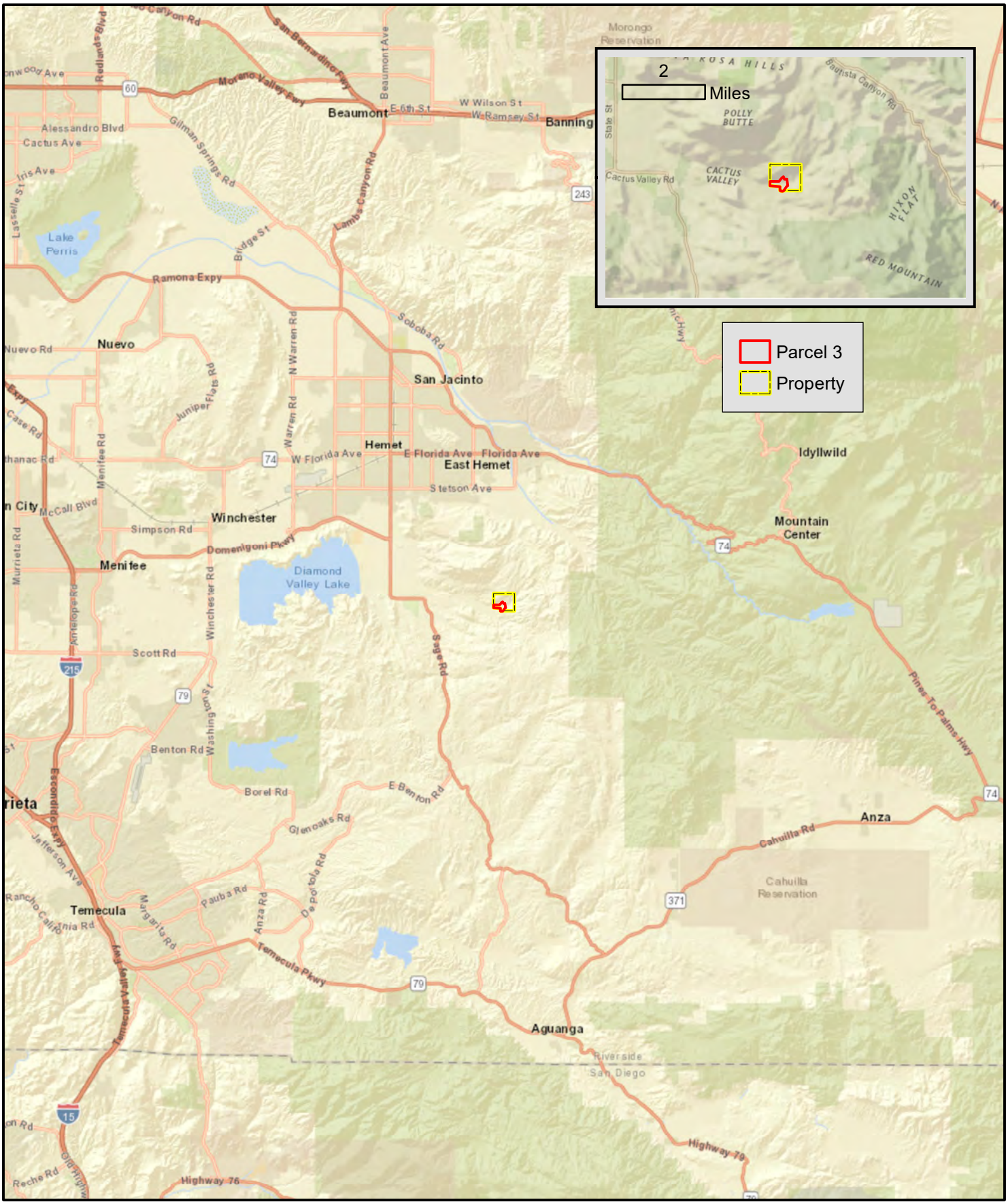

N

0 3.75 7.5 15 Miles

1:300,000

FIGURE 2
Vicinity Map

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California VI FIPS 0406 (Feet)
SOURCE: ESRI World Street Map, National Geographic World Map, 4M

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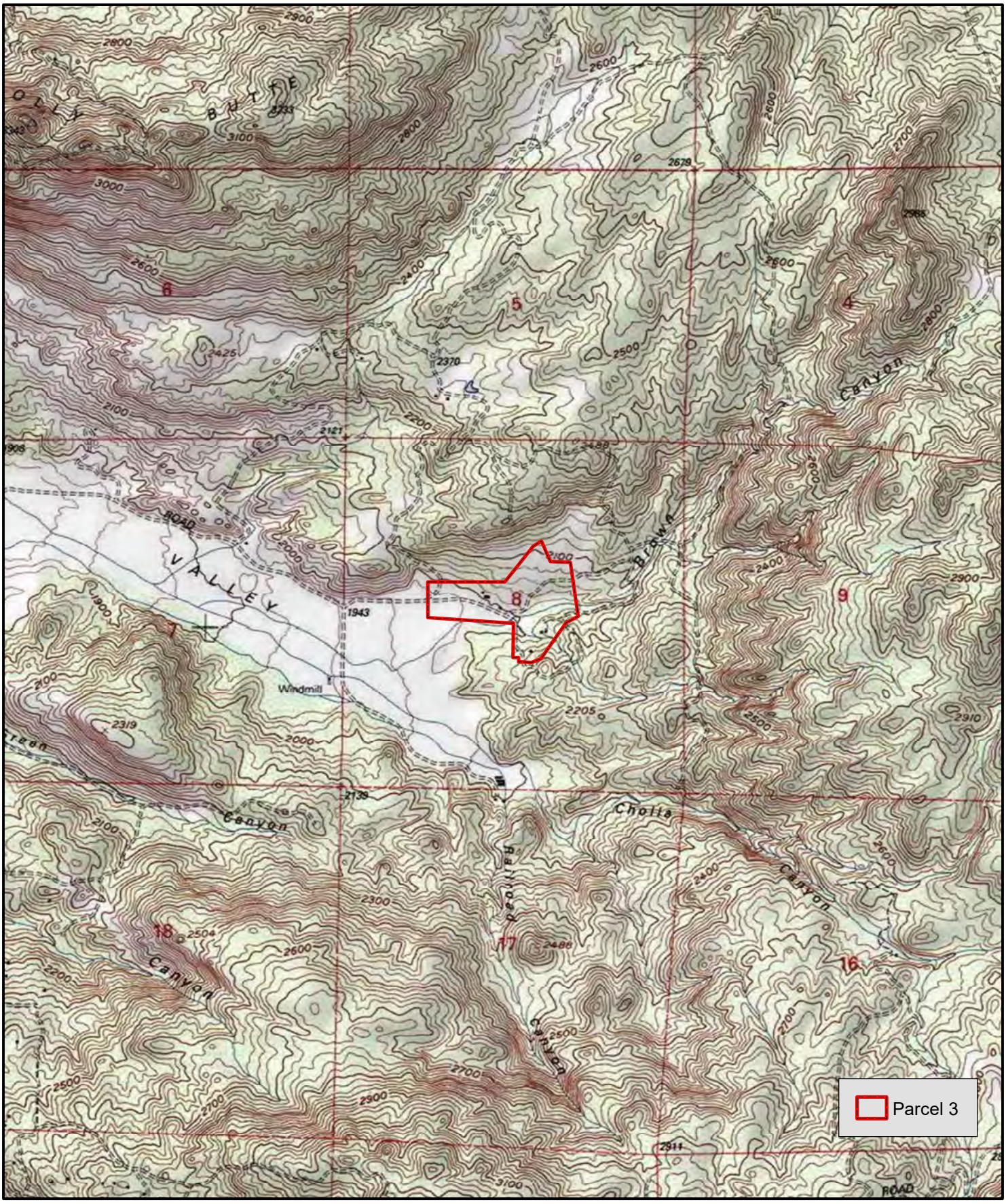

FIGURE 3
USGS Topographic Map

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California VI FIPS 0406 (Feet)
SOURCE: ESRI USA Topo Maps, 4M

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FIGURE 4
Project Area

DATE: February 24, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M

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paved roads were 8.59-acres. The Project site plan and grading plan are presented in the attached Appendix B.

2.1.1 Fuel Modification Zone

The fuel modification zone for the Project ranges up to 150-feet from each of the existing and proposed structures that are part of the CUP. Those areas within the fuel modification zone will be managed in a manner consistent with current practices as specified in the *Fire Protection and Management Plan Paradise Valley Ranch* (Rahn Conservation Consulting, 2021) when describing Vegetation Management and Landscaping. Currently, fuel modification through mowing and trimming of vegetation occurs approximately 300 to 1,500-feet north and east of Parcel 3 on the greater Property area.

The entire area of Parcel 3 has been disturbed and maintained to some degree over the past 50-plus years. Potential wildfire fuels load, specifically grasses, forbs, and shrubs, are routinely mowed and cleared with weed whackers/string trimmers throughout the entirety of Parcel 3 and much of the greater Property area. The County requires fuel modification plans as part of the entitlement process for the CUP. Though this is required, the management within the fuel modification zone will be consistent with the historic and current practices. No new impacts or fuel modification practices will occur because of the CUP; therefore, those areas were not considered "permanent impacts" in this Analysis. It is important to note that no disking or other means of ground disturbance is utilized to clear vegetation.

As described above, the County recently approved LLA210115 involving three parcels on the Property. Parcel 3 will be used for the Project CUP 210005. This parcel is referred to as the "Parcel 3" and is utilized for this analysis herein. *Figure 5 – LLA* (Page 8) depicts the LLA parcel alignments.

The Property is owned and operated by PVR Management, LLC (Applicant/Owner). The Site is currently utilized as a camp retreat (though currently suspended due to the Covid-19 Pandemic) and contains the existing onsite amenities described below, which have been in use for over 40 years. The existing facilities were all located within Parcel 3.

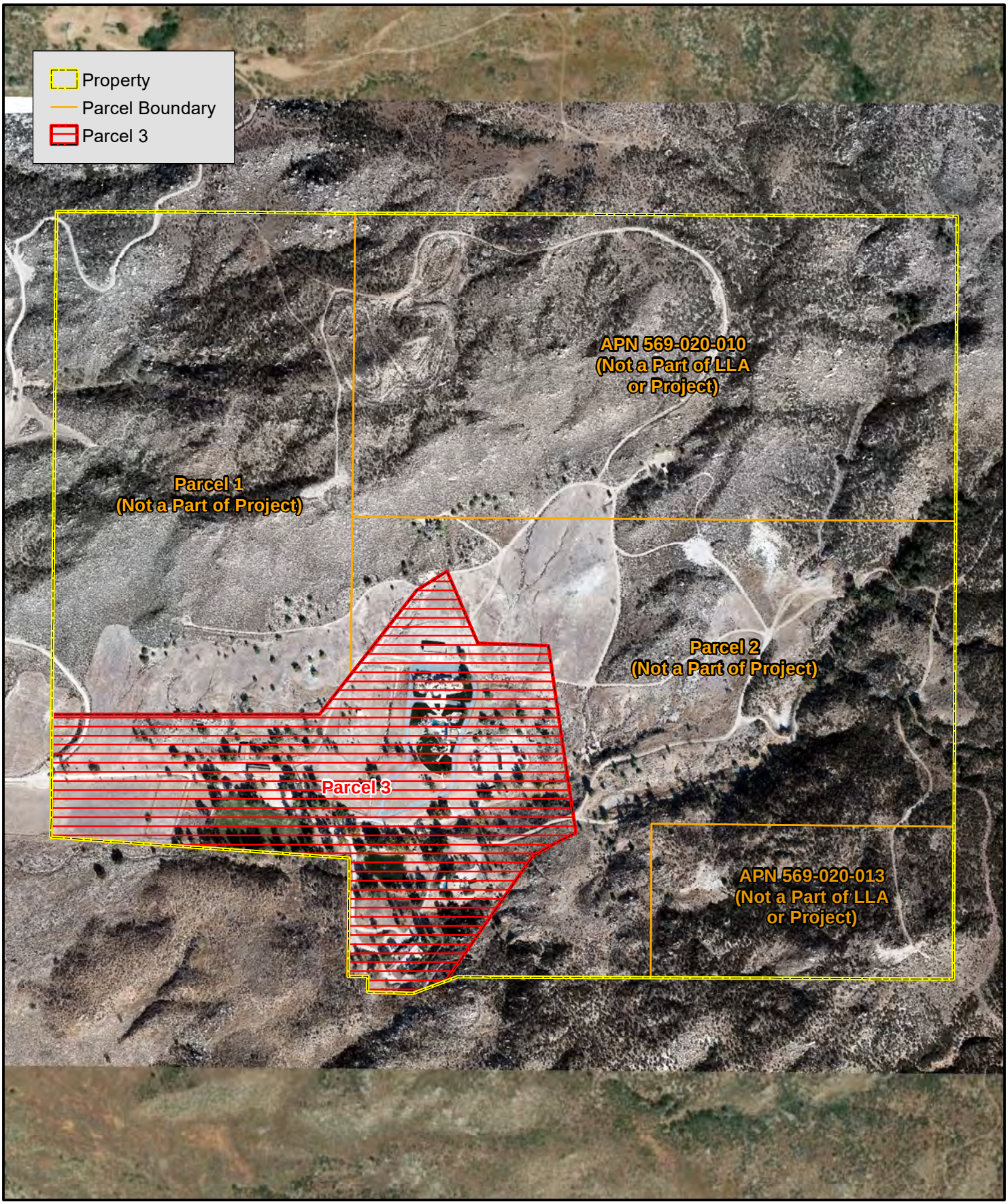
The remaining areas of the Property, which are not a part of this Project, consisted of natural open space, dirt roads/trails, and mowed areas to protect the existing facilities from wildfires.

2.2 Project Description

2.2.1 Center of Excellence and Wildfire Conservancy

The Project CUP proposes the remodeling of five (5) existing structures and potential future development of two (2) new structures into the west coast "Center of Excellence" for firefighter drug and alcohol addiction recovery and a research/training site for the Wildfire Conservancy.

The proposed Center of Excellence will be modeled off the first and only existing facility in the United States (located in Marlboro, MD, approximately 30 miles southeast of Washington D.C.) dedicated solely to the treatment of firefighters. Similarly, this new west coast facility will provide behavioral health treatment, specializing in drug and alcohol addiction recovery while treating any underlying traumatic causes of that behavior. The facility will be fully licensed by the State of California with professional staff trained specifically for these types of behavioral health challenges in this profession and allowing the firefighters to receive the help they need in taking steps toward recovery and wellness. Severe cases are required by the State license to be transferred to hospital care and the staff is highly trained in recognizing such conditions. It is primarily a safe haven for firefighters to talk with other peers who have faced or overcome similar challenges, designed in partnership with the International Association of Fire Fighters



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N

0 200 400 800 1,200 1,600 Feet

1 inch = 575 feet

FIGURE 5
LLA

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M

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(IAFF) and Advanced Recovery Systems (ARS), providing this unique and focused continuum of care for firefighters.

In addition, the property will be used by the Wildfire Conservancy, a California non-profit research foundation established in 2019. The Conservancy's mission focuses on three key areas: improving firefighter health and safety (including behavioral health), improving attack effectiveness, and advancing community resilience in the wildland urban interface. The Paradise Valley Ranch will become the field station for the Wildfire Conservancy, conducting research and training programs in partnership with the California State University system, CAL FIRE, CAL FIRE Local 2881, and the IAFF (among others). Please see a detailed description of the Wildfire Conservancy attached in Appendix B.

The Project's goal is to convert all existing facilities into use by the Center of Excellence and the Wildfire Conservancy. Five of these facilities are proposed for remodeling and two are proposed for extensive remodeling and/or a partial or full rebuild. All upgrades, remodeling, or reconstruction of existing facilities will use the same or similar footprint and size, (with the exception of the Ponderosa Lodge which has a 2,530 SF increase in size), built to meet the Center of Excellence's future treatment facility needs. One additional facility will be developed on the property to serve as visitor check-in, intake, exams, staff offices, and meeting rooms. A second additional facility will be developed for recovery, lodging, and treatment.

No substantial remodeling or new construction related to the Sports Courts, Hacienda House, Guest Cottage, or Barns is proposed. *Table 1 – Facility Components* (below) details the existing and proposed facilities described.

Table 1 – Facility Components

SITE PLAN ID (Phase)	FACILITY	YEAR BUILT	AREA (Square Feet)	CURRENT USE	PROPOSED MODIFICATION/USE
Facility 1 Phase 1A	Silverado House	1998	8,467	7-bedroom facility	Drug/alcohol treatment facility with up to 32 beds in 2 dwelling units (assuming R-4 occupancy with firewall between units) Remodel only, same footprint, enclose existing carport
Facility 2 Phase 1A	Garage	2004	2,400	Garage and storage	Commercial kitchen and dining Remodel only, same footprint
Facility 3 Pool House Phase 1A	Pool House/Fitness	2002	945	Pool house	Exercise facility Remodel only, same footprint
Facility 4 Phase 1B	Chaparral Lodge	1968	2,160	Bunk house and camp facility with 4-bedroom, kitchen, pool, 2 full baths and 2 half baths	Residential treatment facility with no more than 8 beds in 4 bedrooms, warming kitchen, dining room, living room, 1 office Extensive remodel, same footprint

SITE PLAN ID (Phase)	FACILITY	YEAR BUILT	AREA (Square Feet)	CURRENT USE	PROPOSED MODIFICATION/USE
Facility 5 Phase 1B	Ponderosa Lodge	1957	11,849	Bunk house and camp facility with conference hall	Residential treatment facility with up to 40 beds in 10 bedrooms, offices, lounges, and recreation room Extensive remodel, converted garages (current conference room) would need to be demolished and replaced with proposed additions
Facility 6 Phase 2	New Lodge	Proposed	16,777	To be built	Drug/alcohol treatment facility with up to 32 beds each with kitchen, dining, and lounge spaces (two-stories)
Facility 7 Phase 2	New Offices/Intake/ Administrative[2]	Proposed	16,777	To be built	The Project will require the installation of eight (8) temporary office trailers, to be removed after the development of a two-story, permanent structure in the same location, to be used for visitor check-in, intake, exams, staff offices, and meeting rooms
Sports Courts	Sports Courts	2002	27,100	Outdoor recreation	Outdoor recreation No change
Guest Cottage	Guest Cottage	2002	838	Guest Cottage/Residential unit with full kitchen and 1 bedroom and 1 bath	Existing Visitor residence
Hacienda House	Hacienda House	1957	2,000	Manager's residence and camp offices	Wildfire Conservancy
Barns	Barns/Potential Offices	1956	6,910	Storage, stables, living Unit	Existing – intended for use as storage/stables and equestrian therapy

Existing on-site amenities, which have been in use for over 40 years include: 3 pools, 2 man-made lakes, pool house, gym, rock-climbing wall, basketball/tennis court, batting cages, barn and horse stables, and hiking trails/roads. There will be administrative offices, conference/meeting rooms, and a possible caretaker's residence. All new facilities will be constructed to meet or exceed current California Fire and Building Code requirements. The Project will serve as a demonstration for new fire suppression techniques and building construction/design. As shown in *Table 2 – Proposed Private Solar Facilities* (Page 11) the Project will also include small scale, private solar panels for individual building use as part of the proposed Phase I and 2 development (i.e., the Center of Excellence and the Wildfire Conservancy).

[2] Temporary office trailers part of Phase 1B

Table 2 – Proposed Private Solar Facilities

ONSITE LOCATION	ESTIMATED SQUARE FEET
Private Solar 1	13,084
Private Solar 2	8,700
Private Solar 3	33,452
TOTAL	**55,236**

Phasing

All the proposed treatment and research facilities will be constructed in two phases although the first phase will be divided into two sub-phases (Phases 1A and 1B). The following briefly describes the specific facilities that are included in each phase based as summarized in Table 1:

Phase 1A. This phase includes remodeling the Silverado House, Garage, Pool House, and Fitness Center but they will all retain their existing building footprints (total 11,812 sf).

Phase 1B. This phase includes extensive remodeling of the Chaparral and Ponderosa Lodges, but they will still retain their existing footprints (total 14,009 sf with the exception of the Ponderosa Lodge which has a 2,530-sf increase in size). This phase also includes the installation of eight (8) temporary trailers for office and administration functions until a permanent building can be constructed in Phase 2.

Phase 2. This phase includes construction of a new Lodge and new Office/Administration Buildings (total 33,554 sf). Once the new buildings have been completed and occupied, the eight temporary trailers installed in Phase 1B will be removed.

Minimal or No Change. The Project does not entail any substantial remodeling or new construction related to the Sports Courts, Hacienda House, Guest Cottages, or Barns.

Staffing/Occupancy

Project operations are proposed to be completed in two phases; 80 beds will be available in Phase 1 and an additional 32 beds added in Phase 2, for a total of 112 beds upon completion of Phase 2 (typical, anticipated occupancy will be 80% – 90%.). As shown in *Table 3 – Center of Excellence Proposed Staffing* (below), it is anticipated that there will be up to approximately 64 full-time employees; the table below illustrates the breakdown of employees per shift, days of the week, and per Project phase. The Wildfire Conservancy will require an additional 2 to 3 employees, for an overall total of 67 employees. There will be no seasonal employees. The Project will be operational 7 days per week, 24 hours a day, 365 days a year.

Table 3 – Center of Excellence Proposed Staffing

SHIFT	PHASE 1A EMPLOYEES	PHASE 1B ADDITIONAL EMPLOYEES	PHASE 2 ADDITIONAL EMPLOYEES	TOTAL EMPLOYEES
Mon – Fri – Day Shift	36	+17	+11	64
Mon – Fri – Swing Shift	13	+6	+2	21
Mon – Fri – Night Shift	5	+1	+2	8
Sat / Sun – Day Shift	15	+12	+5	32
Sat / Sun – Swing Shift	11	+6	+1	18
Sat / Sun – Night Shift	5	+1	+2	8

Circulation/Access/Parking

The Project will take access off Cactus Valley Road from the west which takes access from Route R3 (Cactus Valley Road to the west and Sage Road to the south). Onsite circulation will be modified to accommodate required Fire Department Access.

Employee parking calculations are based upon one (1) parking stall per employee for peak shift. Due to the remoteness of the site, employee carpooling will be highly encouraged. Client parking calculations are based upon 1 parking stall per 4 beds. The Wildfire Conservancy will have 2-3 employees 2-4 Days per week and training events of less than 25 participants will be held once a month on weekends when the Treatment Facility parking requirements are the lowest; no additional parking is required for training events.

Due to the existing site topography, providing Americans with Disabilities Act (ADA) paths of travel between buildings and other uses on the site is not practical. In order to comply with ADA requirements, the Center of Excellence will provide ADA accessible van and golf cart shuttle service from parking areas to each building and use on the site.

2.2.2 Existing/Proposed General Plan and Zoning Designations

The Project site is currently zoned Rural Residential (R-R). The current General Plan Land Use Designations are Rural Residential and Rural Mountainous. Surrounding zoning and land use to the north and west are Rural Residential and Rural Mountainous, respectively. Surrounding zoning and land use to the east are Rural Residential and Open Space Rural, respectively. Surrounding zoning and land use to the south are Rural Residential and Conservation Habitat, respectively. The zoning and land use designations of the site and surrounding area are delineated in *Table 4 – Land Use and Zoning Designations* (below). The site plan of the proposed facilities is consistent with the existing onsite zoning and General Plan land use designations. The proposed uses are also consistent and compatible with surrounding zoning and land use designations.

Table 4 – Land Use and Zoning Designations

LOCATION/ DIRECTION	GENERAL PLAN LAND USE DESIGNATION	COUNTY ZONING
Project Site	Rural Residential (R-R) Rural Mountainous (R-M)	Rural Residential (R-R)
North	Rural Mountainous (R-M)	Rural Residential (R-R)
South	Conservation Habitat	Rural Residential (R-R)
East	Open Space Rural	Rural Residential (R-R)
West	Rural Mountainous (R-M)	Rural Residential (R-R)

For the treatment facility (i.e., Center of Excellence), either the Residential Facility or Residential Care Facility would be the closest permitted uses allowed in the current R-R zone. The use being permitted would either be classified as a Residential Facility or Residential Care Facility as defined by the zoning. The R-R zoning would also allow the wildfire research facility (i.e., Wildfire Conservancy) to be permitted since it would be similar in character and intensity to other uses permitted in the zone.

Therefore, the proposed treatment and research facilities are consistent with the existing zoning and General Plan land use designations for the site. In addition, they are of low intensity and would be compatible with surrounding zoning and General Plan land use designations (e.g., Rural Mountainous, Open Space Rural, and Conservation Habitat).

2.3 Covered Roads

According to the RCA's MSHCP Information Application (Regional Conservation Authority, 2021), Cactus Valley Road is designated as a "Mountain Arterial" Covered Road. A proposed future alignment of Cactus Valley Road was depicted by the RCA's MSHCP Information Application with the Right-of-Way (RW) turning south just west and offsite of Parcel 3, traversing southeast through RCA Conserved Lands, then eventually connecting to Red Mountain Road. The Project does not propose any improvements to Cactus Valley Road offsite.

2.4 Covered Public Access Facilities

The Project does not entail the construction of, or improvements to, a Covered Public Access Facility.

2.5 General Setting

Parcel 3 was located in the northeastern portion of Cactus Valley where the valley meets the foothills of the Santa Rosa Hills. Parcel 3 was located in an area consisting of rural residential areas and natural open space. *Figure 6 – General Setting Aerial Photograph* (Page 14) depicts the setting of a 1:100,000-scale area around the Property.

3.0 RESERVE ASSEMBLY ANALYSIS

The MSHCP "...is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on Conservation of species and their associated Habitats in Western Riverside County" (Dudek & Associates, Inc., 2003). The MSHCP encompasses approximately 1.26 million acres of land that stretches from the crest of the San Jacinto Mountains west to the Orange County boundary. Ultimately, the MSHCP will result in the conservation of more than 500,000-acres (347,000-acres on existing Public/Quasi-Public Lands [PQP] and 153,000-acres of ARL) that focuses on the 146-species covered by the MSHCP (Dudek & Associates, Inc., 2003).

The MSHCP is a criteria-based plan of which the County's General Plan Area Plan boundaries were utilized to provide the broad organizational framework for the criteria (Dudek & Associates, Inc., 2003). A Conceptual Reserve Design (CRD) was sketched for each Area Plan using vegetation, planning species occurrence data, and biological issues and considerations as the primary criteria for the CRD (Dudek & Associates, Inc., 2003). Subsequent to sketching the CRD, USGS quarter sections (i.e., approximate 160-acre cells) were then overlain on the CRD such that each "Criteria Cell" is an area in real space with a legal description (Dudek & Associates, Inc., 2003). Criteria Cells were then either aggregated into a Criteria Cell Group or retained as individual Criteria Cells based upon the level of conservation and configuration of the Criteria Cell or Criteria Cell Group (Dudek & Associates, Inc., 2003). Criteria Cells were assigned an identification number and each Criteria Cell Group was assigned a letter code. Conservation Criteria was drafted for each Criteria Cell or Criteria Cell Group to provide an explicit description of the areas to be targeted for conservation (Dudek & Associates, Inc., 2003). Those areas located outside of the designated Criteria Cells and/or Criteria Cell Groups are not targeted to be included within the 153,000-acres of ARL.

3.1 San Jacinto Valley Area Plan

Parcel 3 was located in the southeastern portion of the SJVAP. The SJVAP was approximately 92,556-acres (145-square miles). The target conservation acreage for the SJVAP was between 21,740 and 29,665-acres (Dudek & Associates, Inc., 2003). The target acreage consisted of an estimated 10,200-acres of existing PQP Lands with a range of 11,540 to 19,465-acres of ARL (Dudek & Associates, Inc., 2003). Currently, 7,358-acres of ARL have been acquired within the SJVAP (Regional Conservation Authority, 2021).

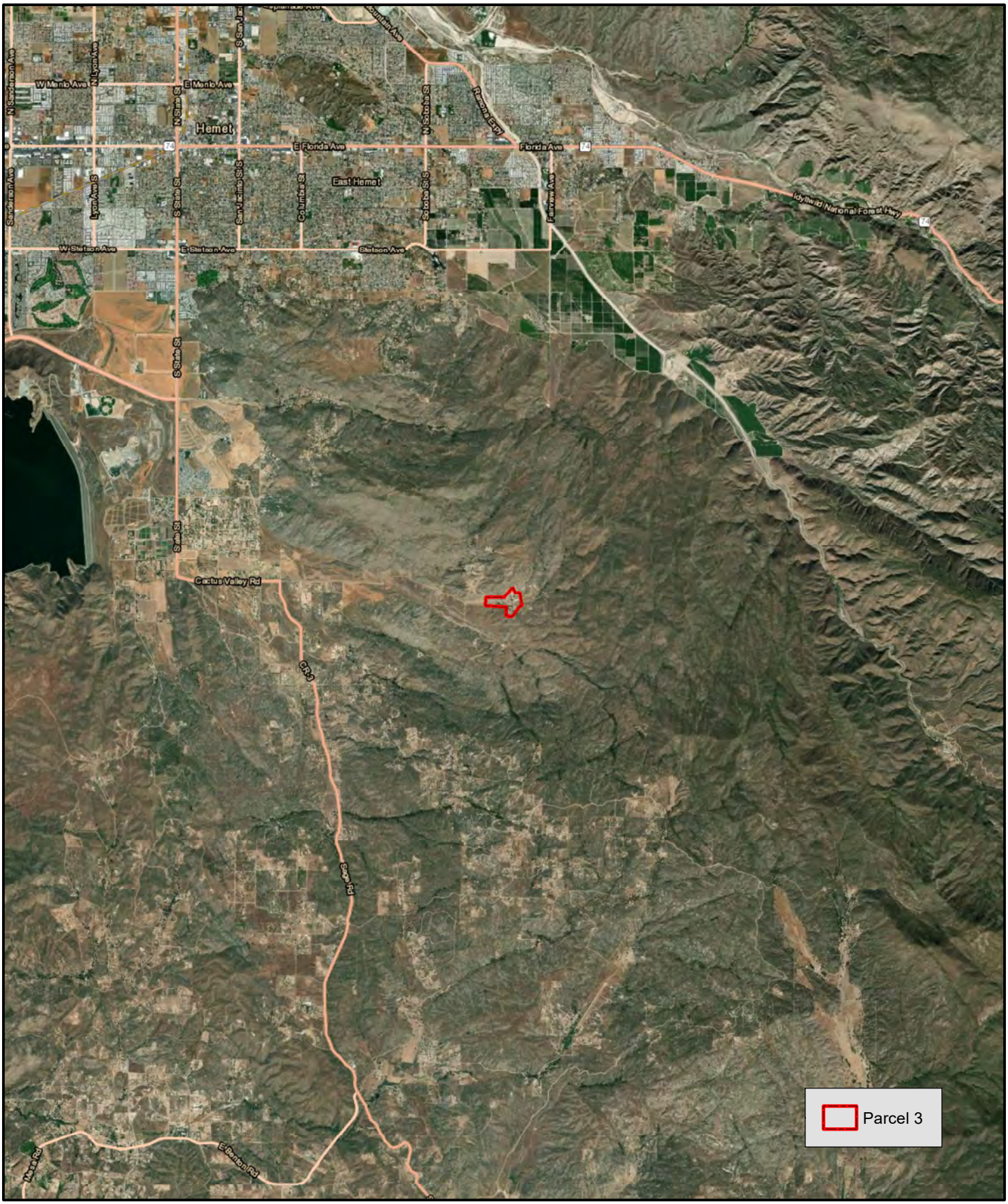

FIGURE 6
General Setting
Aerial Photograph

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, 4M

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3.1.1 Subunits

The SJVAP consisted of five Subunits. Parcel 3 was located within the southeastern portion of SU5 as depicted by *Figure 7 – SJVAP Area Plan and Subunits* (Page 16). The target ARL for SU5 was between 3,670 and 5,475-acres (Dudek & Associates, Inc., 2003). Currently, 1,342-acres of ARL have been acquired within SU5 (Regional Conservation Authority, 2021). The planning species and biological issues and considerations for SU5 according to the MSHCP are presented below.

1. **Planning Species[3]:**
   - Bell's sage sparrow
   - loggerhead shrike
   - bobcat
   - mountain lion
   - cactus wren
   - Quino checkerspot butterfly
   - Los Angeles pocket mouse
   - Stephens' kangaroo rat

2. **Biological Issues and Considerations[4]:**
   - Conserve the existing mosaic of upland Habitat east of Diamond Valley Lake and west of the San Bernardino National Forest. Conservation efforts should focus on maintenance of large block(s) of interconnected Habitat for populations of Quino checkerspot butterfly, Bell's sage sparrow, cactus wren and other species. Conservation should occur in large, interconnected habitat blocks, linking existing Public/Quasi-Public Lands.
   - Maintain Core Area for bobcat.
   - Determine presence of potential Core Area for the Los Angeles pocket mouse.
   - Conserve open grasslands and sparse shrub lands that support populations of Stephens' kangaroo rat, with a focus on suitable Habitat in the Mica Butte area.
   - Maintain Core and Linkage Habitat for mountain lion.

3.1.2 Criteria Area Location

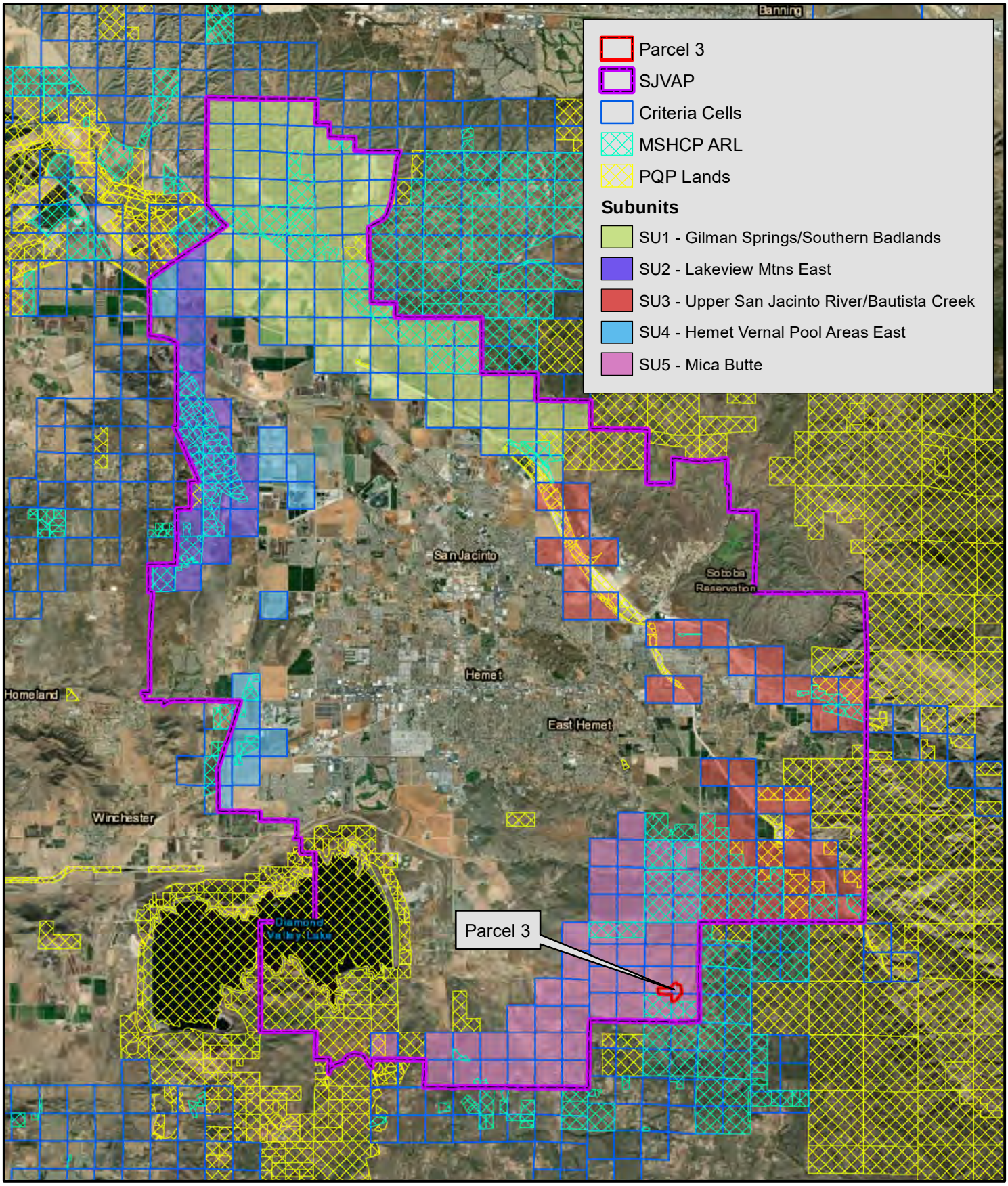
Parcel 3 was located within the southern portions of Cell Groups J' and L' within Criteria Cells 4634, 4636, 4731, and 4732 as depicted by F*igure 8 – MSHCP Criteria Area Location* (Page 17). The MSHCP conservation criteria for each Cell Group is presented below.

Cell Group J'

The MSHCP conservation criteria for Cell Group J' states the following:

> *Conservation within this Cell Group will contribute to assembly of Proposed Core 4. Conservation within this Cell Group will focus on chaparral, coastal sage scrub, grassland, Riversidean alluvial fan sage scrub, woodland, and forest habitat. Areas conserved within this Cell Group will be connected to chaparral, coastal sage scrub, grassland, woodland and forest habitat proposed for conservation in Cell Group L' to the east, to chaparral, coastal sage scrub, grassland, and Riversidean alluvial fan sage scrub habitat proposed for conservation in Cell Group E' to the west, and to chaparral habitat*

[3] Subsets of Covered Species that are identified to provide guidance for Reserve Assembly in Cores and Linkages and/or Area Plans.
[4] A list of biological factors to be used by the Plan Participants in assembly of the MSHCP Conservation Area.



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N

0 1.5 3 6 Miles

1:150,000

FIGURE 7
SJVAP Area Plan and Subunits

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, 4M, Riverside County GIS Data, RCA

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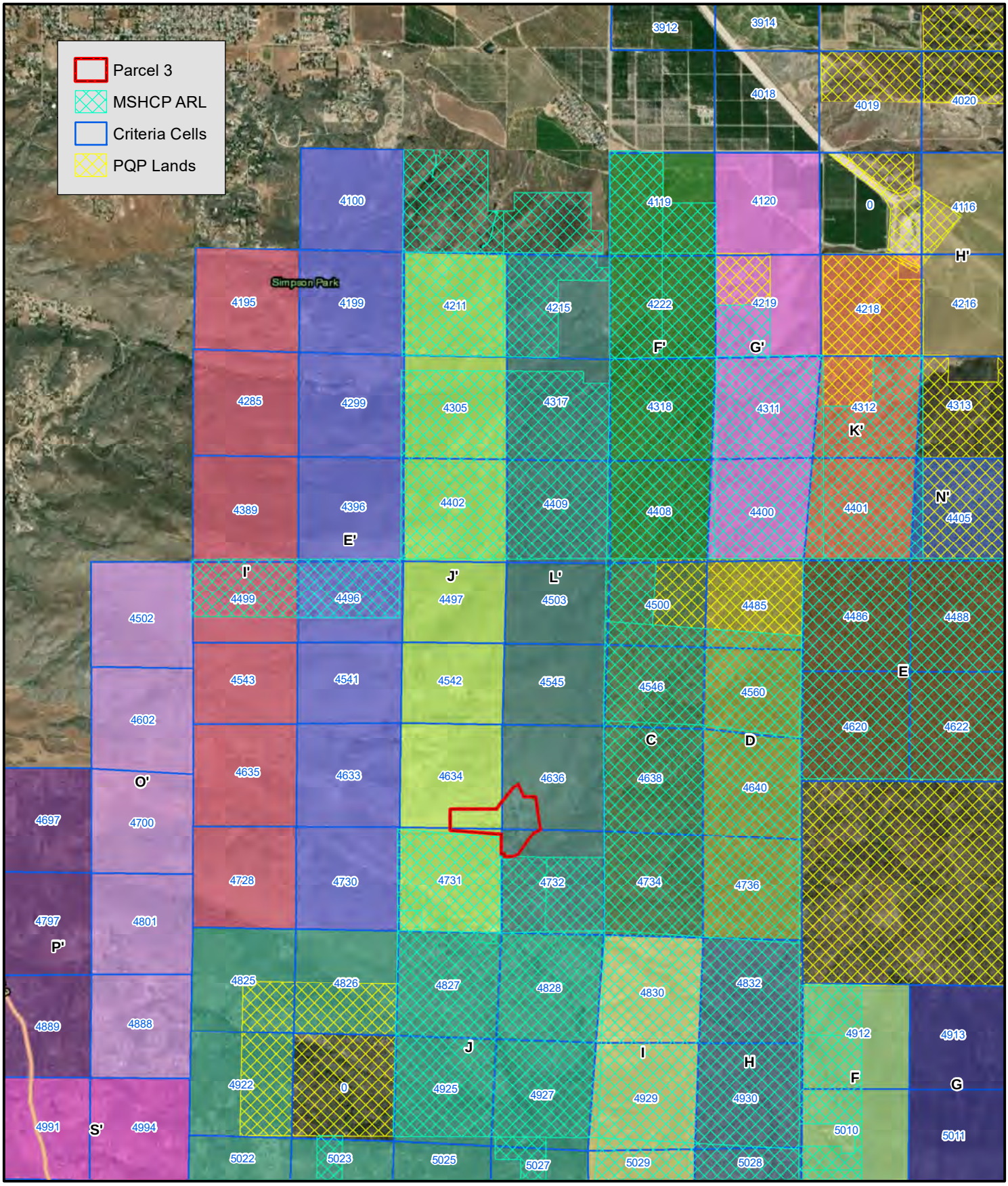

N

0 0.5 1 2 Miles

1:40,000

FIGURE 8
MSHCP Criteria Area Location
(Cell Groups shaded)

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, 4M, Riverside County GIS Data, RCA

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proposed for conservation in Cell Group J in the Riverside Extended Mountain Area Plan to the south. Conservation within this Cell Group will range from 45%-55% of the Cell Group focusing in the southern portion of the Cell Group.

Cell Group L'

The MSHCP conservation criteria for Cell Group L' states the following:

Conservation within this Cell Group will contribute to assembly of Proposed Core 4. Conservation within this Cell Group will focus on chaparral, coastal sage scrub, grassland, woodland and forest habitat. Areas conserved within this Cell Group will be connected to chaparral and grassland habitat proposed for conservation in Cell Group F' to the east, to chaparral habitat proposed for conservation in Cell Group C in the Riverside Extended Mountain Area Plan also to the east, to chaparral, coastal sage scrub, grassland, woodland and forest habitat proposed for conservation in Cell Group J' to the west, and to chaparral, coastal sage scrub, woodland and forest habitat proposed for conservation in Cell Group J in the Riverside Extended Mountain Area Plan to the south. Conservation within this Cell Group will range from70%-80% of the Cell Group focusing in the southern portion of the Cell Group.

3.1.3 Proposed Core 4

According to the MSHCP:

Proposed Core 4 (East Cactus Valley) is located in the east-central region of the Plan Area. This Core is composed of private lands and is generally unconstrained by existing urban Development or agricultural use. Connections are made from the Core via Existing Constrained Linkage D (Bautista Creek), Proposed Linkage 14 (Cactus Valley), and Existing Core K (San Jacinto Mountains). The Core also functions as a Linkage, connecting the Diamond Valley Lake/Lake Skinner and Cactus Valley areas in the west with the San Jacinto Mountains in the east. Proposed Core 4 is contiguous with Existing Core K (San Jacinto Mountains), thus greatly enlarging the functional area of the Core. The Core provides Live-In and movement Habitat for several species, including the Quino checkerspot, which has key populations in this area. As previously mentioned, this butterfly is restricted by the distribution and availability of its host plants, which in many areas have been replaced by non-native exotic weed species and habitat type conversion. However, due to the lack of planned roadway facilities, the large size of the Core (11,890 acres), and surrounding planned land uses largely of Rural Mountainous, these types of Edge Effects are not expected to compromise the integrity of the Core.

Cell Groups J' and L' were located in the northwestern/central portion of Proposed Core 4. According to the MSHCP, the purpose of assembling a Core Area was to form "a block of Habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species." According to the MSHCP, the primary goal of Proposed Core 4 was to provide live-in habitat for the following Planning Species:

- Quino checkerspot butterfly
- Bell's sage sparrow
- loggerhead shrike
- bobcat
- mountain lion
- arroyo toad
- cactus wren
- Stephens' kangaroo rat
- Los Angeles pocket mouse

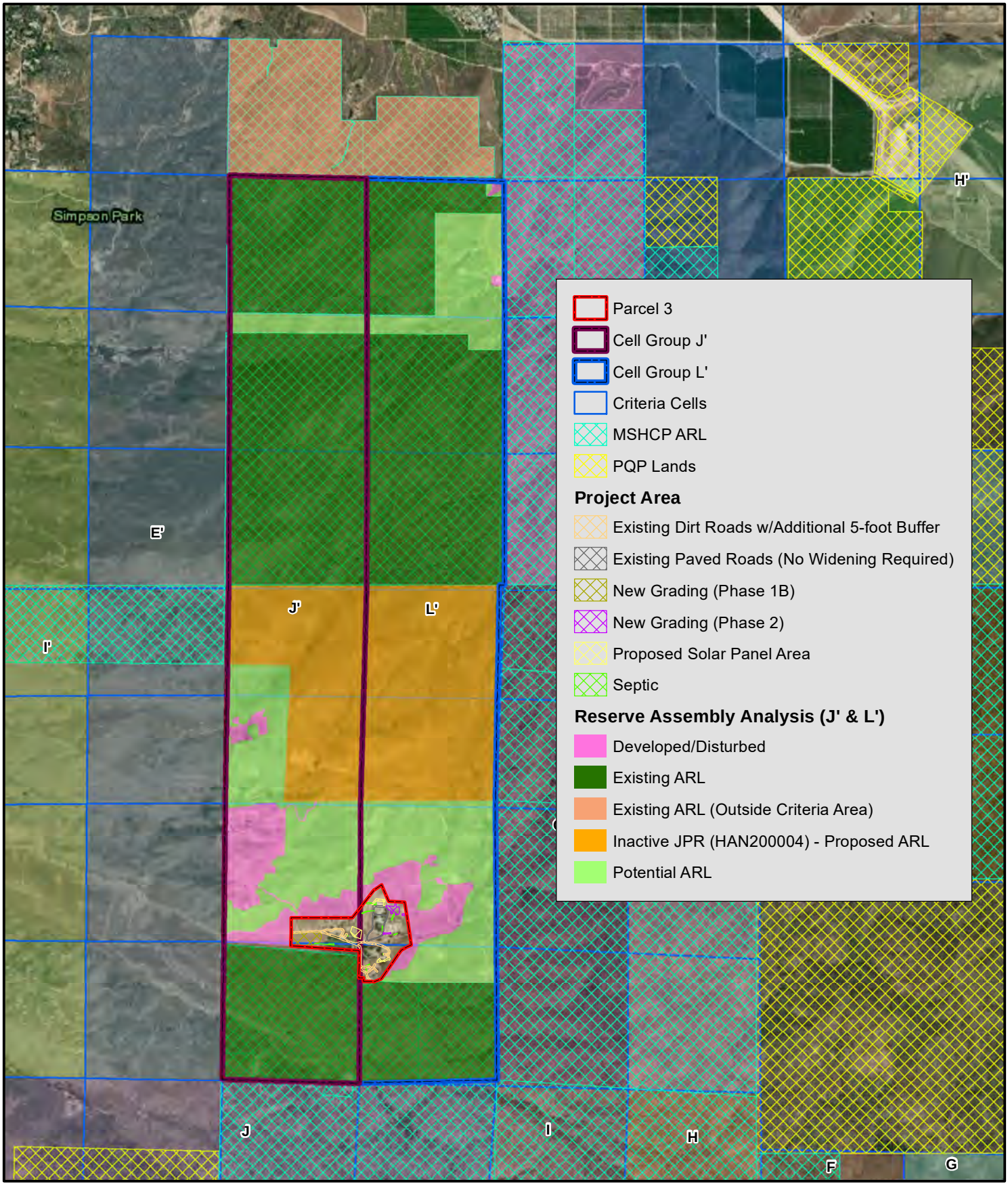
3.2 Reserve Assembly Analysis Methods

The Reserve Assembly Analysis is the first step in the MSHCP Consistency Analysis. The purpose of the Reserve Assembly Analysis is to ensure that Assembly goals (i.e., acreages and function) are still achievable with the development of a project site. According to the RCA, in order to perform the Reserve Assembly Analysis, the following acreages are obtained to determine if a proposed project is consistent with the Reserve Assembly goals for a particular Criteria Cell, Cell Group and/or Subunit:

- Cell or Cell Group (whichever is applicable)
- Described Conservation – If range is listed, then the mid-range goal is used (i.e., 45%-55%; then 50% is used)
- Proposed Project
- Existing and Approved Pending Development (currently active JPRs obtained from RCA)
    - Existing development is any developed area within the Cell/Cell Group such as single-family home, subdivisions, commercial or industrial buildings, roads or other improved public facilities (fire stations, flood control channel etc.). It may in some cases be appropriate to exclude as developed the undeveloped portion of single-family homes on large lots (> 1 acre) if the undeveloped portion of the lot may contribute to Reserve Assembly. Existing homes, generally on large lots, may specifically be described for conservation as part of a linkage/constrained linkage with no other viable route; therefore, a portion of these large lots may be able to be categorized as "Potential Conservation."
- Covered Roads (existing and proposed) – Covered roads not yet built are counted as future development.
- Existing and Pending Conservation – Existing MSHCP ARL acres are counted towards Cell/Cell Group Reserve Assembly goals. Conservation planned through a completed JPR but not yet conveyed to the RCA is counted as pending conservation.
- PQP acreage (already included in the baseline 347,000-acre existing conserved lands inventory) does not count towards the described ARL goal (153,000-acres) in the Cell or Cell Group, whichever is applicable. Cell/Cell Group acreage goals describe new conservation (ARL) acres beyond the PQP baseline. In some cases, the RCA may allow the PQP to be included as existing conservation, but this will need to be handled on a case-by-case basis, and in coordination with the Wildlife Agencies.
- Proposed Project Avoidance Areas (must be protected by, or proposed to be protected by, deed restriction, and should not include vegetation management or fuel modification zones).
- Undeveloped Areas Potentially Available for Future Conservation – Existing disturbed/developed areas, such as agricultural lands, that may still be potentially available for acquisition as future conservation may also be considered in this category. These areas should be labeled using their current land use. All of these areas that are "undeveloped" or "existing disturbed/developed" that are being considered as potentially available must be located in the area that can functionally contribute to the Reserve, specifically the Reserve feature (Core and/or Linkage) that is the focus of the Cell or Cell Group criteria.

3.3 Reserve Assembly Analysis Results

Figure 9 – Reserve Assembly Analysis (Page 20) depicts the results of the Reserve Assembly Analysis for Cell Groups J' and L' performed by SBS. Existing ARL, areas that remain for Potential ARL, existing Developed/Disturbed areas, Parcel 3, the Project, inactive JPRs, and two areas north of Cell Groups J' and L', located outside of the Criteria Area, which have been acquired as ARL and managed by the RCA. No PQP Lands were present within Cell Groups J' or L'. Although the calculated acreages from the Reserve



N

0 0.75 1.5 Miles

1:30,000

FIGURE 9
Reserve Assembly Analysis

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI (feet)
SOURCE: ESRI World Imagery, Riverside County GIS Data, RCA, SBS

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Assembly Analysis were based on public GIS data from the County and RCA, and do not represent legal survey standards for accuracy, Parcel 3 was mapped to legal survey standards to ensure that the Project aligned correctly to accurately calculate acreages. Because of this discrepancy, some areas were not mapped (i.e., area between Parcel 3's southern boundary and the MSHCP ARL) in an attempt to remain consistent with the County and RCA's acreage calculations. The detailed acreage results of the Reserve Assembly Analysis are presented in Appendix C.

The MSHCP criteria states that conservation within Cell Groups J' and L' will be "*focusing in the southern portion of the Cell Group;*" however, the RCA has the ability to acquire land outside of these "focused" locations to achieve MSHCP acreage and assembly goals.

3.3.1 Cell Group J'

Cell Group J' consisted of a configuration of seven Criteria Cells. According to the County's GIS "Cell Groups" feature class, Cell Group J' totaled 1,050.95-acres. The target conservation range of the Cell Group was 45% - 55% with the ultimate target, per the EPD and RCA being 50% which is 525.48-acres. Current land use within Cell Group J' primarily consisted of natural open space with some rural residential/disturbed areas located in the southern end. 18.37-acres of Parcel 3 was located in the southern portion.

Cell Group J' currently has 605.32-acres of Existing ARL which exceeds the Target ARL by 79.85-acres. The Inactive JPR[5] (HAN200004) will provide an additional 180.33-acres of ARL exceeding the Target ARL by 260.18-acres. Although the acreage goal for Cell Group J' is far exceeded, an additional 107.99-acres of natural open space is available for Potential ARL outside Parcel 3.

3.3.2 Cell Group L'

Cell Group L' consisted of a configuration of seven Criteria Cells. According to the County's GIS "Cell Groups" feature class, Cell Group L' totaled 1,042.57-acres. The target conservation range of the Cell Group was 70% - 80% with the ultimate target, per the EPD and RCA being 75% which is 781.93-acres. Current land use within Cell Group L' primarily consisted of natural open space with two small rural residential areas in the northern portion that included an orchard. 29.38-acres of Parcel 3 was located in the southern portion.

Cell Group L' currently has 499.77-acres of Existing ARL which is short of the Target ARL by 282.16-acres. The inactive JPR (HAN200004) will provide an additional 244.97-acres of ARL which would bring the Target ARL deficit to 14.94-acres. An additional 227.39-acres of natural open space is available for Potential ARL outside Parcel 3.

3.4 Reserve Assembly Analysis Discussions

Based on the Reserve Assembly Analysis Results above, Cell Group J' has met and exceeds the acreage goal, and Cell Group L' has the Potential ARL available to also meet and exceed its acreage goal. Though the Conservation Criteria described for both Cell Groups states that conservation will focus in the "southern" portion, the majority of the ARL acquisitions to-date have focused on the northern portions, including the area immediately north of the Cell Groups outside of the Criteria Area. The area north of Cell Group J' provides an additional 139.82-acres, and the area north of Cell Group L' provides an additional 80.76-acres. Approximately 60% of the northern portions of Cell Groups J' and L' support large blocks of

[5] Although this land has not been formally acquired by the RCA, the findings of HAN200004 were not challenged with a Habitat Acquisition and Negotiation Strategy (HANS I) Initial Review Waiver; therefore, this land will likely remain open space.

contiguous habitat, unlike the southern portion, which contains Parcel 3 and its associated facilities and rural residential areas west and northwest of Parcel 3.

The existing facilities on Parcel 3 and rural residential areas to the west and northwest preclude a functional east/west and north/south habitat connection. These would be better achieved to the north and south of Parcel 3 where existing intact habitat remains, and animal movement would not be impeded by development. Further, blocks of habitat remain west of Parcel 3 beyond the rural residential areas in Cell Groups E' and I' which would further facilitate both an east/west and north/south connection. Establishing a functional Core will always be challenging in areas as heavily populated as Southern California and more specifically Western Riverside County; however, if land acquisitions prioritize areas of natural open space as the RCA has done in this area, while maintaining acreage and assembly goals, Core and Linkage goals will likely be more easily achieved. Parcel 3 would not contribute to the Assembly goals for Proposed Core 4 within Cell Groups J' and L'; however, inactive JPR (HAN200004) and the Potential ARL areas identified would.

The Project would not impede the target connections (i.e., Linkages/Cores) for Proposed Core 4. The attached *Figure 10 – Applicable Cores & Linkages* (Page 23) generally depicts these areas and clearly illustrates that these areas would remain functional with the development of the Project which only constitutes 9.62-acres and a portion of that is existing dirt roads.

Parcel 3 and associated Project would not impede the conservation targets described for Cell Groups J' and L'. Cell Group J' exceeds its target ARL and Cell Group L' has the land available to meet the target ARL. *Table 5 – Cell Group J' and L' Conservation Acreages* (below) provides the total acreage for each Cell Group, the Targe ARL, the ARL acquired to-date, the area provided by Inactive JPR HAN 200004, and the remaining land available for Potential ARL.

Table 5 – Cell Group J' and L' Conservation Acreages

CELL GROUP	GIS CELL GROUP SIZE	TARGET ARL	ACQUIRED ARL	INACTIVE JPR (HAN200004)	POTENTIAL ARL
J'	1050.95	525.48	605.32	180.33	169.70
L'	1042.57	781.93	499.77	244.97	227.39

3.5 Public Quasi-Public Lands

The Project will not directly or indirectly impact PQP Lands. The nearest PQP Lands were located approximately 0.8-mile southwest of the Project.

4.0 VEGEATION MAPPING

Vegetation community classifications are typically conducted in accordance with the California Department of Fish and Wildlife's (CDFW) Vegetation Classification and Mapping Program (VegCAMP) *List of Vegetation Alliances and Associations* (Natural Communities List) (California Department of Fish and Wildlife, 2020) and *A Manual of California Vegetation* (Sawyer, Keeler-Wolf, & Evens, 2009). Vegetation communities and land covers are mapped in the field utilizing both Collector for ArcGIS installed on a smart phone connected to an iSXBlue2+ GNSS submeter GPS receiver (Collector) and paper maps (i.e., aerial photographs and USGS topographic maps).

Some land cover types are not classified in the above-referenced sources (i.e., developed, ornamental, ruderal, etc.); therefore, each land cover is designated with a common name for the purpose of this report. A brief description of the vegetation communities/land covers present on Parcel 3 is presented below.

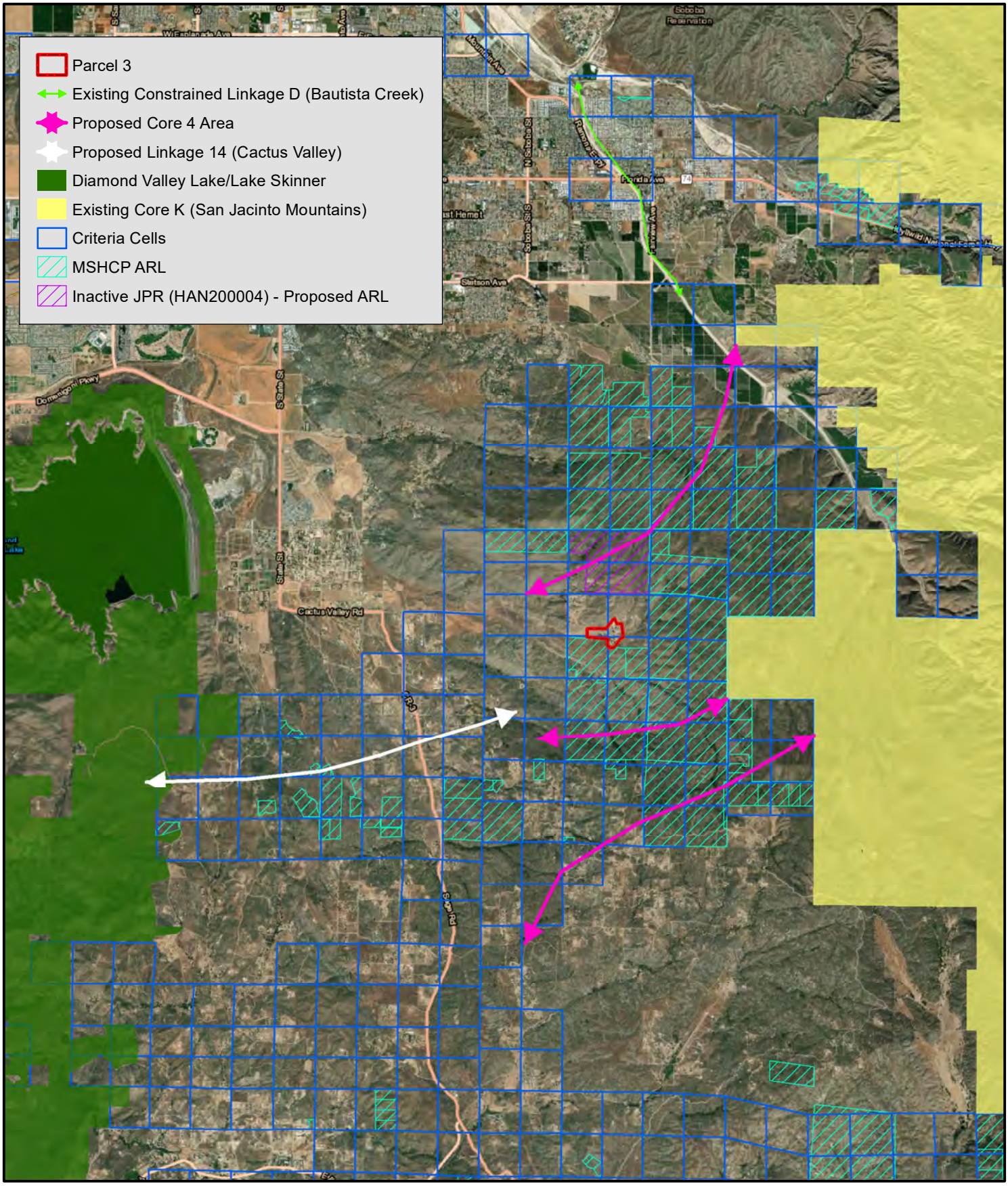

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FIGURE 10
Applicable Cores & Linkages

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI (feet)
SOURCE: ESRI World Imagery w/Labels, ESRI World Transportation, Riverside County GIS Data, RCA

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Parcel 3 and Project acreages are provided in *Table 6 – Land Covers* (Page 25). The distribution of vegetation communities and land covers on Parcel 3 are depicted on *Figure 11 – Land Covers* (Page 27). A complete list of the flora observed on the Property is provided in Appendix D, and a complete list of the fauna observed on, above, or near the Property is provided in Appendix E.

- **Brittle Bush Scrub/Ornamental**: Brittle bush scrub, with brittle bush (*Encelia farinosa*) dominant, was present only in the far north corner of Parcel 3, north of a dirt road. Brittle bush scrub was the dominant community north of Parcel 3 on the Property on south-facing slopes. The community was nearly homogenous with very few associate shrubs present typical of coastal sage scrub, such as California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*). This notwithstanding, wishbone bush (*Mirabilis laevis*) was common throughout this community. Planted ornamental trees were sparsely scattered throughout. Peruvian pepper tree (*Schinus molle*) and Aleppo pine (*Pinus halepensis*) were the most common. A few planted California sycamore (*Platanus racemosa*) and coast live oak (*Quercus agrifolia*) were also present in this community.
- **California Sycamore Woodland/Ruderal**: Areas mapped as woodlands were those that supported three or more trees with an interconnected canopy. The California sycamore woodland/Ruderal community was present in the central portion of Parcel 3 within an area utilized for campground activities. The understory consisted entirely of non-native annual grasses and forbs with ripgut grass (*Bromus diandrus*) dominant.
- **Coast Live Oak-California Sycamore Woodland/Ruderal**: The Coast live oak-California sycamore woodland/Ruderal community was present in the central portion of Parcel 3 within an area utilized for campground activities near the human-created pond. The understory consisted entirely of non-native annual grasses and forbs with ripgut grass dominant. Other non-native annual grasses and forbs, such as red brome (*Bromus rubens*), cheat grass (*Bromus tectorum*), long-beaked filaree (*Erodium botrys*), and London rocket (*Sisymbrium irio*), were present in the understory. Coast live oak-California Sycamore Woodland Association is listed as "Sensitive" by VegCAMP.
- **Coast Live Oak Woodland/Ruderal**: The Coast live oak woodland/Ruderal community was present in the southeastern portion of Parcel 3 on a north-facing slope. The understory consisted entirely of non-native annual grasses and forbs with ripgut grass dominant.
- **Developed/Ornamental/Ruderal**: Developed/Ornamental/Ruderal areas consisted of the area associated with the structures and campground activity facilities and was the dominant land cover within Parcel 3. This area included structures, paved roads, dirt roads, horse pastures, ornamental trees and shrubs, lawn, and human-created ponds. These areas were routinely utilized by people and were readily maintained. Ornamentals such as blue gum (*Eucalyptus globulus*), lemon-scented gum (*Eucalyptus citriodora*), Peruvian pepper tree, Aleppo pine, bottlebrush (*Melaleuca viminalis*), and freeway iceplant (*Carpobrotus edulis*) were present. Ruderal areas consisted entirely of non-native annual grasses and forbs with ripgut grass dominant. Other non-native annual grasses and forbs, such as red brome, cheat grass, long-beaked filaree, and London rocket, were common throughout.
- **Ruderal**: Ruderal areas consisted of routinely mowed vegetation for fire protection where non-native annual grasses and forbs were dominant. The vegetation was low-growing due to being consistently mowed and supported very few sage scrub species and native annuals. This land cover was present in the eastern portion of Parcel 3.
- **Ruderal/Coastal Sage Scrub**: This community was present in the southeastern portion of Parcel 3 and consisted primarily of non-native annual grasses and forbs with sage scrub species sparsely

scattered throughout. Ripgut grass was dominant with California buckwheat, brittle bush, and deerweed present.

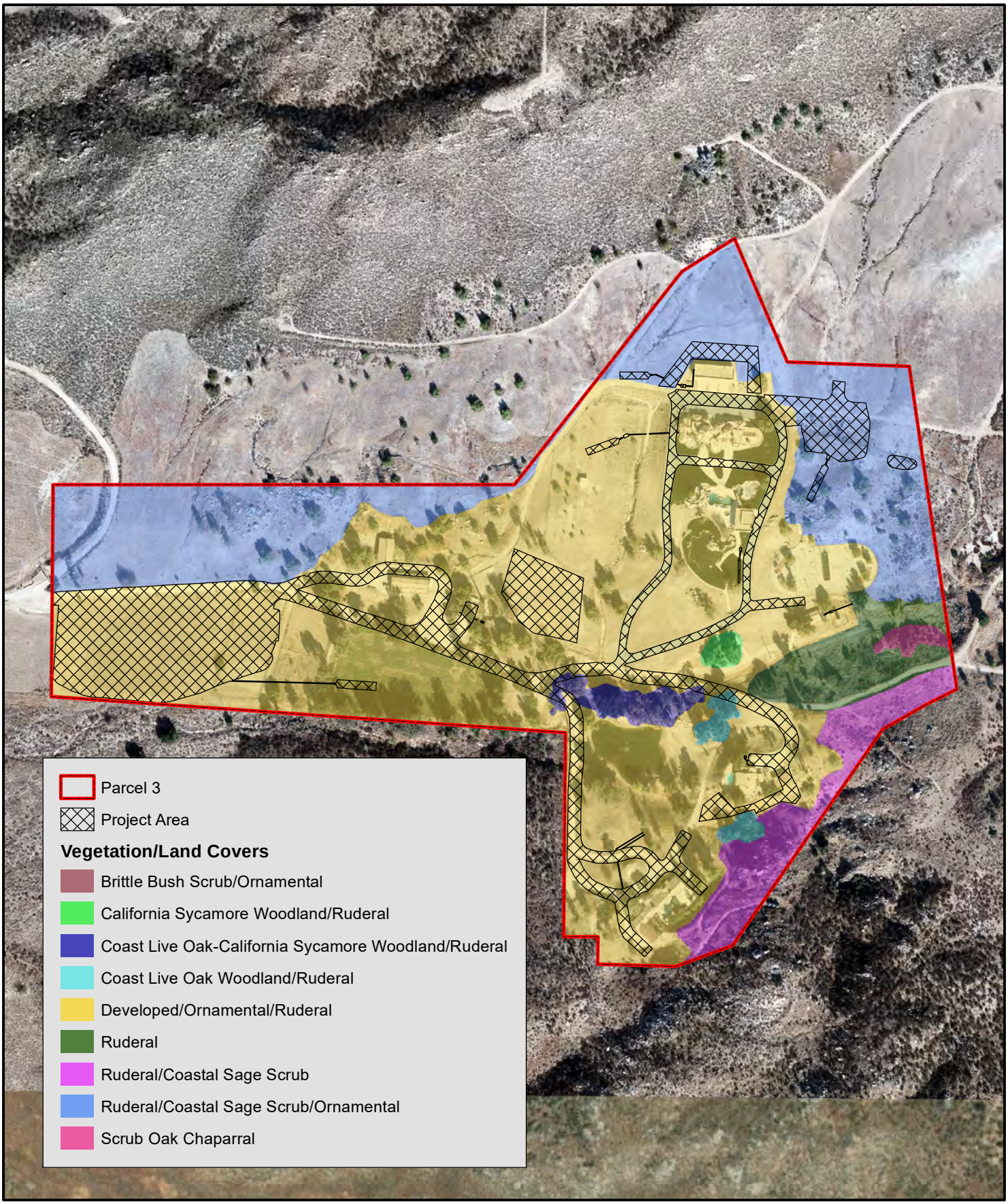
- **Ruderal/Coastal Sage Scrub/Ornamental**: This area consisted of routinely mowed vegetation for fire protection and was present in the northwestern and north/northeastern portion of Parcel 3. Non-native annual grasses and forbs such as long-beaked filaree, redstem filaree (*Erodium cicutarium*), bromes (*Bromus* spp.), and wild oat (*Avena* spp.) were present and low-growing throughout with remnant brittle bush, deerweed, and California buckwheat interspersed. Erosional gullies were common throughout this area and supported strips of coastal sage scrub. Ornamental trees were planted throughout the area. Common fiddleneck (*Amsinckia menziesii*), a native annual, was common throughout the area.
- **Scrub Oak Chaparral**: Scrub oak chaparral, with scrub oak dominant, was present on a north-facing slope in the eastern portion of Parcel 3. Associate species included chaparral-beard tongue, chamise, blue elderberry (*Sambucus nigra* subsp. *caerulea*), buck brush (*Ceanothus cuneatus*), evergreen buckthorn (*Rhamnus ilicifolia*).

Table 6 – Land Covers

COMMON NAME/VEGCAMP COMMUNITY	PARCEL 3 ACRES	PROJECT AREA ACRES[6]
Brittle Bush Scrub/Ornamental VegCAMP Alliance Brittle bush scrub 33.030.00 No corresponding VegCAMP Association	0.002	0
California Sycamore Woodland/Ruderal VegCAMP Alliance California sycamore woodlands 61.310.00 VegCAMP Association *Platanus racemosa*/annual grass 61.311.03	0.18	0
Coast Live Oak-California Sycamore Woodland/Ruderal VegCAMP Alliance Coast live oak woodland and forest 71.060.00 VegCAMP Association *Platanus racemosa – Quercus agrifolia*[7] 61.312.01 VegCAMP Association *Quercus agrifolia*/grass 71.060.09	0.68	0.07

[6] The riparian woodland communities within this area included the canopy only. No riparian associated trees are expected to be removed by the Project.
[7] This Association is listed as "Sensitive" by VegCAMP.

COMMON NAME/VEGCAMP COMMUNITY	PARCEL 3 ACRES	PROJECT AREA ACRES[6]
Coast Live Oak Woodland/Ruderal VegCAMP Alliance Coast live oak woodland and forest 71.060.00 VegCAMP Association *Quercus agrifolia*/grass 71.060.09	0.37	0.03
Developed/Ornamental/Ruderal VegCAMP Alliance Wild oats and annual brome grasslands 42.027.00 VegCAMP Association *Bromus diandrus* 42.026.21	30.97	8.46
Ruderal VegCAMP Alliance Wild oats and annual brome grasslands 42.027.00 No corresponding VegCAMP Association	1.86	0.003
Ruderal/Coastal Sage Scrub VegCAMP Alliance Wild oats and annual brome grasslands 42.027.00 VegCAMP Alliance California buckwheat scrub 32.040.00 No corresponding VegCAMP Association	2.22	0
Ruderal/Coastal Sage Scrub/Ornamental VegCAMP Alliance Wild oats and annual brome grasslands 42.027.00 VegCAMP Alliance Brittle bush scrub 33.030.00 No corresponding VegCAMP Association	11.25	1.06
Scrub Oak Chaparral VegCAMP Alliance Scrub oak chaparral 37.407.00	0.22	0
TOTAL	**47.75**	**9.62**



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N

0 125 250 500 750 1,000 Feet

1 inch = 333 feet

FIGURE 11
Vegetation Communities/ Land Covers

DATE: March 1, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M, SBS

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5.0 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

MSHCP Section 6.1.2 requires all subject properties under the jurisdiction of the MSHCP that are proposing a land use change/applying for a discretionary permit to conduct a MSHCP Section 6.1.2 assessment. This includes a habitat assessment for Riparian/Riverine Areas, Vernal Pools, three fairy shrimp species; 1) Riverside fairy shrimp (*Streptocephalus woottoni*) (RFS), 2) vernal pool fairy shrimp (*Branchinecta lynchi*) (VPFS), and 3) Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*) (SRPFS), and three bird species; 1) Least Bell's Vireo (*Vireo bellii pusillus*) (LBVI), 2) Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (SWFL), and 3) Western Distinct Population Segment (DPS)[8] Yellow-billed Cuckoo (*Coccyzus americanus*) (YBCU). If the assessment identifies suitable habitat for any of the six-species associated with Riparian/Riverine Areas, Vernal Pools, and/or Fairy Shrimp habitat listed above, and the proposed project design does not incorporate avoidance of the identified habitat, focused surveys would be required, and avoidance and minimization measures will be implemented in accordance with the MSHCP's species-specific objectives for these species.

5.1 Riparian/Riverine Areas

According to MSHCP Section 6.1.2:

> ***Riparian/Riverine Areas*** *are lands which contain Habitat dominated by tress* [trees], *shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*

5.1.1 Methods

Office Review

Prior to initiating the field assessment, SBS conducted a review and analysis of the Hemet 7.5 Minute USGS California Quadrangle, historic aerial photography from Historic Aerials online (Historic Aerials by Netronline, 2021) and Google Earth, the U. S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey. SBS also utilized as the primary baseline source, site-specific topographic data obtained from the Riverside County Flood Control and Water Conservation District (RCFC) and 4M.

SBS also conducted a query of both the California Natural Diversity Database (CNDDB) and the USFWS Carlsbad Fish and Wildlife Office (CFWO) "Species Occurrence Data" GIS data to determine if the three-targeted fairy shrimp and/or three-targeted bird species listed above in Section 5.0 have been documented within five miles of the Property.

After performing the field assessment, SBS performed a Wetlands Climate Tables (WETs) analysis to determine the precipitation climatic conditions (i.e., drought, dry, normal, etc.) at the time of the assessment.

[8] Distinct Population Segment: In addition to the listing and delisting of species and subspecies, the ESA [Endangered Species Act] allows the listing/delisting of Distinct Population Segments of vertebrate species (i.e., animals with backbones, mammals, birds, fish, reptiles, and amphibians). A Distinct Population Segment is a portion of a species' or subspecies' population or range. The Distinct Population Segment is described geographically instead of biologically, such as "all members of XYZ that occur north of 40 north latitude" (U. S. Fish and Wildlife Service - Pacific Region, 2019)

Riparian/Riverine Field Mapping Assessment

A potential Riparian/Riverine Area is walked and mapped with Collector, recording a vertex for every two feet traveled, as either a polyline and/or polygon depending on the habitat type (i.e., Riparian vs. Riverine) and the width of the feature[9]. The jurisdictional extent of a Riparian/Riverine Area is typically the dripline[10]of the riparian vegetation associated with the water feature if present, or the top of the streambank in the absence of riparian vegetation[11]. Data collected while walking the potential Riparian/Riverine Area includes characteristics and functions such as hydrology, soils/substrates, dominant plant species/vegetation community, biological functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, habitat suitability for LBVI, SWFL, YBCU, RFS, VPFS, SRPFS, and whether the feature contributes to downstream resources for MSHCP Section 6.1.2 species and/or MSHCP Conservation Areas.

Field Assessment Dates and Weather Conditions

The MSHCP Section 6.1.2 assessment was conducted by biologists Tim Searl and Jason Caskey (Caskey Biological Consulting) on February 11, 12, and 18, 2021. Detailed survey information and conditions are presented in *Table 7 – MSHCP Section 6.1.2 Assessment Conditions* (Page 30). Mr. Searl and Mr. Caskey also conducted a state and federal Jurisdictional Delineation (JD) on these dates with the results of the JD submitted to the County in a standalone report titled *Jurisdictional Delineation Report* dated December 21, 2021.

5.1.2 Existing Conditions and Results

Watershed Location

The Property was located within the southeastern portion of the Santa Ana Watershed (HUC6 180702) within the following sub-watersheds: south-central portion of the San Jacinto Watershed (HUC8 18070202), in the southeastern portion of the Lower San Jacinto River Watershed (HUC10 1807020203), near the central portion of the Saint Johns Canyon Watershed (HUC12 180702020301). *Figure 12 – Watershed Location* (Page 31) depicts Parcel 3's location within each of these Hydrologic Units.

Office Review

Historic Aerial Photography Analysis

Georeferenced historic aerial photographs from 1967 and 1978 were purchased from Netronline. Google Earth images were reviewed from 1996 to 2019. The overall result of the historical analysis indicates that the Property and Parcel 3 have been maintained in a relatively similar condition for over 50 years with additional structures, facilities, water features, etc. constructed over that time.

1967

In 1967 much of Parcel 3 was maintained similarly to current conditions. It is highly likely, given the Site's location and historical use of the southern Hemet area, that the Site was utilized for dryland agriculture. Also, native habitat adjacent to farming areas were often utilized as range lands for cattle grazing. The Ponderosa Lodge, Hacienda House, and barns were present at this time also suggesting some type of ranching operation.

[9] Any feature ≤ to three feet in width, or lacking a discernable bed and bank, is mapped as a polyline, and given a mean width. The feature is then calculated and depicted in ArcGIS by utilizing the Buffer tool to represent the mean width.

[10] The area defined by the outermost circumference of a tree canopy where water drips from and onto the ground.

[11] The jurisdictional limits of a Riparian/Riverine Area generally coincide with that of CDFW 1600 streambeds. Though if a feature lacks riparian vegetation, a Riparian/Riverine Area must contribute to downstream resources to meet the criteria, unlike CDFW 1600 streambeds where CDFW may potentially assert jurisdiction over isolated streambeds regardless of it being vegetated or unvegetated.

Table 7 – MSHCP Section 6.1.2 Assessment Conditions[12]

DATE	FIELD PERSONNEL	SURVEY TIME	TEMPERATURE	HUMIDITY	% CLOUD COVER	WIND SPEED	ANNUAL PRECIPITATION TO-DATE[13]
2/11/2021	Tim Searl, Jason Caskey	0715-1530	50-72	66-40	0-10	0-4	3.46
2/12/2021	Tim Searl, Jason Caskey	0700-1530	50-60	88-49	100-50	4-1	3.59[14]
2/18/2021	Tim Searl, Jason Caskey	0715-1600	45-66	40-18	0-0	0-5	3.60

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[12] Temperature (Degrees Fahrenheit), Humidity (Relative; %), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter.
[13] Annual Precipitation (July 01 to June 30) To-Date was obtained from the RCFC's Rain Gauge Map Website for Hemet-Ryan Field – Station No. 180 (Riverside County Flood Control and Water Conservation District, 2021).
[14] A rain/thunderstorm that produced a substantial amount of rainfall and some hail occurred for approximately 15 minutes while onsite.

N

0 10 20 40 Miles

1 in = 10 miles

FIGURE 12
Watershed Location

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 UTM Zone 11N
SOURCE: ESRI World Imagery Basemap, ESRI World Transportation, 4M, USGS

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The primary drainage feature on the Property entering Parcel 3 in the eastern end and flowing in a southwesterly direction was Brown Canyon. By 1967, Brown Canyon had been altered upstream of Parcel 3 near dirt road crossings where basins/dams appear present. These were likely constructed for flood control purposes, to recharge well water, and facilitate the construction of the dirt roads. These areas are present today. *Figure 13 – 1967 Aerial Photograph* (Page 33) depicts Parcel 3 and surrounding Property area.

1978

In 1978 additional facilities and structures were present within Parcel 3. The Chaparral Lodge had been built along with additional agriculture facilities such as corrals, a stable, a round exercise pen, and possibly an oval track. Drainage patterns on Parcel 3 and surrounding Property appeared similar to 1967. *Figure 14 – 1978 Aerial Photograph* (Page 34) depicts Parcel 3 and surrounding Property area.

Google Earth Review

Over the years, Parcel 3 and surrounding Property transitioned from a working farm to a camp retreat. By 1996, the Silverado Lodge was being constructed and a pond was present where the former oval track was located. Subsequent to 1996, the remaining facilities listed in Table 1 above were constructed and appeared completed by 2006. Though Brown Canyon, and the downstream area thereof, appears in a similar state since 1967, the remaining areas of Parcel 3 have been altered since with the additional development. Grading associated with the construction of buildings, roads, and other facilities since the 90s has altered the topography.

NWI

According to the NWI, which utilized an aerial photograph from 1985 as its base, two potential "Riverine" areas were on Parcel 3. These Riverine areas essentially follow the general alignment of the USGS-designated blueline streams mapped on the Hemet USGS Topographic Quadrangle for Parcel 3. The first is the downstream end of Brown Canyon and the other an unnamed canyon/drainage. The unnamed canyon was present in the eastern portion of Parcel 3 and did not exhibit any potentially MSHCP Section 6.1.2/jurisdictional features during the field assessment conducted in February 2021. No drainage patterns were observed throughout this area. *Figure 15 – NWI* (Page 35) depicts the NWI data. The *Classification of Wetlands and Deepwater Habitats of the United States* (Federal Geographic Data Committee (FGDC), 2013) defines "Riverine" as:

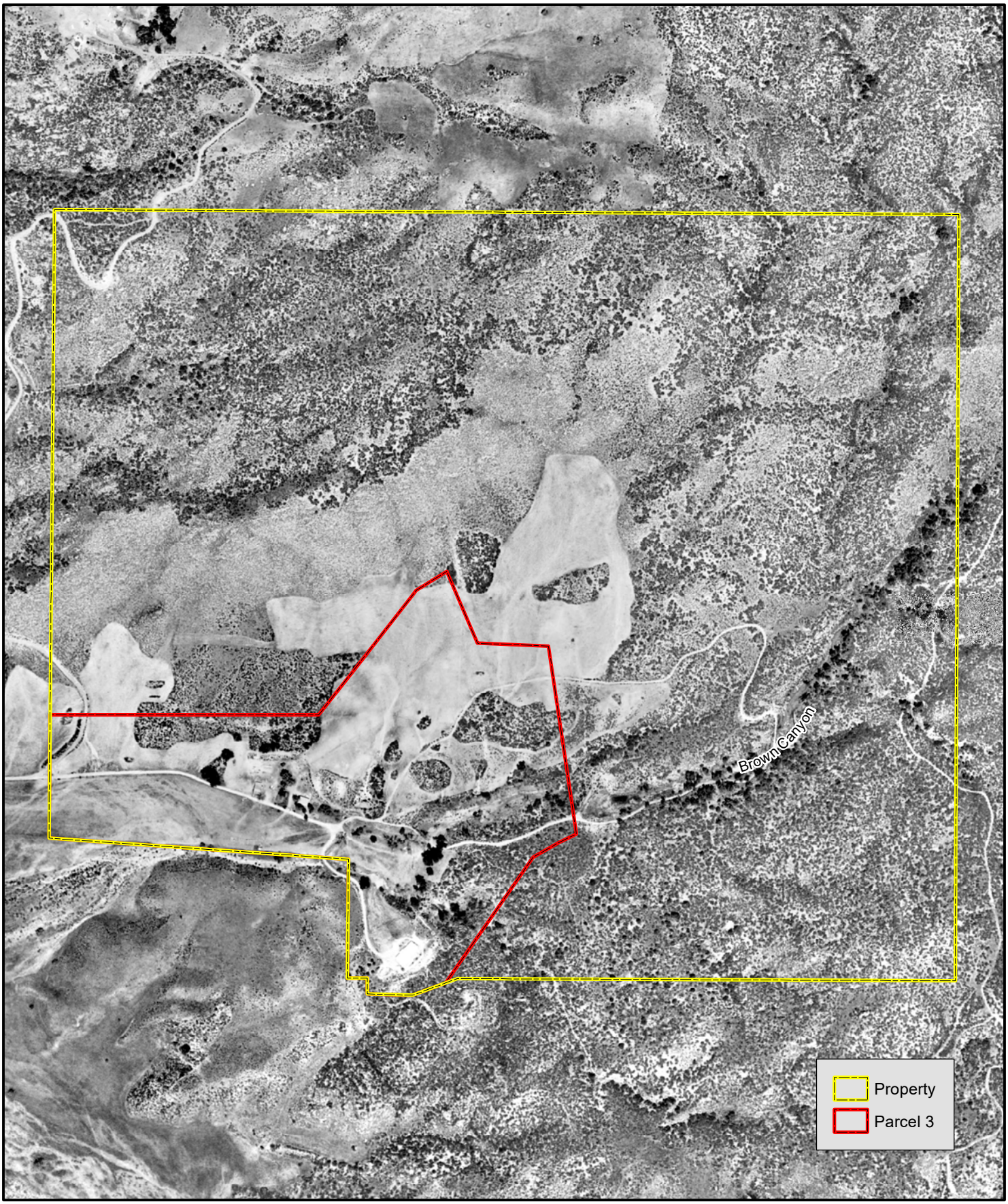
> *"The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is "an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water"*

Query Results

Though no suitable habitat was present on Parcel 3 or surrounding Property, LBVI has been documented within five miles of Parcel 3. Two records (CFWO: 1; CNDDB: 1) from 1976 and 2011 were reported. The nearest documented record was from the CNDDB in 1976 along Bautista Creek approximately 3.0-miles northeast of Parcel 3. *Figure 16 – MSHCP Section 6.1.2 Targeted Species Query Results* (Page 36) depicts the query results.

Natural Resources Conservation Service Soils

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (United States Department of Agriculture Natural Resources Conservation Service, 2021), Parcel 3 consisted of nine soil series as depicted by



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N

0 225 450 900 1,350 1,800 Feet

1 inch = 572 feet

FIGURE 13
1967 Aerial Photograph

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: Netronline Historic Aerials, 4M

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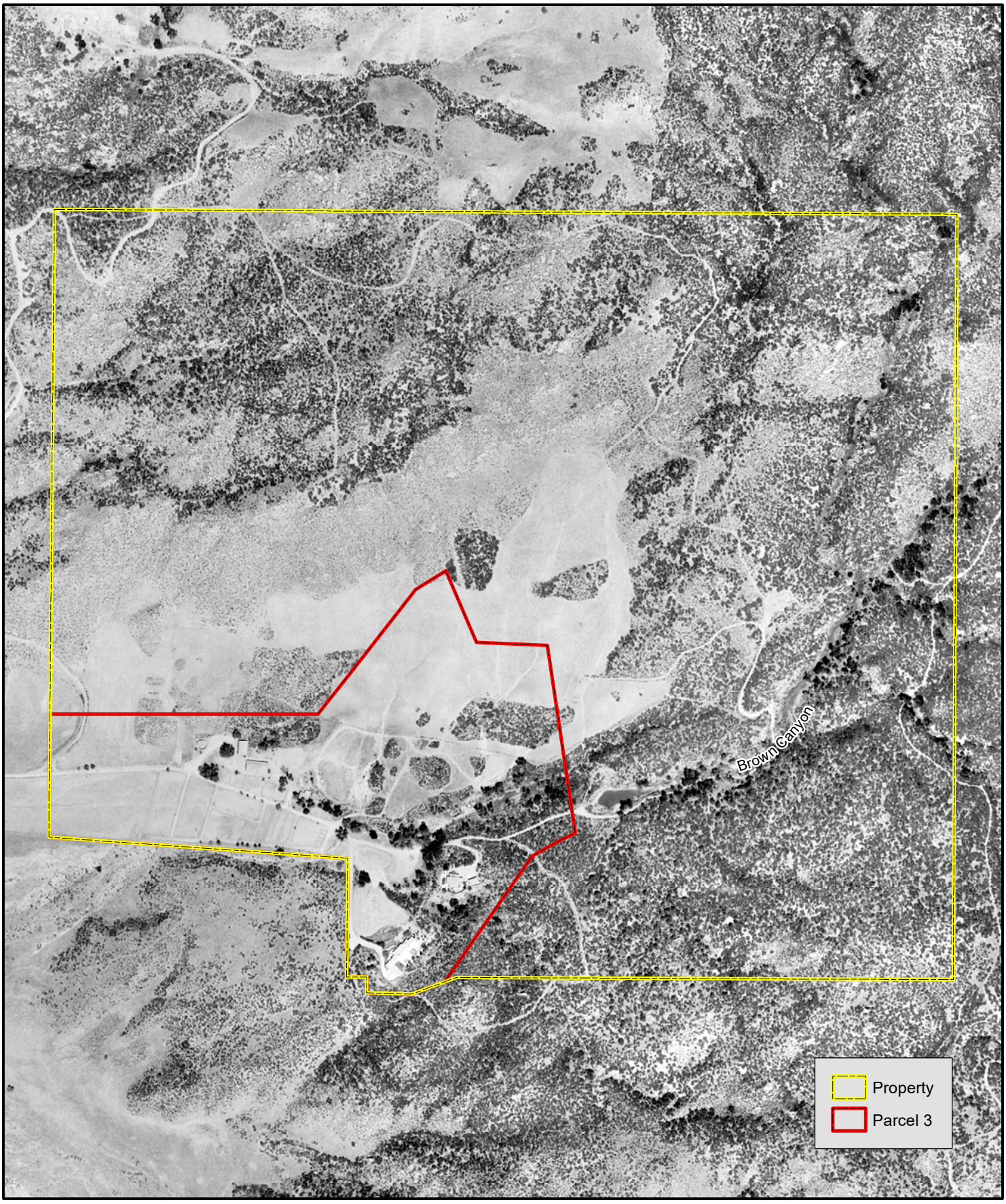

BSEARL BIOLOGICAL SERVICES

N

0 225 450 900 1,350 1,800 Feet

1 inch = 572 feet

FIGURE 14
1978 Aerial Photograph

DATE: August 3, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: Netronline Historic Aerials, 4M

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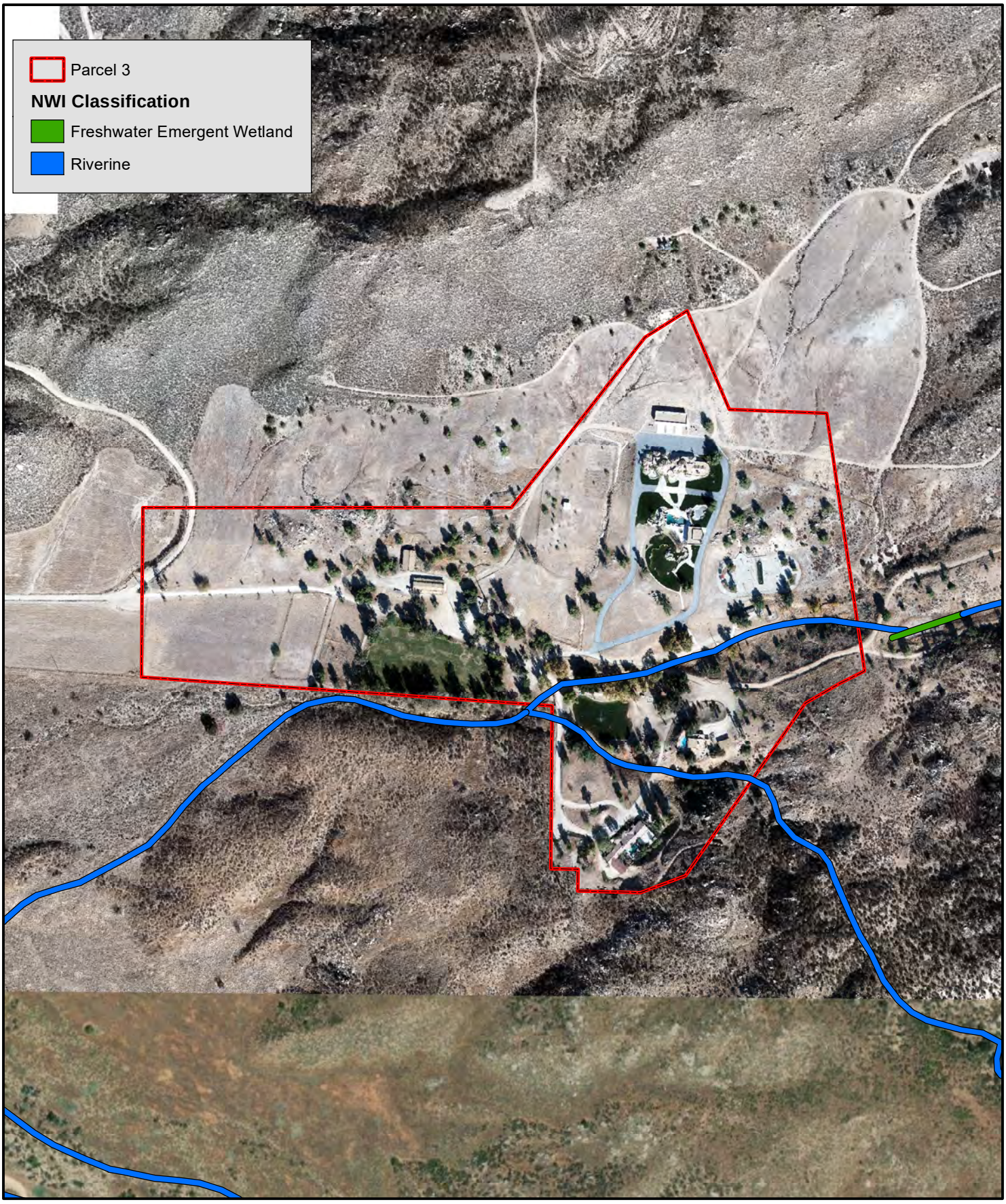

N

0 160 320 640 960 1,280 Feet

1 inch = 417 feet

FIGURE 15
NWI

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M, USFWS

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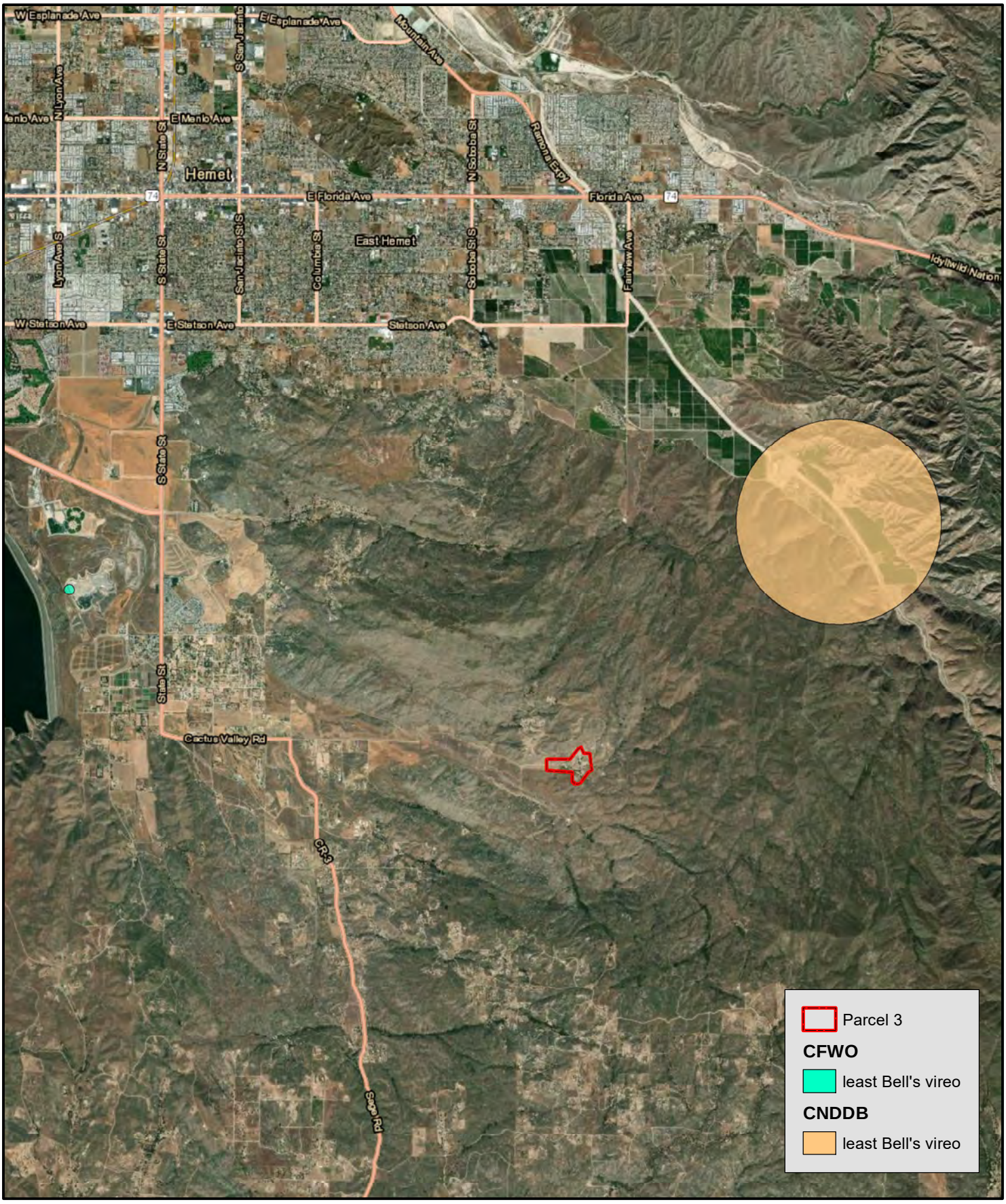

N

0 0.75 1.5 3 Miles

1:80,000

FIGURE 16
MSHCP Section 6.1.2
Targeted Species
Query Results

DATE: November 30, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, 4M, CNDDB, USFWS

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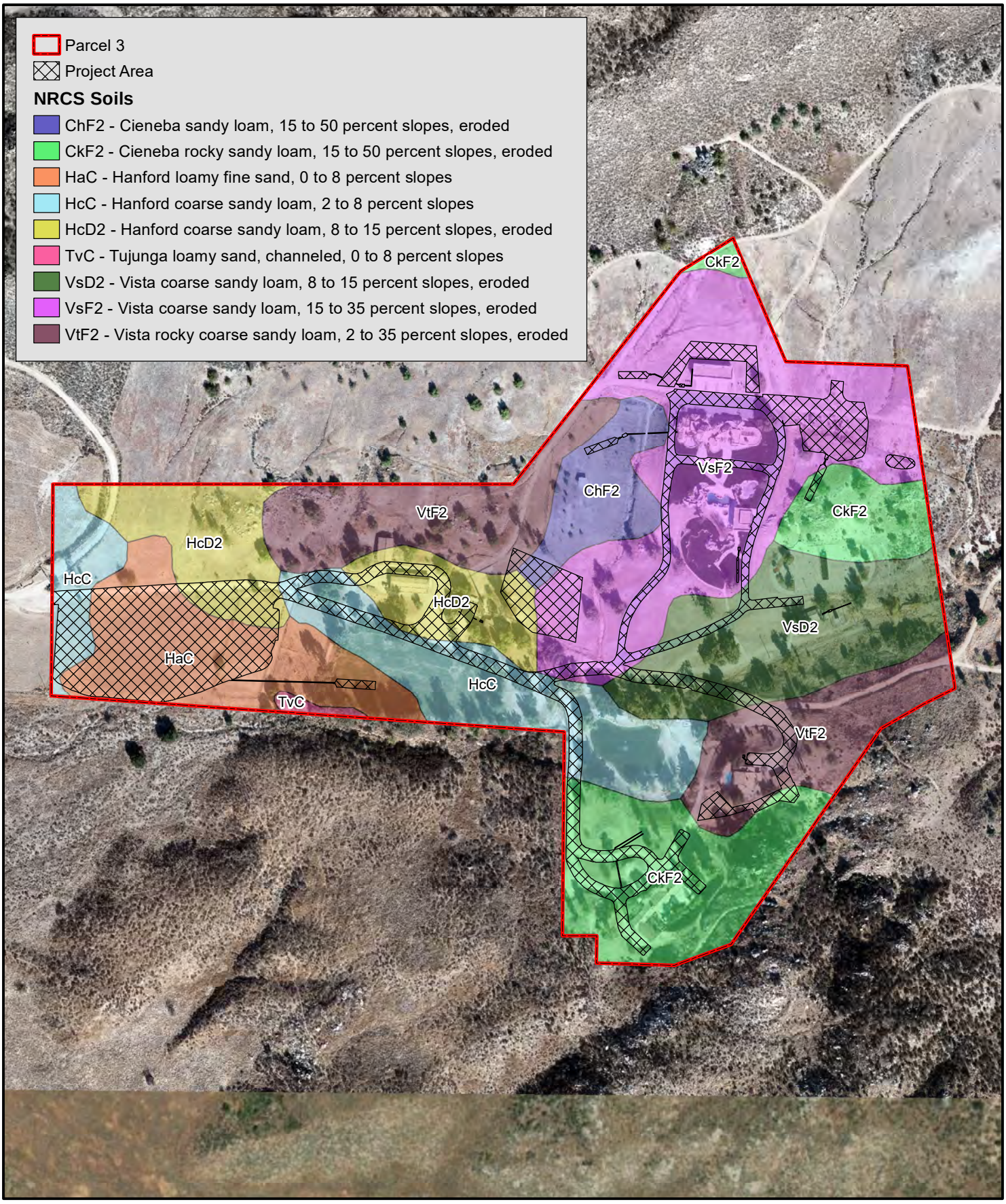
Figure 17 – NRCS Soils (Page 38). A brief description, as described by the NRCS, is presented below. Acreages are provided in *Table 8 – NRCS Soils* (Page 39). No hydric, clay, or saline-alkali soils series were present on Parcel 3.

- **Cieneba sandy loam, 15 to 50 percent slopes, eroded (ChF2)**: A somewhat excessively drained residuum soil weathered from igneous rock. The depth to the restrictive feature is 10 to 20-inches to paralithic bedrock. The depth to the water table is typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded (CkF2)**: CkF2 was the dominant soil series on the Property. CkF2 is a somewhat excessively drained residuum soil weathered from igneous rock. The depth to the restrictive feature is 14 to 22-inches to paralithic bedrock. The depth to the water table is typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Hanford loamy fine sand, 0 to 8 percent slopes (HaC)**: A well-drained alluvium soil derived from granite. The depth to the restrictive feature is more than 80-inches. The depth to the water table is also typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Hanford coarse sandy loam, 2 to 8 percent slopes (HcC)**: A well-drained alluvium soil derived from granite. The depth to the restrictive feature is more than 80-inches. The depth to the water table is also typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Hanford coarse sandy loam, 8 to 15 percent slopes, eroded (HcD2)**: A somewhat excessively drained alluvium soil derived from granite. The depth to the restrictive feature is more than 80-inches. The depth to the water table is also typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Tujunga loamy sand, channeled, 0 to 8 percent slopes (TvC)**: An excessively drained sandy alluvium soil derived from granite. The depth to the restrictive feature is more than 80-inches. The depth to the water table is also typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Vista coarse sandy loam, 8 to 15 percent slopes, eroded (VsD2)**: A well-drained residuum soil weathered from granite and/or granodiorite. The depth to the restrictive feature is 20 to 40-inches to paralithic bedrock. The depth to the water table is typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Vista coarse sandy loam, 15 to 35 percent slopes, eroded (VsF2)**: A well-drained residuum soil weathered from granite and/or granodiorite. The depth to the restrictive feature is 20 to 40-inches to paralithic bedrock. The depth to the water table is typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded (VtF2)**: A well-drained residuum soil weathered from granite and/or granodiorite. The depth to the restrictive feature is 20 to 40-inches to paralithic bedrock. The depth to the water table is typically more than 80-inches. The frequency of ponding, according to the NRCS, is none.



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N

0 125 250 500 750 1,000 Feet

1 inch = 333 feet

FIGURE 17
NRCS Soils

DATE: March 1, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M, NRCS

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Table 8 – NRCS Soils

SOIL	PARCEL 3 ACRES	PROJECT AREA ACRES
ChF2	2.00	0.16
CkF2	6.88	0.87
HaC	4.61	2.59
HcC	5.94	1.31
HcD2	4.71	1.22
TvC	0.16	0
VsD2	5.46	0.49
VsF2	10.83	2.53
VtF2	7.16	0.45
TOTAL	**47.75**	**9.62**

Riparian/Riverine Areas Results

SBS personnel identified and mapped 16 potentially state jurisdictional features (i.e., CDFW and Regional Water Quality Control Board [RWQCB]). This included four ephemeral waterways, nine isolated ephemeral waterways/erosional gullies, two basin/berm areas, and one human-created pond which was constructed in the late 1970s and is sourced entirely by well water. SBS determined that four of the identified features potentially meet the criteria of a Riparian/Riverine Area based on the definition provided above in Section 5.1. *Table 9 – Potential Riparian/Riverine Areas* (below) provides each features area in square feet and acres. *Figure 18 – Potential MSHCP Section 6.1.2 Riparian/Riverine Areas* (Page 40) depicts the location and extent of the potential Riparian/Riverine Areas and those areas that were determined not to meet the criteria of Riparian/Riverine. Appendix F depicts photographic key maps and a collection of assessment photographs.

An analysis of the WETs, with the results provided in Appendix G, indicated that Parcel 3's location was experiencing moderate drought conditions during the field assessment; however, the February field work was conducted during normal conditions. Below is a summary of the features within Parcel 3.

Table 9 – Potential Riparian/Riverine Areas

FEATURE ID	PARCEL 3		PROJECT AREA[15]	
	Square Feet	Acres	Square Feet	Acres
A	50,040.68	1.15	2,873.28	0.07
A1	2,408.77	0.06	0	0
A2	7,462.01	0.17	0	0
A3	10,906.03	0.25	0	0
TOTAL	**70,817.49**	**1.63**	**2,873.28**	**0.07**

Assessed Areas Not Meeting Criteria of Riparian/Riverine

SBS personnel assessed and mapped 16 features during a Jurisdictional Delineation/MSHCP Riparian/Riverine Area field assessment. As mentioned above, four of these features were determined to meet the criteria of a MSHCP Section 6.1.2 resource. The other 12 features were determined to potentially be jurisdictional by the state but did not meet the criteria of a MSHCP Section 6.1.2 resource. Both CDFW and RWQCB will assert jurisdiction over isolated water features, including erosional gullies with no discernable bed or bank. The nine isolated ephemeral waterways were not connected, and therefore, not contributing to downstream resources, did not consist of riparian vegetation, and did not provide suitable habitat for MSHCP Section 6.1.2 Covered Species.

[15] Excludes the existing paved road areas. Tree canopy only.

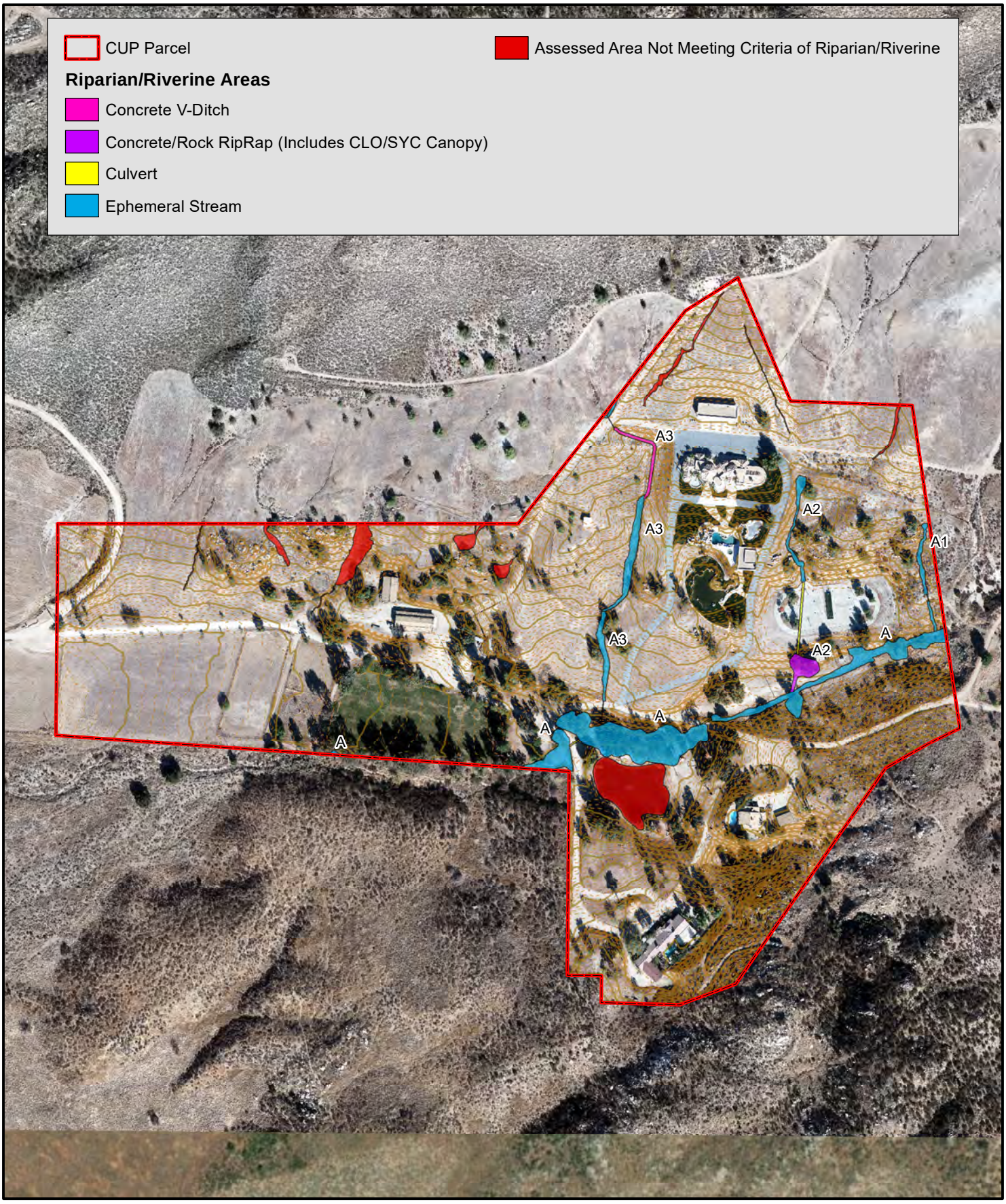

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FIGURE 18
Potential MSHCP
Section 6.1.2
Riparian/Riverine Areas

DATE: January 18, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M, SBS

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One of the basin/bermed areas received storm runoff from two erosional gullies originating from a dirt road, and the other via 8-inch culvert on the edge of the dirt road. The bermed areas appeared to have been in place for 50-years and were likely placed in these locations to protect the barn and corral located to the southwest. These artificial areas did not consist of riparian vegetation. Additionally, no evidence of ponding was present, and this was attributed to the very sandy, porous soils. The areas also did not provide suitable habitat for MSHCP Section 6.1.2 Covered Species.

The human-created pond mapped on Figure 18 in the southern portion of Parcel 3 was sourced entirely from well water. No natural stream courses flowed directly into the pond. The human-created pond did not meet the criteria of a MSHCP Riparian/Riverine Area. Additionally, since the pond contains water year-round, it did not meet the criteria as a Vernal Pool or provide suitable Fairy Shrimp habitat.

Feature A

This feature was the historic downstream area of Brown Canyon; however, with the upstream alterations of Brown Canyon, Feature A receives most of its flow from an ephemeral feature that begins upstream of Parcel 3 located north of Brown Canyon. Based on field evidence, it appears that Feature A only receives flows from Brown Canyon during high yield rain events due to the two "dams/basins" located within Brown Canyon upstream. Feature A was an ephemeral drainage that flowed in a west/southwesterly direction and ultimately discharged and contributed to downstream resources in Cactus Valley. The bed and bank of Feature A was relatively narrow throughout and difficult to detect in the upstream end. Ruderal non-native annual grasses and forbs were dominant throughout with a mature Coast Live Oak-California Sycamore Woodland present in the central portion. No riparian vegetation such as mule fat (*Baccharis salicifolia* subsp. *salicifolia*) or willow (*Salix* spp.) were present. Soils throughout primarily consisted of coarse sandy loams. Two dirt road crossings were present with the feature connected at the upstream road via one 36-inch culvert, and in the downstream end via two 24-inch culverts. Feature A would be expected to be subject to MSHCP Section 6.1.2 Riparian/Riverine Areas policies.

Feature A_1

Feature A_1 was a southerly flowing ephemeral erosional gully that was directly tributary to Feature A. It was divided and connected with a 12-inch culvert under what appeared to be a historic dirt road or trail no longer in use. The incised channel was approximately one foot in depth and did not have an associated bank, typical of erosional gullies. Ruderal non-native annual grasses and forbs were dominant throughout with some coastal sage scrub species such as deerweed and California buckwheat along the gully. No riparian vegetation was present. Soils throughout primarily consisted of coarse sandy loams. Feature A_1, an erosional gully with a direct connection to Feature A, is likely subject to MSHCP Section 6.1.2 Riparian/Riverine Areas policies as a "Riverine" area due to its direct connection to Feature A.

Feature A_2

Feature A_2 was a southerly flowing ephemeral erosional gully in the upstream end that was directly tributary to Feature A via culvert, rock riprap, then a concrete apron. Flows appeared to originate from runoff associated with the Silverado Lodge/Garage area and graded slopes associated with roadways. The incised channel in the upstream end was approximately six inches in depth and did not have an associated bank. Ruderal non-native annual grasses and forbs were dominant throughout with some coastal sage scrub species present. Evergreen buckthorn (*Rhamnus ilicifolia*), a native chaparral shrub, and Peruvian pepper tree, an ornamental, were also present. No riparian vegetation was present. Soils throughout primarily consisted of coarse sandy loams. Feature A_2 was divided and connected with two 30-inch culverts under the sports facility. The culverts discharged onto open rock riprap area near a building with a large coast live oak and California sycamore nearby. The flows then entered a concrete apron that discharged into Feature

A. Feature A_2 is likely subject to MSHCP Section 6.1.2 Riparian/Riverine Areas policies as a "Riverine" area due to its direct connection to Feature A.

Feature A_3

Feature A_3 was a southerly flowing ephemeral feature that originated from two erosional gullies. Runoff from the Silverado Lodge/Garage area and graded slopes associated with roadways also contributed to this feature which was observed directly by SBS personnel during a thunderstorm that produced substantial rainfall on February 12. The upstream erosional gullies discharged into an 18-inch culvert that was encased in cement under a dirt road and connected to an 8-foot-wide concrete V-ditch. Flows then exited the V-ditch creating a large erosional feature that was ultimately connected to Feature A via another 18-inch culvert. Ruderal non-native annual grasses and forbs were dominant throughout the natural areas with some sage scrub species present and Peruvian pepper tree in the downstream end. No riparian vegetation was present. Soils throughout primarily consisted of coarse sandy loams. Feature A_3 is likely subject to MSHCP Section 6.1.2 Riparian/Riverine Areas policies as a "Riverine" area due to its direct connection to Feature A.

5.1.3 Impacts

The Applicant, Architect, and Engineer designed the proposed Project to avoid impacts to potentially jurisdictional areas, including MSHCP Section 6.1.2 Riparian/Riverine Areas. *Figure 19 – Potential MSHCP Riparian/Riverine Areas w/Project Area* (Page 43) depicts areas where the tree canopy intersects with the footprint of the proposed DG roads.

Feature A

The Project's dirt roads will be surfaced with DG and widened to 20-feet and/or 24-feet per County requirements. Figure 19 depicts five locations near Feature A where the Project's roads intersect the mapped potential MSHCP Section 6.1.2 Riparian/Riverine Areas. These four areas consisted entirely of California sycamore and coast live oak canopy, not the bed or associated bank of the drainage. Some minor trimming of branches may be required in these three locations to allow the passage of a full-sized fire truck per County requirements. Areas where the potential road alignment and associated grading within the five-foot buffer area intersected the bed and bank of Feature A were reduced as depicted by Figure 19. The Project will not impact the bed or bank of Feature A.

Feature A_3

The new septic line leading from the Silverado Lodge to the west intersects with the Concrete V-Ditch portion of Feature A3. The Project will bore beneath the concrete ditch leaving the ditch intact.

Indirect Effects

The Project is not expected to produce disturbances that result in indirect effects on Riparian/Riverine Areas both during construction and post-construction. It is important to note that Feature A consisted entirely of a narrow bed and bank and did not support riparian vegetation such as willow or mule fat with the understory consisting of primarily grasses and forbs. Features A_1 and A_2 were essentially erosional gullies consisting entirely of upland vegetation but were connected to Feature A. Feature A_3 had the most pronounced bed and bank of all the areas but also consisted entirely of upland vegetation.

Best Management Practices (BMPs) described in Section 10.0 of this Analysis will be implemented during construction. The Project is considered very small-scale and the limited grading (i.e., temporary trailers, one new building, road widening) required will not alter the watersheds. Additionally, the Project will not generate excessive noise or lighting that would indirectly impact these areas.

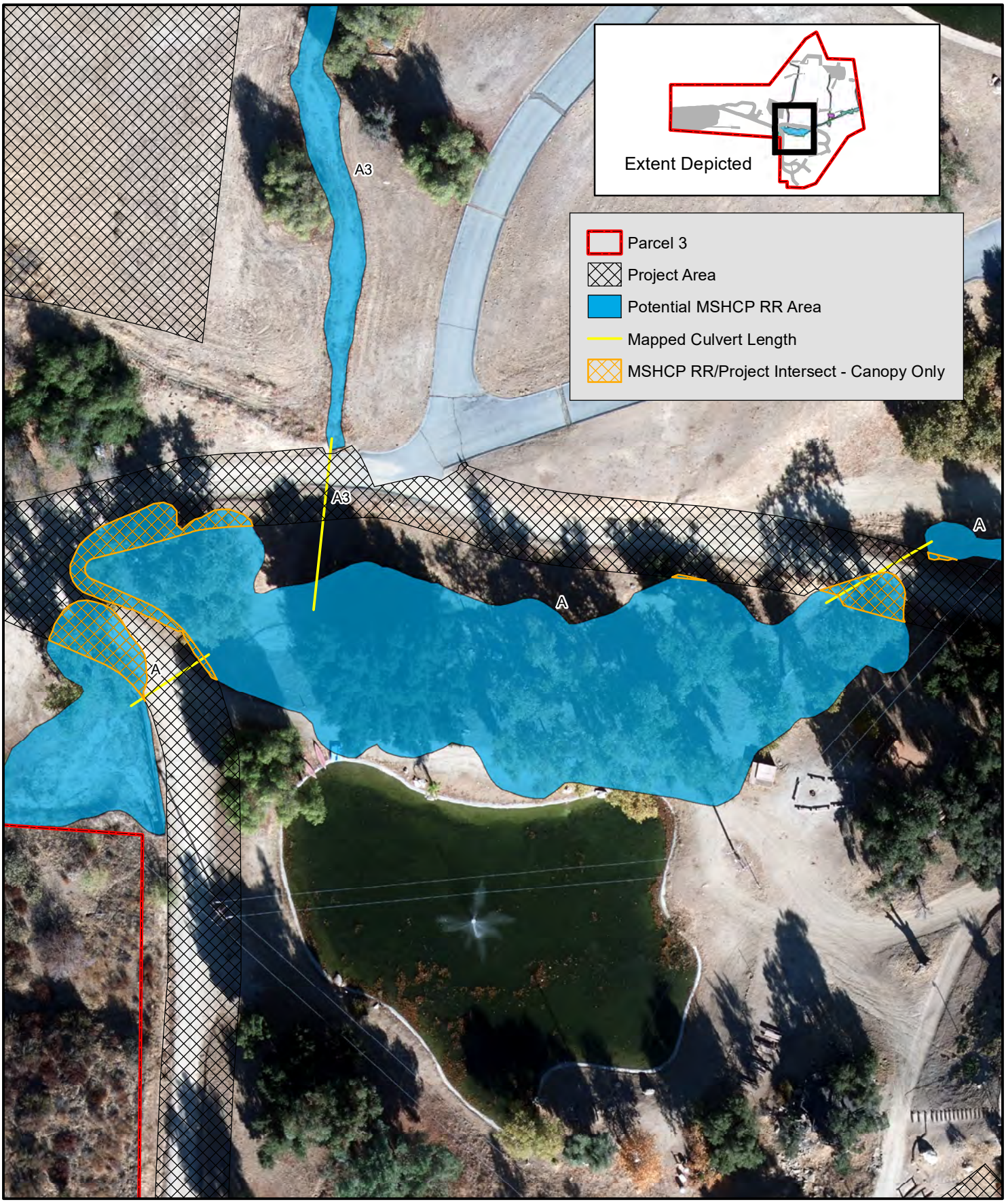

FIGURE 19
Potential MSHCP
Section 6.1.2
Riparian/Riverine Areas
w/Project Area

DATE: December 2, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M, SBS

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The ultimate use of the Project post-construction is also considered small-scale and essentially the same as what the Property is currently used for as a camp retreat. A CUP/discretionary action was only required for the Project due to the facility proposing to provide medical treatment. Housing and treating patients for Post-Traumatic Stress Disorder (PTSD) is not expected to generate indirect effects via excessive noise, lighting, or toxics on the Riparian/Riverine Areas.

5.1.4 Mitigation

No Riparian/Riverine Area mitigation is required. The Project is consistent with the Riparian/Riverine Areas section of MSHCP Section 6.1.2. The Project will place a "no impact/avoidance area" deed restriction over the MSHCP Section 6.1.2 Riparian/Riverine Area. The deed restriction will demonstrate that the areas will be avoided, and no impacts will occur from the Project, including fuel modification within the bed and bank. The deed restriction will be finalized as a condition of Project approval by the County.

5.2 Vernal Pools

According to MSHCP Section 6.1.2:

> ***Vernal pools*** *are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.*

5.2.1 Methods

The perimeter of a potential Vernal Pool is walked and mapped by creating a polygon utilizing Collector. Data collected while walking each potential Vernal Pool feature includes plant species composition, presence/absence of standing water, evidence of potential ponding (i.e., cracked mud), functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, and habitat suitability for RFS, VPFS, SRPFS.

5.2.2 Existing Conditions and Results

No evidence of vernal pools was recorded on Parcel 3. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools become completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (i.e., the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (i.e., lacking oxygen or air) develop. None of these conditions (i.e., no depressions, hydric soils, etc.) were observed on the Site and all soils are mapped as sandy/loams that do not retain water.

5.2.3 Impacts
No Vernal Pool impacts will occur due to the lack of Vernal Pools on Parcel 3.

5.2.4 Mitigation
No Vernal Pool mitigation is required. The Project is consistent with the Vernal Pool section of MSHCP Section 6.1.2.

5.3 Fairy Shrimp
According to Section 6.1.2 of the MSHCP:

> ***Fairy Shrimp*** *For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.*

5.3.1 Methods
The perimeter of a potential Fairy Shrimp Habitat feature is walked and mapped by creating a polygon utilizing Collector. Data collected while walking each potential Fairy Shrimp feature includes plant species composition, presence/absence of standing water, evidence of potential ponding (i.e., cracked mud), functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, and habitat suitability for RFS, VPFS, SRPFS.

5.3.2 Existing Conditions and Results
No suitable habitat for fairy shrimp was detected on Parcel 3. Similar to the vernal pool assessment, no features were detected that would support fairy shrimp. The soils within Parcel 3 consisted entirely of sandy loams, and no evidence of seasonal ponding was detected throughout.

The human-created ponds on Parcel 3 are sourced by well water and contain water year-round. Fairy shrimp require seasonal ponding to complete their life cycle, and therefore, these areas do not provide suitable habitat.

5.3.3 Impacts
No Fairy Shrimp impacts will occur due to the lack of Fairy Shrimp habitat on Parcel 3.

5.3.4 Mitigation
No Fairy Shrimp mitigation is required. The Project is consistent with the Fairy Shrimp section of MSHCP Section 6.1.2.

5.4 Riparian Birds
5.4.1 Methods
Potentially suitable habitat for LBVI, SWFL, and/or YBCU are mapped in the field utilizing Collector. Habitat assessments are conducted by SWFL and YBCU permitted biologist Tim Searl (Permit Number: TE02351A-1).

A polygon is created in the field utilizing Collector while walking the perimeter of potentially suitable habitat for riparian birds. Data collected while assessing the potential habitat includes characteristics such as vegetation community, dominant plant species present, plant densities, and presence or absence of surface water.

5.4.2 Existing Conditions and Results

No suitable habitat for LBVI, SWFL, or YBCU was present on Parcel 3. The central portion of Feature A consisted of an open coast live oak-California sycamore woodland but lacked key habitat requirements for all three bird species.

5.4.3 Impacts

No impacts will occur to Riparian Birds due to the lack of Riparian Bird habitat on or near Parcel 3.

5.4.4 Mitigation

No Riparian Bird mitigation is required. The Project is consistent with MSHCP Section 6.1.2.

6.0 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

Parcel 3 was not located within a designated assessment area for Narrow Endemic Plant Species.

7.0 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The MSHCP covers 146 species of plants and animals of which 40 species have specific survey requirements (Dudek & Associates, Inc., 2003). 34 of the 40 species have an associated survey area map that designates areas where surveys may be required if suitable habitat is present (Dudek & Associates, Inc., 2003). According to the MSHCP:

> *For locations with positive survey results, 90% of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species are met. Avoidance shall not be considered to be Conservation contributing to Reserve Assembly unless the avoided populations are acquired and managed as Additional Reserve Lands.*

7.1 Criteria Area Plant Species

Parcel 3 was not located within a designated assessment area for Criteria Area Plant Species.

7.2 Amphibians

Parcel 3 was not located within a designated assessment area for Amphibians.

7.3 Burrowing Owl

Parcel 3 was not located within a designated assessment area for Burrowing Owl.

7.4 Mammals

Nearly the entire Parcel 3 was located within a designated assessment area for LAPM as depicted by *Figure 20 – LAPM Assessment Area* (Page 47). A description of the MSHCP Objectives, LAPM assessment process, and LAPM assessment results are provided below.

7.4.1 Background

MSHCP LAPM Objectives

According to the MSHCP, LAPM is widely distributed in the eastern two-thirds of the MSHCP Plan Area, but recent known localities are sparsely scattered throughout this area. LAPM appears to be limited to sparsely vegetated areas in patches of fine, sandy soils typically associated with washes or of aeolian origin

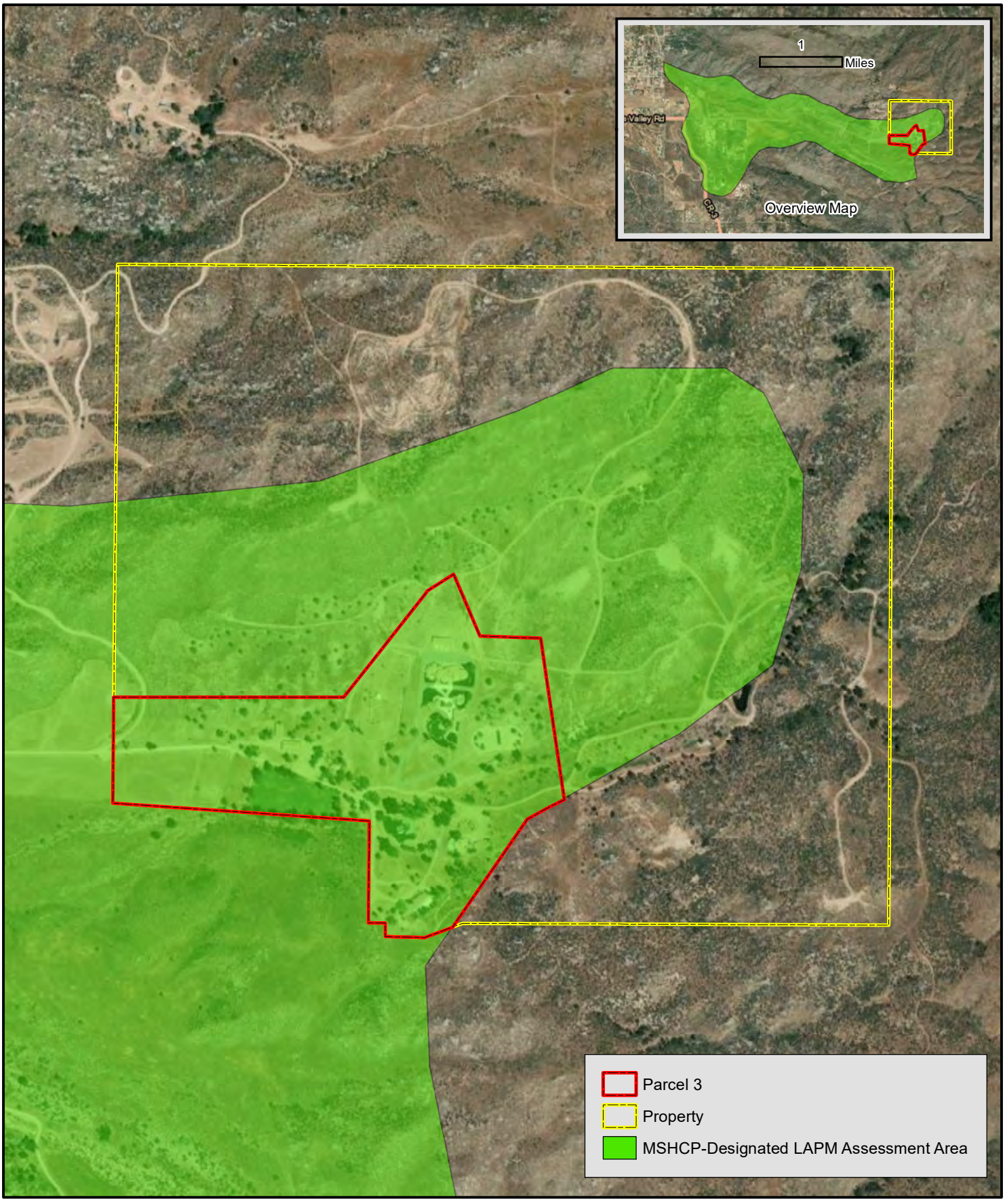

FIGURE 20
LAPM Assessment Area

DATE: December 2, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, 4M, Riverside County GIS Data

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(i.e., windblown habitats such as dunes). The status of LAPM populations in the MSHCP Plan Area is unknown; however, the consensus is that LAPM is in decline primarily due to habitat loss.

LAPM is a Group 3[16] species. The MSHCP conservation goals and objectives for LAPM are as follows:

Objective 1

Include within the MSHCP Conservation Area, at least 14,000 acres of suitable habitat for the Los Angeles pocket mouse (e.g., sandy to loamy-sand soils occurring in non-native grassland, Riversidean sage scrub, Riversidean alluvial fan sage scrub, desert scrub, playa and vernal pool, chaparral, or redshank chaparral habitat), with at least 2,000 acres within each of seven (7) Core Areas within the MSHCP Conservation Area. Based on existing population distribution information, probable Core Areas include the following: 1) San Jacinto Wildlife Area-Lake Perris Reserve, 2) the Badlands, 3) San Jacinto River and Bautista Creek, 4) Anza Valley, 5) Lake Skinner-Domenigoni Reserve, 6) Potrero Valley, and 7) Temecula Creek.

Objective 2

Include within the MSHCP Conservation Area at least 10,000 acres of suitable habitat for the Los Angeles pocket mouse outside of the probable Core Areas identified above, but within the Criteria Area. Criteria Area locations where additional habitat likely will be conserved include the Santa Ana River (northeast of Highway 60 and possibly in some areas downstream), Wilson Creek, Vail Lake, Warm Springs Creek, San Timoteo Creek, and San Gorgonio Wash.

Objective 3

Surveys for Los Angeles pocket mouse will be conducted as part of the project review process for public and private projects within the mammal species survey area where suitable habitat is present (see Mammal Species Survey Area Map, Figure 6-5 of the MSHCP, Volume I). Los Angeles pocket mice located as a result of survey efforts shall be conserved in accordance with the procedures described in Section 6.3.2 of the MSHCP, Volume 1. Survey and site-specific conservation efforts will continue until there is a minimum of seven Core Areas with at least 2,000 acres of suitable habitat within each core area, for a total of 14,000 acres of suitable habitat.

Objective 4

Within the MSHCP Conservation Area, Reserve Managers shall demonstrate that each of the seven Core Areas supports a stable or increasing population that occupies at least 30 percent of the suitable habitat (at least 4,200 acres) as measured over any 8-consecutive year period (i.e., the approximate length of the weather cycle).

[16] Take coverage is warranted based upon site specific considerations and the identification of specific conservation and management conditions for species within a narrowly defined Habitat or limited geographic area within the MSHCP Plan Area (Dudek & Associates, Inc., 2003).

Life History

The life history information provided herein was taken directly from the attached *Los Angeles Pocket Mouse Perognathus longimembris brevinasus Survey Results* report in Appendix H. The report was prepared by Arthur Davenport of Davenport Biological Services (DBS) specifically for HAN 200008.

The LAPM is one of 19 subspecies of little pocket mice (*Perognathus longimembris*) (Hall, 1981). The LAPM is one of two *P. longimembris* that occur on the coastal plain of southern California (i.e., south of the Transverse Range and west of the Peninsular Ranges). The marginal records for the distribution of the LAPM are San Fernando; San Bernardino; Cabazon; Aguanga; 4 kilometers (2.5 miles) N Oak Grove; Burbank (Hall, 1981).

Little pocket mice are small, have elongated skulls, nearly equal length front and hind legs, and external, fur-lined cheek pouches. The fur of little pocket mice lacks spines, as found in other genera of pocket mice (e.g., *Chaetodipus*), and is very fine. Adult little pocket mice are from 112 to 155 mm long (4 to 6 inches), and weighs from 7 to 12 grams (0.25 to 0.42 ounces [US]) (Ingles, 1965) (Hall, 1981).

Little pocket mice can enter torpor (become dormant) when environmental conditions become adverse (e.g., low food availability, cold, hot). During torpor, both breathing and heartbeat are reduced and energy is conserved. The species may remain in torpor for several months, depending on environmental conditions. In addition, individual LAPM within the same local population may enter torpor at different times, depending on the specific conditions found in their patch of habitat (Reichman & Price, 1993).

In general, the LAPM typically occurs within native plant communities where the aerial cover provided by shrubs and trees is low and the ground is largely devoid of vegetation or debris. LAPM occur within coastal sage scrub, alluvial fan scrub, introduced European grasslands, and herbaceous grasslands. Mr. Davenport has also observed this subspecies in associations of Great Basin sagebrush (*Artemisia tridentata*) which can occur at higher elevations. The LAPM is often found on sandy substrates where conditions are good for burrowing. Like other pocket mice, the LAPM predominantly collects and consumes seeds (e.g., grass), but will eat green vegetation as well as insects.

7.4.2 Methods

CNDDB Query

SBS conducted a query of the CNDDB GIS data to determine if LAPM have been documented within five miles of Parcel 3. The results of the query are presented in section 7.4.3 below.

Field Survey Dates and Survey Conditions

The LAPM assessment was conducted by Arthur Davenport with the assistance Tim Searl. The habitat assessment was conducted on April 20, 2021. A five-night focused trapping survey was conducted from May 24 to May 29, 2021. Weather conditions for the focused surveys were recorded in the evening when traps were set, and in the morning when traps were checked. *Table 10 – Field Assessment Conditions* (Page 50) provides the survey conditions during the assessment. The table also provides the conditions for general flora and fauna surveys conducted by Tim Searl on March 31 and April 1, 2021.

Habitat Assessment

Prior to initiating the field habitat assessment, the NRCS soils depicted on Figure 17 were reviewed in an effort to anticipate the suitability of the soils and potential distribution of LAPM. On April 20, 2021, Arthur Davenport and Tim Searl conducted the field LAPM habitat assessment on Parcel 3 and surrounding Property area within the MSHCP-designated LAPM Assessment Area. Habitat suitability for LAPM was

Table 10 – Field Assessment Conditions[17]

DATE	FIELD PERSONNEL	SURVEY TYPE[18]	SURVEY TIME	SUNRISE[19]	TEMPERATURE	HUMIDITY	CLOUD COVER	WIND SPEED	ANNUAL PRECIPITATION TO-DATE[20]	MOON PHASE
3/31/2021	Tim Searl	GEN	0645-1530	0637	50-87	33-12	0-0	3-5	4.74	Waning Gibbous
4/1/2021	Tim Searl	GEN	0630-1315	0636	55-94	26-12	0-60	2-5	4.74	Waning Gibbous
4/20/2021	Arthur Davenport Tim Searl	LAPM HA	0600-1330	0612	51-76	36-76	0-0	1-4	4.88	Waxing Gibbous
5/24/2021-5/25/2021	Arthur Davenport Tim Searl	LAPM FS	1530/0730	0542	94/71	9/25	0/0	1/0	4.88	Waxing Gibbous
5/25/2021-5/26/2021	Arthur Davenport Tim Searl	LAPM FS	1730/0800	0541	85/68	20/43	80/80	2/2	4.88	Waxing Gibbous
5/26/2021-5/27/2021	Arthur Davenport Tim Searl	LAPM FS	1730/0800	0541	77/58	18/86	0/5	3/2	4.88	Waning Gibbous
5/27/2021-5/28/2021	Arthur Davenport Tim Searl	LAPM FS	1730/0800	0540	80/64	26/58	0/0	0/1	4.88	Waning Gibbous
5/28/2021-5/29/2021	Arthur Davenport Tim Searl	LAPM FS	1730/0830	0540	80/60	25/77	10/10	5/0	4.88	Waning Gibbous

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[17] Temperature (Degrees Fahrenheit), Humidity (Relative; %), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel handheld weather meter and weathercurrents.com for the Hemet area (Weather Currents, 2021).
[18] GEN: General biological flora/fauna survey, LAPM HA: LAPM Habitat Assessment; LAPM FS: LAPM Focused Trapping Survey (Evening Start/Morning Stop).
[19] Sunrise and Moon Phase was obtained from the Hemet, California Weather Underground Website (Weather Underground, 2021).
[20] Annual Precipitation (July 01 to June 30) To-Date was obtained from the RCFC's Rain Gauge Map Website for Hemet-Ryan Field – Station No. 180 (Riverside County Flood Control and Water Conservation District, 2021).

classified and mapped as Not Suitable[21], Low[22], Moderate[23], or High[24] based primarily on vegetation cover and soil conditions.

Focused Surveys

Focused trapping for LAPM was initiated on the evening of May 24, 2021 and concluded on the morning of May 29, 2021. Trapping was conducted by Arthur Davenport under Scientific Collecting Permit 8469 and associated Memorandum of Understanding (MOU) with CDFW. Tim Searl assisted with the trapping effort on the evening of May 24 and on the mornings of May 25 through May 29.

All the habitats located within Parcel 3 that were determined to be suitable for LAPM were sampled. One-hundred 12-inch Sherman folding live-traps were baited with rolled oats and distributed within both low and moderate quality habitat to maximize the potential of detecting LAPM. Traps were spaced approximately 10-meters apart along transects which sampled Parcel 3.

A total of 100 locations were trapped for five consecutive nights for a total of 500 trap-nights. Weather conditions were checked by Arthur Davenport near midnight, and weather conditions permitting, the traps were then checked and cleared in the morning. The traps were closed during the day and reopened and baited each evening. All traps were washed and disinfected with a 10% bleach solution before being deployed in the field. Upon completion of the survey, all traps, trap bags, boots and other equipment that were used in the field were also disinfected with a 10% bleach solution.

7.4.3 Existing Conditions and Results

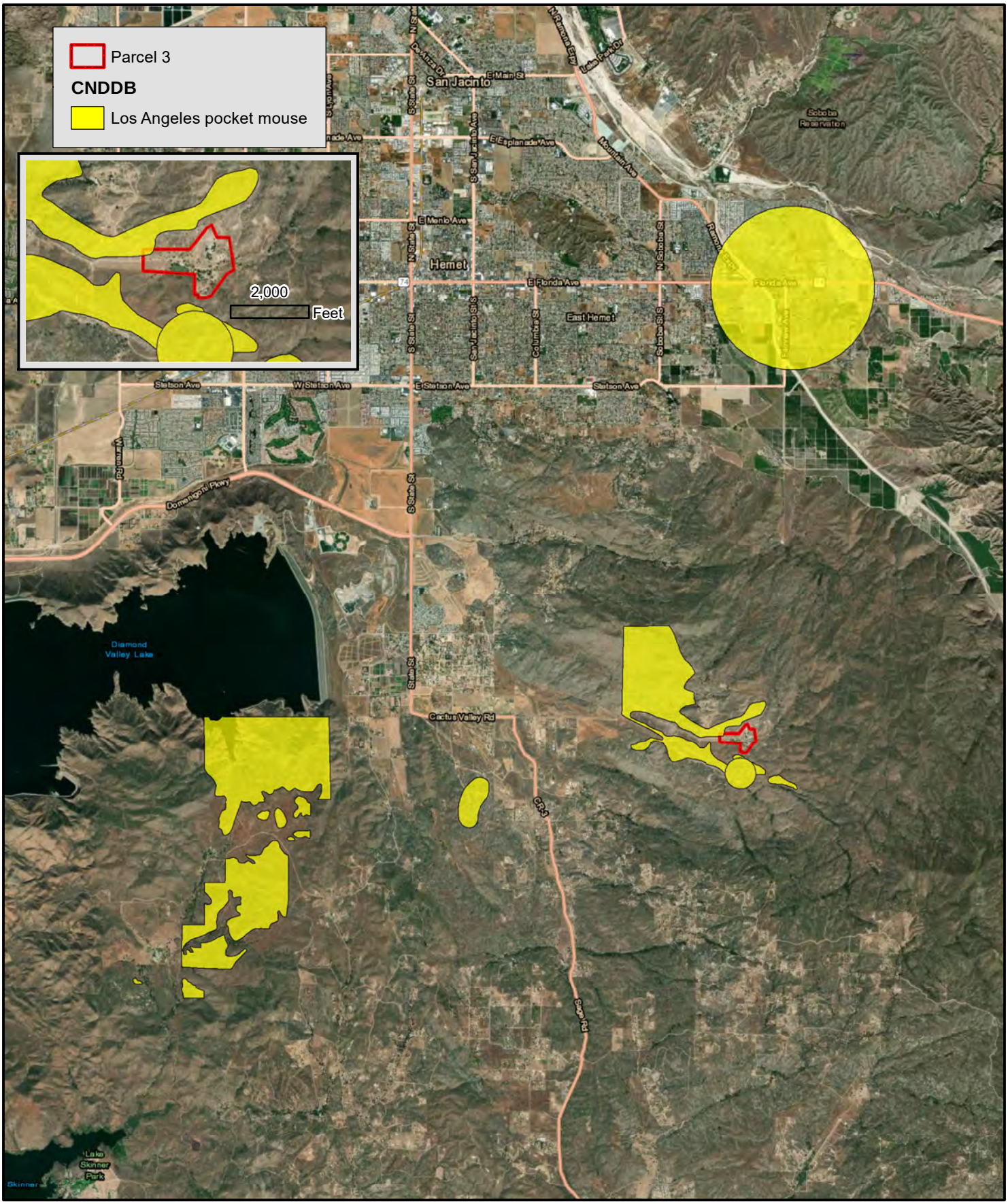
CNDDB Query

According to the CNDDB, a total of five records from 1908 (1 record), 1990 (3 records), and 1991 (1 record) of LAPM have been reported within five miles of Parcel 3. This includes a 1990 mapped area that crosses the northwest corner of Parcel 3 and continues northeast on the Property. The CNDDB states that areas associated with this record: "exact capture locations and number of individuals are not stated in report" and that this location was identified as "a potential mitigation site for Eastside Reservoir" (now the Diamond Valley Reservoir). The results of the query are depicted on *Figure 21 – LAPM Query Results* (Page 52).

Habitat Assessment

DBS and SBS identified 23.88-acres of suitable LAPM habitat within Parcel 3. This included 12.22-acres of Low suitability, 11.66-acres of Moderate suitability, and 0.002-acre (95.81-sf) of High suitability habitat. *Figure 22 – LAPM Habitat Suitability/Trapline Locations* (Page 53) depicts the results of the habitat assessment and the trapline locations used to sample Parcel 3 during the focused survey. The areas not mapped on Figure 22 were Not Suitable for LAPM.

[21] The habitat lacks the required characteristics to support LAPM. Examples include developed land, severely compacted soils, very dense chaparral, and very dense or matted non-native grasses/forbs.
[22] The habitat is structurally suitable; however, factors such as the presence of non-native grasses and forbs, compacted soils, ornamental trees/shrubs, etc. have reduced the quality of the habitat to where LAPM occurrence is highly unlikely. No burrows consistent with those dug by LAPM observed.
[23] The habitat is structurally suitable with less of the above degrading factors. Moderate suitability areas primarily consisted of mowed areas where soils were suitable for burrowing animals. Some burrows consistent with those dug by LAPM observed.
[24] This habitat consisted of intact coastal sage scrub with very few non-native grasses and forbs present. Several burrows consistent with those dug by LAPM observed.



N

0 1 2 4 Miles

1:100,000

FIGURE 21
LAPM Query Results

DATE: December 2, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, 4M, CNDDB

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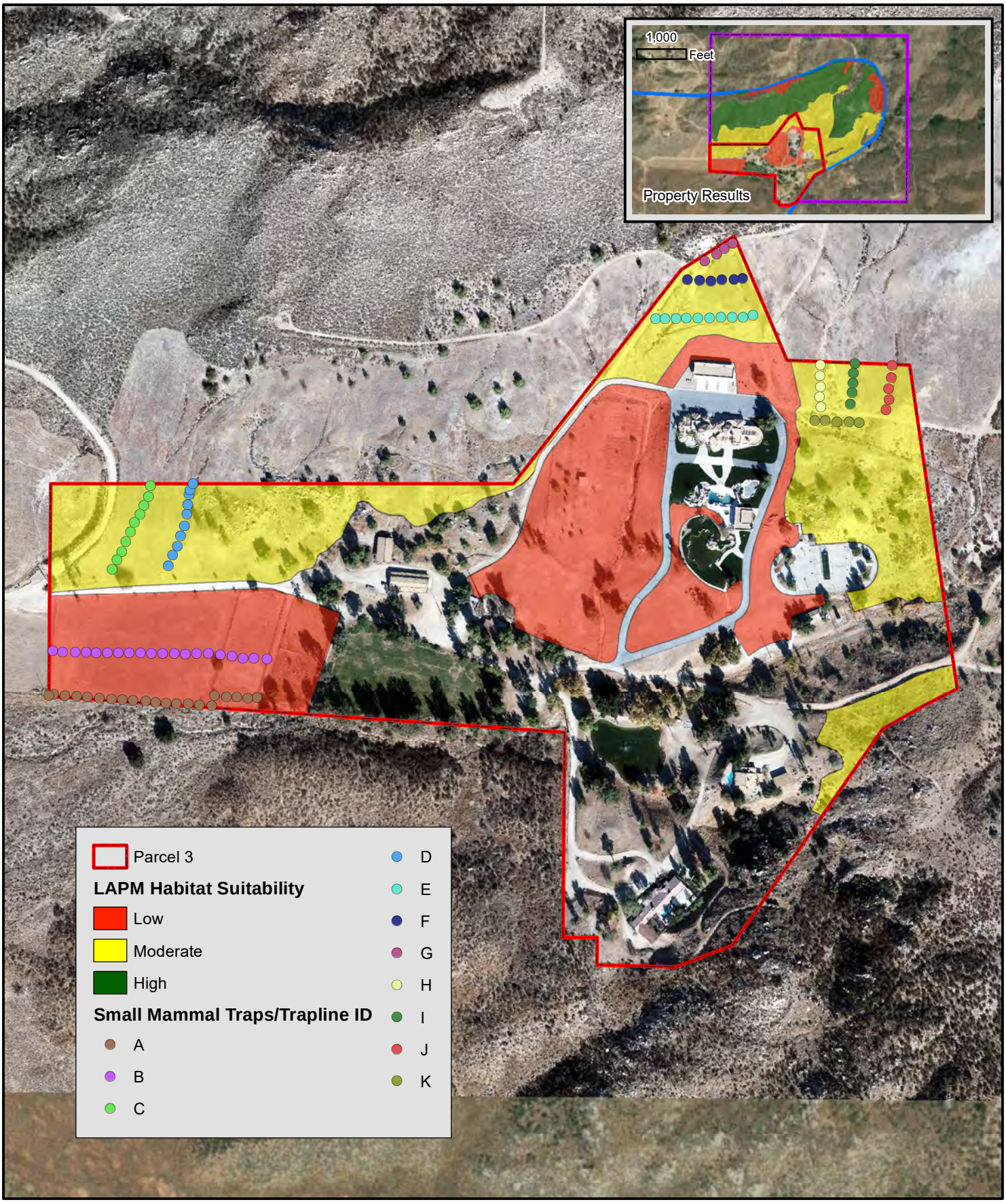

N

0 125 250 500 750 1,000 Feet

1 inch = 332 feet

FIGURE 22
LAPM Habitat Suitability/ Trapline Locations

DATE: December 2, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, 4M, Riverside County GIS Data, DBS, SBS

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Low Suitability

The Low-quality habitat associated with the central portion of Parcel 3 consisted of compacted soils which was likely the result of historic grading activities associated with the construction of the lodge, roads, and sports courts. No burrows consistent with those constructed by LAPM were detected throughout this area. The Low-quality habitat in the southwestern corner of Parcel 3 was a pasture area. This area also consisted of compacted soils, though to a lesser degree than the other Low-quality habitat areas. This area was considered the best of the Low-quality areas due to it being located immediately adjacent to Cactus Valley. No burrows consistent with those constructed by LAPM were detected throughout this area.

Moderate Suitability

The Moderate-quality habitat was similar throughout Parcel 3 which consisted of mowed areas that were maintained for the purpose of fire protection. The substrates were suitable for fossorial small mammals (i.e., deer mouse, pocket mouse, etc.). DBS and SBS detected some burrows consistent with those dug by LAPM.

High Suitability

Parcel 3 only contained approximately 96-sf of High-quality habitat in the far northern extent. This area was located on the north side of a dirt road and consisted of intact brittle bush scrub with an open understory of very few non-native grasses and forbs. DBS and SBS detected several burrows consistent with those dug by LAPM in the greater area of High-quality habitat located on the Property but outside of Parcel 3.

Surrounding Property Area

Though not a part of the Project, DBS and SBS conducted the habitat assessment for LAPM within the entire MSHCP-designated LAPM Assessment Area on the Property, including areas outside of Parcel 3, prior to knowing that Parcel 3 would be the only area associated with the Project. Those areas assessed included an additional 51.34-acres of High suitability and 33.53-acres of Moderate suitability for LAPM. Areas of High and Moderate suitability were considered to have long-term conservation value (LTCV) for LAPM.

Focused Surveys

Six individual LAPM were captured a total of nine times (three recaptures) during the 500-night trapping program. LAPM was detected along traplines D, G, I, and K which were all located within Moderate-quality habitat as depicted by *Figure 23 – LAPM Detection Locations* (Page 55). Based on these results, Davenport's report (Appendix G) concluded that LAPM are anticipated to occur throughout the Moderate and High-quality habitat on Parcel 3 and surrounding Property area. Areas of High and Moderate suitability were considered to have LTCV for LAPM.

In addition to LAPM, six other rodent species were detected during the focused trapping. This included California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), Dulzura kangaroo rat (*Dipodomys simulans*), San Diego desert woodrat (*Neotoma lepida intermedia*), and deer mouse (*Peromyscus maniculatus*).

No federal and/or state listed Endangered, Threatened, or Candidate species were detected during the surveys. Three CDFW Species of Special Concern[25] (SSC) were detected and included LAPM,

[25] It is the goal and responsibility of CDFW to maintain viable populations of all native species, and to that end, the CDFW has designated certain vertebrate species as SSC because of declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction (California Department of Fish and Wildlife, 2021).

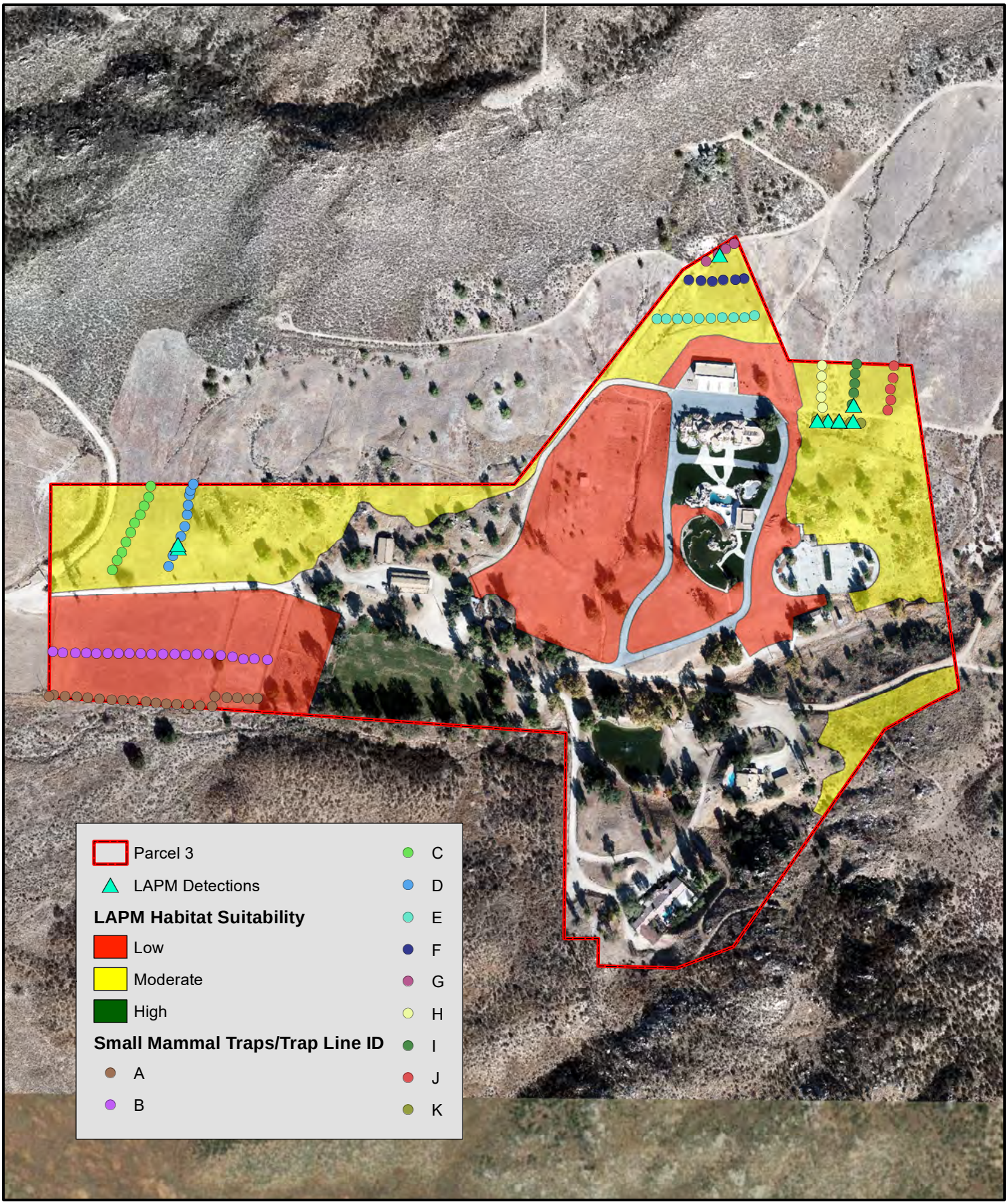

FIGURE 23
LAPM Detection Locations

DATE: December 2, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, 4M, Riverside County GIS Data, DBS, SBS

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northwestern San Diego pocket mouse, and San Diego desert woodrat; all of which are MSHCP Covered Species.

7.4.4 Impacts

Parcel 3 supported 11.66-acres of LTCV habitat for LAPM based on the trapping results. Although LAPM may utilize the Low-quality habitat on occasion to disperse, the compacted substrates likely preclude LAPM from occupying these areas, and therefore, do not provide LTCV for LAPM.

Initially, the Project was proposing Private Solar within the LTCV habitat north of the garage in the northern end of Parcel 3, and in the western end of Parcel 3. The Project Applicant removed these proposed solar panels to reduce potential impacts to LAPM within Parcel 3, keeping only the essential new lodge/care facility in the northeastern end as part of Phase 2 and new Septic systems within the LTCV. The Septic impacts will likely be temporary as those areas will likely relegate to current conditions. The total impact from the new building, associated WQMP basin, some required road widening, and the Septic will total 0.75-acre which accounts for 6.4% of the LTCV within Parcel 3. This is within the 10% impact threshold, and therefore, a DBESP and mitigation are not required per the MSHCP. Project impacts are depicted on *Figure 24 – LAPM Long-Term Conservation Value Habitat/Project Impact* (Page 57).

Though the surrounding Property area was not a part of this Project, the area within the MSHCP-designated LAPM Assessment Area provides an additional 84.87-acres of LTCV habitat for LAPM, and based on the trapping results for Parcel 3, these areas likely support a substantial population of LAPM. When those areas are factored into the LTCV habitat impact, the Project will only impact 0.78% of the 96.54-acres of LTCV habitat on the Property. The Applicant will continue to manage and maintain these areas as currently conducted and have been over the past 50-plus years.

Site Disturbance History

The entire 47.75-acre area of Parcel 3 has a long-documented history of maintenance activities that result in disturbance such as the wildfire mitigation measures mentioned above and in Section 2 of this Analysis. The Moderate quality habitat within Parcel 3, which was also determined to be occupied by LAPM, was maintained for these purposes. Therefore, fuel modification within these areas, which have been maintained in this manner for over 50 years, was not an impact on LAPM. The only new and permanent disturbance will be the new Phase 2 facility's footprint which totaled 0.61-acre within LTCV habitat. The WQMP basin (0.05-acre), septic systems (0.07-acre), and road widening (0.02-acre) will initially result in direct impacts to LTCV; however, over time these areas will likely relegate to current conditions and thus result in temporary impacts.

Indirect Effects

The small-scale Project is not expected to generate disturbances that would cause negative indirect effects on avoided LTCV habitat for LAPM. Further, the Project is not expected to negatively impact LTCV habitat on the greater Property area. Habitat will remain connected to the east, north, and most importantly to the west where high-quality habitat eventually connects to Cactus Valley. The alluvial coastal sage scrub habitats within Cactus Valley likely provide the highest quality habitat in the area. The construction of one building and associated septic systems/WQMP basin, and minor road widening on 0.75-acre will not impact or impede LAPM connectivity. Parcel 3 and the greater Property area was located in the far eastern end of the LAPM Assessment Area for Cactus Valley. The previously referenced Figure 24 depicts the LAPM habitat connectivity both on the greater Property area and offsite to the west.

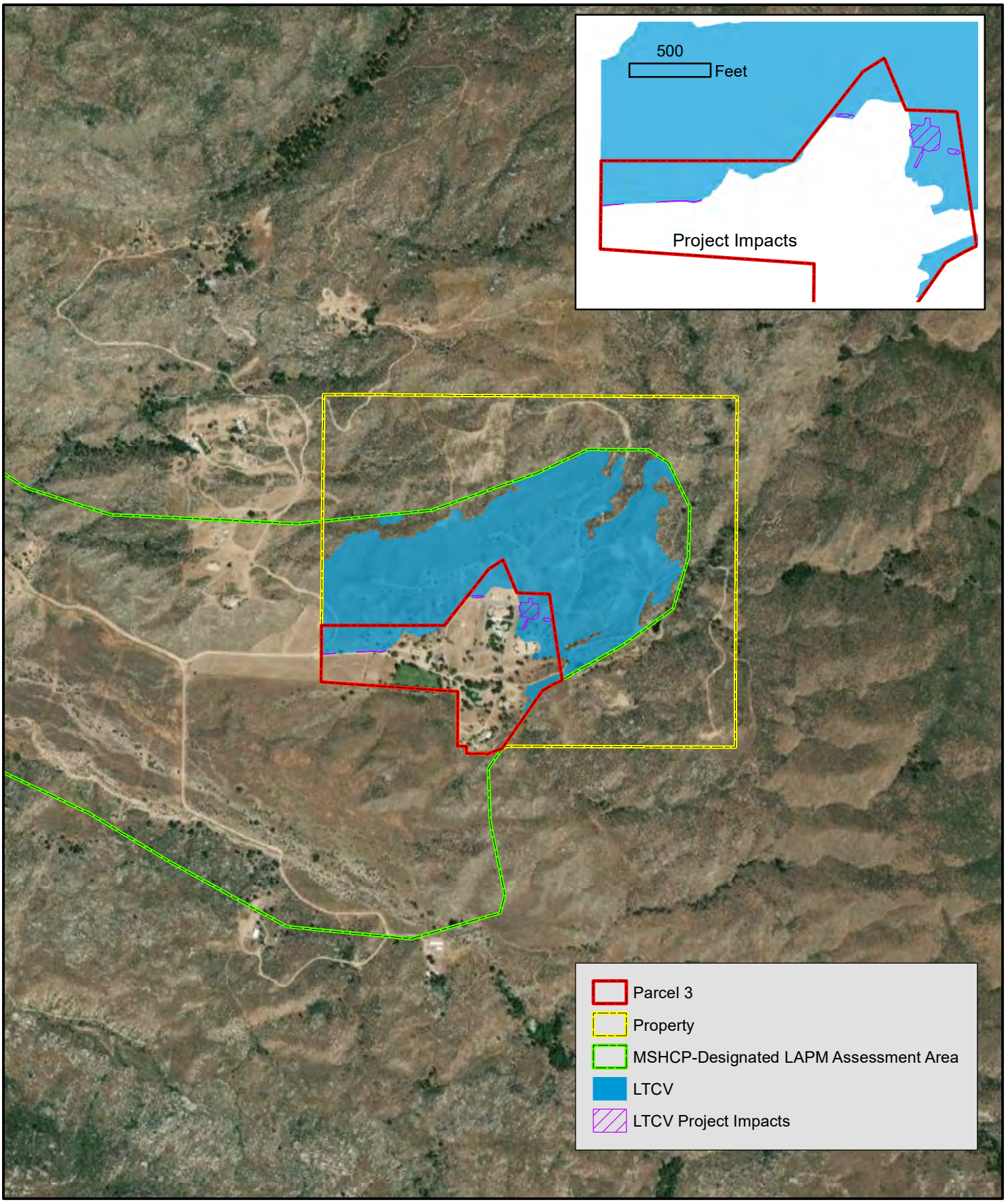

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FIGURE 24
LAPM Long-Term Conservation Value Habitat/Project Impact

DATE: January 19, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M, DBS, SBS

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7.4.5 Mitigation

The Project will impact 6.4% of the LTCV habitat within Parcel 3. This is within the 10% impact threshold; therefore, no mitigation is required.

8.0 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

Parcel 3 was not located in an area with Delhi sands.

8.2 Species Not Adequately Conserved

No species listed in MSHCP Table 9-3 (Dudek & Associates, Inc., 2003) were detected on or near Parcel 3.

8.3 Additional Regulatory-Status Species Requiring Special Consideration

8.3.1 Coast Live Oak

The County protects native oak trees and oak woodlands through the *Riverside County Oak Tree Management Guidelines* (Riverside County, 1993), and *Ordinance No. 559* (Riverside County, 1977) which is not applicable to this Project given its below 5000-feet msl. Based on *Figure 25 – Native Trees* (Page 59), The Project will likely require the removal of one planted coast live oak in the western end. This oak was a healthy, irrigated tree with a diameter at breast height (DBH) of 25. Other trees depicted on Figure 25 were located near the future road width plus five-foot buffer area, but not within footprint.

Coast Live Oak Mitigation

The Project's landscape plan includes 21 coast live oak 24-inch box sized trees. These plantings will offset the removal of one planted coast live oak.

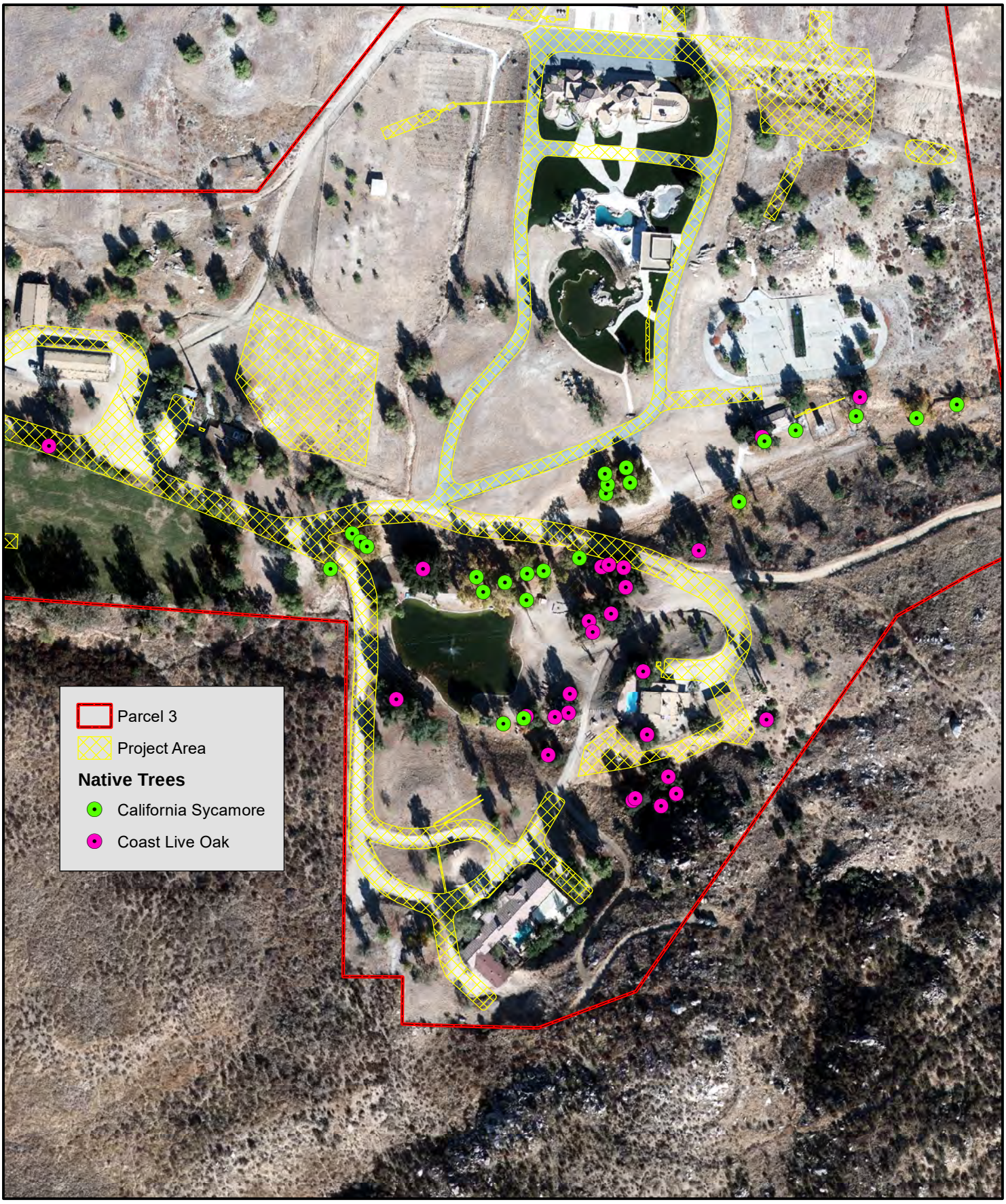
8.3.2 Coastal California Gnatcatcher

Coastal California Gnatcatcher (*Polioptila californica californica*) (CAGN) was detected at three locations near Parcel 3 during surveys on February 11, 12, and April 20, 2021. The three locations are depicted on *Figure 26 – CAGN Detections* (Page 60) and included a singing male (Feb. 11), pair (Feb. 12), and family group with recently fledged young (Apr. 20). The family group was using an area of brittle bush scrub near the nest which was also constructed in a brittle bush and represents the marked location for the "Family Group" depicted on Figure 26.

CAGN Mitigation

SBS recommends the following mitigation measures to reduce the potential of construction related direct and/or indirect impacts during road widening and Phase 2 grading operations.

1. A CAGN-permitted biologist shall be designated and responsible for overseeing compliance with avoidance measures (e.g., pre-construction surveys, buffers) for CAGN during grading activities.
2. If grading occurs during the CAGN nesting season, at least three presence/absence surveys shall be conducted one week apart per the *USFWS CAGN Presence/Absence Survey Guidelines* (U. S. Fish & Wildlife Service, 1997) between February 15 and August 30 prior to the commencement of grading activities.
3. If grading occurs during the CAGN nesting season, a CAGN-permitted biologist shall conduct full-time biological monitoring during grading operations and will have the authority to establish a 300-foot no disturbance buffer around active nests if present.



BSEARL BIOLOGICAL SERVICES

N

0 70 140 280 420 560 Feet

1 inch = 192 feet

FIGURE 25
Native Trees

DATE: March 1, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: High Res Imagery, 4M, SBS

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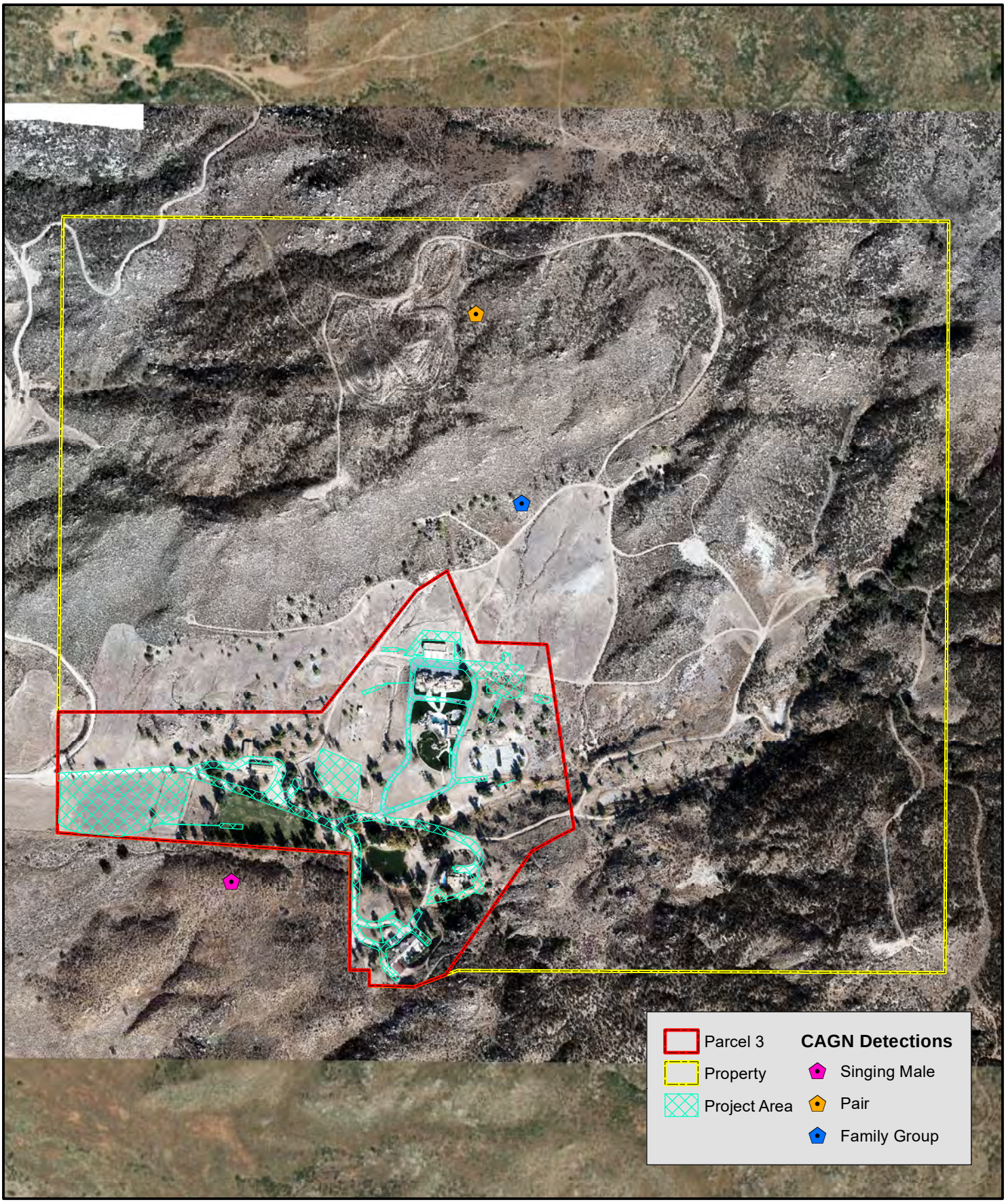

FIGURE 26
CAGN Detections

DATE: March 1, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M, SBS

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8.4 Nesting Birds

The Migratory Bird Treaty Act of 1918 (MBTA) created an *"Establishment of a Federal prohibition, unless permitted by regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention . . . for the protection of migratory birds . . . or any part, nest, or egg of any such bird."*

Further, the California Fish and Game Code (CFGC) states the following:

CFGC 3503: *"It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto."*

CFGC 3503.5: *"It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."*

Nesting Bird Mitigation

If construction activities occur during the nesting bird season (i.e., January 1 – August 31 for raptors and hummingbirds; February 1 – August 31 for all other birds), then a pre-construction nesting bird survey shall be conducted prior to and within three days of construction activities. The biologist shall have the authority to establish no disturbance buffers with the distances determined by factors such as species, tolerance of disturbance, nest status, etc.

If nesting bird surveys result in the need for a biological monitor to be present during construction activities, then one shall be present full-time to monitor construction activities to ensure no direct or indirect impacts occur to potential nest success. The biologist shall have the authority to suspend construction activities if potential impacts are observed.

9.0 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

MSHCP Section 6.1.4 provides recommendations and guidelines to minimize potential "edge effects"[26] resulting from locating development projects near the MSHCP Reserve Assembly or MSHCP conserved resources. Measures, such as buffers and/or barriers, are typically put in place to control drainage, toxics, lighting, noise, and invasives.

The following 6.1.4 Guidelines will be implemented to minimize edge effects to the nearby conserved lands and habitats.

- Drainage: The Project will implement the applicable BMPs described below in Section 10.0. The Project is not expected to alter the current drainage patterns on Parcel 3 due to the Project avoiding all potentially jurisdictional/MSHCP Riparian/Riverine Areas. The Project is proposing a WQMP basin in the western portion of Parcel 3 near the proposed temporary trailers and parking area. This basin will ensure that the quality of the surface runoff is not altered in an adverse way, compared

[26] Edge effects are defined by the MSHCP as "Adverse direct and indirect effects to species, Habitats and Vegetation Communities along the natural urban/wildlands interface. May include predation by mesopredators (including native and non-native predators), invasion by exotic species, noise, lighting, urban runoff and other anthropogenic impacts (trampling of vegetation, trash and toxic materials dumping, etc.)."

to current conditions, prior to discharging to the ARL south of Parcel 3. The basin's size and function are detailed further in the Applicant's WQMP.

- Toxics: The Project will implement the BMPs described below in section 10.0; however, the Project is not expected to generate or discharge toxins.
- Lighting: Any Project lighting installed near the Development/Conservation boundary shall be shielded or directed as to not shine directly into the nearby ARL areas.
- Noise: The Project is not expected to produce any amount of noise that would be considered an impact to wildlife utilizing the nearby ARL areas.
- Invasives: Project landscaping will avoid those listed in Table 6-2 of the MSHCP which is also provided in Appendix I of this document. Further, the Project should be landscaped with the appropriate native species such as coast live oak and California sycamore.
- Barriers: The Project is not proposing new fencing; however, a barbed wire fence is currently present along Parcel 3's southern boundary where ARL is present. Signs shall be attached to the existing fence stating, "Conservation Area Beyond This Point" or "Environmentally Sensitive Area," or utilize those the County/RCA utilize to demarcate conservation areas.
- Grading/Land Development: No grading or land development will extend into the ARL area.

10.0 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

The following BMPs, taken directly from the MSHCP (Dudek & Associates, Inc., 2003), should be implemented to the extent feasible and where applicable.

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from

reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.

8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS [USFWS], and CDFG [CDFW], RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

11.0 REFERENCES

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12.0 CERTIFICATION

I hereby certify that the statements furnished above, the associated figures, and the attached appendices present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed: Tim Searl Date: March 1, 2022

Tim Searl, Owner/Biologist, Searl Biological Services
Permit Number: TE02351A-1

FIGURE DISCLAIMER

Figures and data are to be used for reference purposes only. Map features are approximate and are not necessarily accurate to surveying or engineering standards. Tim Searl, SBS makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on any of the Figures associated with this report.

APPENDIX A

Recorded Lot Line Adjustment

COUNTY OF RIVERSIDE
TRANSPORTATION AND LAND MANAGEMENT AGENCY

Patricia Romo, P.E.
Director of Transportation

Transportation Department

Mojahed Salama, P.E.
Deputy for Transportation/Capital Projects
Richard Lantis, P.L.S.
Deputy for Transportation/Planning and Development

November 8, 2021

PVR Management, LLC
Kenneth Jackson
8895 Research Dr Unit 200
Irvine, CA 92618

RE: Lot Line Adjustment No. 210115

Dear Applicant:

This notice is to inform you of the CONDITIONAL APPROVAL of the above referenced application pursuant to Section 20.1 of Riverside County Ordinance No. 460.

This application is tentatively approved and has been found to be in compliance with Riverside County Land Use ordinance 348 and the County General Plan.

This letter is your authorization to have new deeds prepared based upon the configurations in the approved exhibit(s) shown in the recorded Notice of LLA. Each lot resulting from said recorded Notice of Lot Line Adjustment requires a "new" deed" to be recorded with the County Recorder's Office, vesting in the name of the owner(s) based on the new configurations. The new deeds shall contain the following language: "This document is being recorded pursuant to the tentative approval of Lot Line Adjustment No. 210115 recorded on November 8, 2021 as Document number 2021-0664213". Recordation of new deeds is required: 1) prior to the issuance of any building permits; 2) to assure the accurate reflection of this action by the County Surveyor and County Assessor; and, 3) Prior to sale or subdivision.

Applications for Lot Line Adjustment SHALL NOT BE CONSIDERED FINAL until the Notice of LLA, Exhibits "A" and "B," and new deeds reflecting the adjustment have been recorded with the Office of the County Recorder. The conditional approval of this Lot Line Adjustment is valid for a period of One year, and recordation of the new deeds, together with the Notice and Exhibits must be accomplished within that time period or this conditional approval shall be considered null and void and of no effect whatsoever.

Sincerely,

Dennis Odenbaugh PLS
Senior Land Surveyor

CC: File

RECORDING REQUESTED BY
RIVERSIDE COUNTY

When recorded, return to:

Riverside County Transportation Department
8th Floor County Administrative Center
4080 Lemon Street, Riverside, Ca. 92502-1409

Mail Stop # 1080

No Fee, 6103 Government Code
Benefit of Riverside County Transportation Dept.

THIS AREA FOR RECORDER'S USE ONLY

DOC # 2021-0664213
11/08/2021 11:14 AM Fees: $0.00
Page 1 of 9
Recorded in Official Records
County of Riverside
Peter Aldana
Assessor-County Clerk-Recorder

**This document was electronically submitted
to the County of Riverside for recording**
Receipted by: ALEJANDRA#1032

NOTICE OF LOT LINE ADJUSTMENT NO. LLA210115

RECORD OWNERS	EXISTING PARCELS (Assessor Parcel Numbers)
PVR Management, LLC, a California limited liability company	569-020-013, 024, 025 and 026

LEGAL DESCRIPTION OF ADJUSTED PARCELS

See attached Legal Description- Exhibit "A"

SIGNATURE(S) OF RECORDED OWNER(S) *(Must be Notarized)*

Kenneth W. Jackson, Managing Owner Signature:

RIVERSIDE COUNTY SURVEYOR'S APPROVAL

This document reviewed and approved by Riverside County Surveyor.

LICENSED LAND SURVEYOR
DAVID L. MCMILLAN
No. 8488
Exp. 12-31-22
STATE OF CALIFORNIA

By: _____ Date: 11-8-2021

NOTARY ACKNOWLEDGEMENT

STATE OF CALIFORNIA)
COUNTY OF Orange)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

On 10-19-2021, before me, Aubry Edwards, Notary Public personally appeared Kenneth W. Jackson who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Notary Public

AUBRY EDWARDS
COMM...2255391
NOTARY PUBLIC-CALIFORNIA
ORANGE COUNTY
My Term Exp. August 23, 2022

EXHIBIT "A"– LEGAL DESCRIPTION
LOT LINE ADJUSTMENT NO. LLA210115

SHEET 1 OF 4 SHEETS

PARCEL 1:

IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, THAT PORTION OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SECTION 8, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SAN BERNARDINO MERIDIAN, ALSO BEING A PORTION OF PARCEL "A" OF LOT LINE ADJUSTMENT NO. 4431, REC. JULY 15, 2002 AS DOC. NO. 2002-386378 OF OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:

***BEGINNING** AT THE NORTHWEST CORNER OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8;*

THENCE ALONG THE WEST LINE OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE WEST LINE OF PARCEL "A" OF SAID LOT LINE ADJUSTMENT 4431, SOUTH 00°01'09" WEST, 2216.93 FEET;

THENCE LEAVING SAID LINE, NORTH 89°30'38" EAST, 1178.16 FEET;

THENCE NORTH 37°37"58" EAST, 223.68 FEET TO A POINT ON THE EAST LINE OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE EAST LINE OF PARCEL "A" OF SAID LOT LINE ADJUSTMENT 4431;

THENCE ALONG SAID EAST LINE, NORTH 00°02'27" EAST, 2032.82 FEET TO THE NORTHEAST CORNER OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE NORTH ONE QUARTER CORNER OF SAID SECTION 8;

*THENCE ALONG THE NORTH LINE OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE NORTH LINE OF PARCEL "A" OF SAID LOT LINE ADJUSTMENT 4431, SOUTH 89°51'55" WEST, 1315.40 FEET TO THE **POINT OF BEGINNING.***

TOGETHER WITH A FORTY FOOT (40') WIDE INGRESS AND EGRESS EASEMENT FOR ACCESS PURPOSES WITHIN AND ACROSS PARCEL 3 FOR THE BENEFIT OF PARCEL 1, PER DOC. NO. 2021-0496034, 8-18-2021 AS SHOWN ON SHEET B-3.

THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 66.53 ACRES (2,897,853 S.F.), MORE OR LESS.

SEE EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

PARCEL 2:

IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, THAT PORTION OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SECTION 8, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SAN BERNARDINO MERIDIAN, AND THAT PORTION OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8, AND THAT PORTION OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8, ALSO BEING A PORTION OF PARCEL "B" AND PARCEL "C" OF LOT LINE ADJUSTMENT NO. 4431, REC. JULY 15, 2002 AS DOC. NO. 2002-386378 OF OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:

***BEGINNING** AT THE NORTHEAST CORNER OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SAID SECTION 8;*

Prepared: June, 2021
Assessor's Parcel Numbers: 569-020-013, 024, 025, 026

EXHIBIT "A"– LEGAL DESCRIPTION
LOT LINE ADJUSTMENT NO. LLA210115

SHEET 2 OF 4 SHEETS

PARCEL 2 Cont.:

THENCE ALONG THE NORTH LINE OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE NORTH LINE OF SAID PARCEL "B" OF SAID LOT LINE ADJUSTMENT 4431, SOUTH 89°55'40" WEST, 2656.99 FEET TO THE NORTHWEST CORNER OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SAID SECTION 8;

THENCE ALONG THE WEST LINE OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE WEST LINE OF SAID PARCEL "B" OF SAID LOT LINE ADJUSTMENT 4431, SOUTH 00°02'27" WEST, 694.07 FEET;

THENCE LEAVING SAID LINE, NORTH 37°37'58" EAST, 469.57 FEET;

THENCE NORTH 57°23'58" EAST, 158.22 FEET;

THENCE SOUTH 23°39'34" EAST, 343.16 FEET;

THENCE SOUTH 88°20'26" EAST, 311.44 FEET;

THENCE SOUTH 08°52'02" EAST, 833.92 FEET;

THENCE SOUTH 63°11'51" WEST, 86.65 FEET;

THENCE SOUTH 60°03'33" WEST, 128.58 FEET;

THENCE SOUTH 34°18'20" WEST, 672.14 FEET TO A POINT ON THE SOUTH LINE OF PARCEL "C" OF SAID LOT LINE ADJUSTMENT 4431;

THENCE ALONG SAID SOUTH LINE, NORTH 68°55'32" EAST, 55.03 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8;

THENCE ALONG THE SOUTH LINE OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE SOUTH LINE OF SAID PARCEL "C" OF SAID LOT LINE ADJUSTMENT 4431, NORTH 89°46'22" EAST, 2183.19 FEET TO THE SOUTHEAST CORNER OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8;

THENCE ALONG THE EAST LINE OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE EAST LINE OF SAID PARCEL "C" OF SAID LOT LINE ADJUSTMENT 4431, NORTH 00°12'05" WEST, 672.51 FEET TO THE NORTHEAST CORNER OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8, ALSO BEING A POINT ON THE SOUTH LINE OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SAID SECTION 8, ALSO BEING A POINT ON THE SOUTH LINE OF SAID PARCEL "B" OF SAID LOT LINE ADJUSTMENT 4431;

THENCE ALONG THE EAST LINE OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE EAST LINE OF SAID PARCEL "B" OF SAID LOT LINE ADJUSTMENT, NORTH 00°11'55" WEST, 1345.11 FEET TO THE ***POINT OF BEGINNING.***

Prepared: June, 2021

Assessor's Parcel Numbers: 569-020-013, 024, 025, 026

EXHIBIT "A"– LEGAL DESCRIPTION
LOT LINE ADJUSTMENT NO. LLA210115

SHEET 3 OF 4 SHEETS

PARCEL 2 Cont.:

TOGETHER WITH A TWENTY FOOT (20') WIDE INGRESS AND EGRESS EASEMENT FOR ACCESS PURPOSES WITHIN AND ACROSS PARCEL 3 FOR THE BENEFIT OF PARCEL 2 AS SHOWN ON SHEET B-3.

THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 94.22 ACRES (4,104,331 S.F.), MORE OR LESS.

SEE EXHIBIT "B", ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

PARCEL 3:

IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, THAT PORTION OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER AND THAT PORTION OF THE EAST ONE HALF OF THE SOUTHWEST ONE QUARTER OF SECTION 8, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SAN BERNARDINO MERIDIAN, AND THAT PORTION OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SECTION 8, TOWNSHIP 6 SOUTH, RANGE 1 EAST, AND THAT PORTION OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8 AND THAT PORTION OF THE SOUTHEAST QUARTER OF SAID SECTION 8, ALSO BEING A PORTION OF PARCEL "A", PARCEL "B" AND PARCEL "C" OF LOT LINE ADJUSTMENT NO. 4431, REC. JULY 15, 2002 AS DOC. NO. 2002-386378 OF OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:

***COMMENCING** AT THE NORTHWEST CORNER OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8;*

*THENCE ALONG THE WEST LINE OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE WEST LINE OF SAID PARCEL "A" OF SAID LOT LINE ADJUSTMENT 4431, SOUTH 00°01'09" WEST, 2216.93 FEET TO THE **TRUE POINT OF BEGINNING;***

THENCE LEAVING SAID LINE, NORTH 89°30'38" EAST, 1178.16 FEET;

THENCE NORTH 37°37"58" EAST, 223.68 FEET TO A POINT ON THE EAST LINE OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8, ALSO BEING THE EAST LINE OF SAID PARCEL "A" OF SAID LOT LINE ADJUSTMENT 4431;

THENCE LEAVING SAID LINE, NORTH 37°37'58" EAST, 469.57 FEET;

THENCE NORTH 57°23'58" EAST, 158.22 FEET;

THENCE SOUTH 23°39'34" EAST, 343.16 FEET;

THENCE SOUTH 88°20'26" EAST, 311.44 FEET;

THENCE SOUTH 08°52'02" EAST, 833.92 FEET;

Prepared: June, 2021
Assessor's Parcel Numbers: 569-020-013, 024, 025, 026

EXHIBIT "A"– LEGAL DESCRIPTION
LOT LINE ADJUSTMENT NO. LLA210115

SHEET 4 OF 4 SHEETS

PARCEL 3 Cont.:

THENCE SOUTH 63°11'51" WEST, 86.65 FEET;

THENCE SOUTH 60°03'33" WEST, 128.58 FEET;

THENCE SOUTH 34°18'20" WEST, 672.14 FEET TO A POINT ON THE SOUTH LINE OF SAID PARCEL "C" OF SAID LOT LINE ADJUSTMENT 4431;

THENCE ALONG SAID SOUTH LINE, SOUTH 68°55'32" WEST, 153.63 FEET;

THENCE ALONG SAID SOUTH LINE, NORTH 88°51'54" WEST, 200.06 FEET;

THENCE ALONG SAID SOUTH LINE, NORTH 00°13'30" EAST, 69.50 FEET;

THENCE ALONG SAID SOUTH LINE, SOUTH 89°46'22" WEST, 87.29 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL "C" OF SAID LOT LINE ADJUSTMENT 4431, ALSO BEING THE SOUTHWEST CORNER OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8;

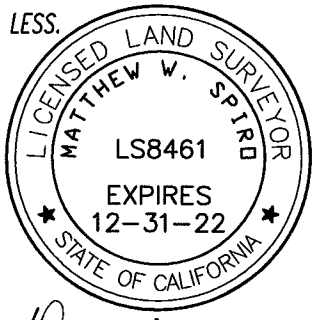
THENCE ALONG THE WEST LINE OF SAID PARCEL "C" OF SAID LOT LINE ADJUSTMENT 4431, ALSO BEING THE WEST LINE OF THE NORTH ONE HALF OF THE NORTH ONE HALF OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 8, NORTH 00°02'27" EAST, 521.67 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL "A" OF SAID LOT LINE ADJUSTMENT 4431;

THENCE ALONG THE SOUTH LINE OF SAID PARCEL "A" OF SAID LOT LINE ADJUSTMENT 4431, NORTH 86°29'15" WEST, 1316.77 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL "A", ALSO BEING A POINT ON THE WEST LINE OF THE EAST ONE HALF OF THE SOUTHWEST ONE QUARTER OF SAID SECTION 8;

THENCE ALONG THE WEST LINE OF SAID PARCEL "A", ALSO BEING THE WEST LINE OF THE EAST ONE HALF OF THE SOUTHWEST ONE QUARTER OF SAID SECTION 8 AND THE WEST LINE OF THE EAST ONE HALF OF THE NORTHWEST ONE QUARTER OF SAID SECTION 8, NORTH 00°01'09" EAST, 541.21 FEET TO THE ***TRUE POINT OF BEGINNING.***

THE ABOVE DESCRIBED PARCEL OF LAND CONTAIN 47.75 ACRES (2,079,978 S.F.), MORE OR LESS.

SEE EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

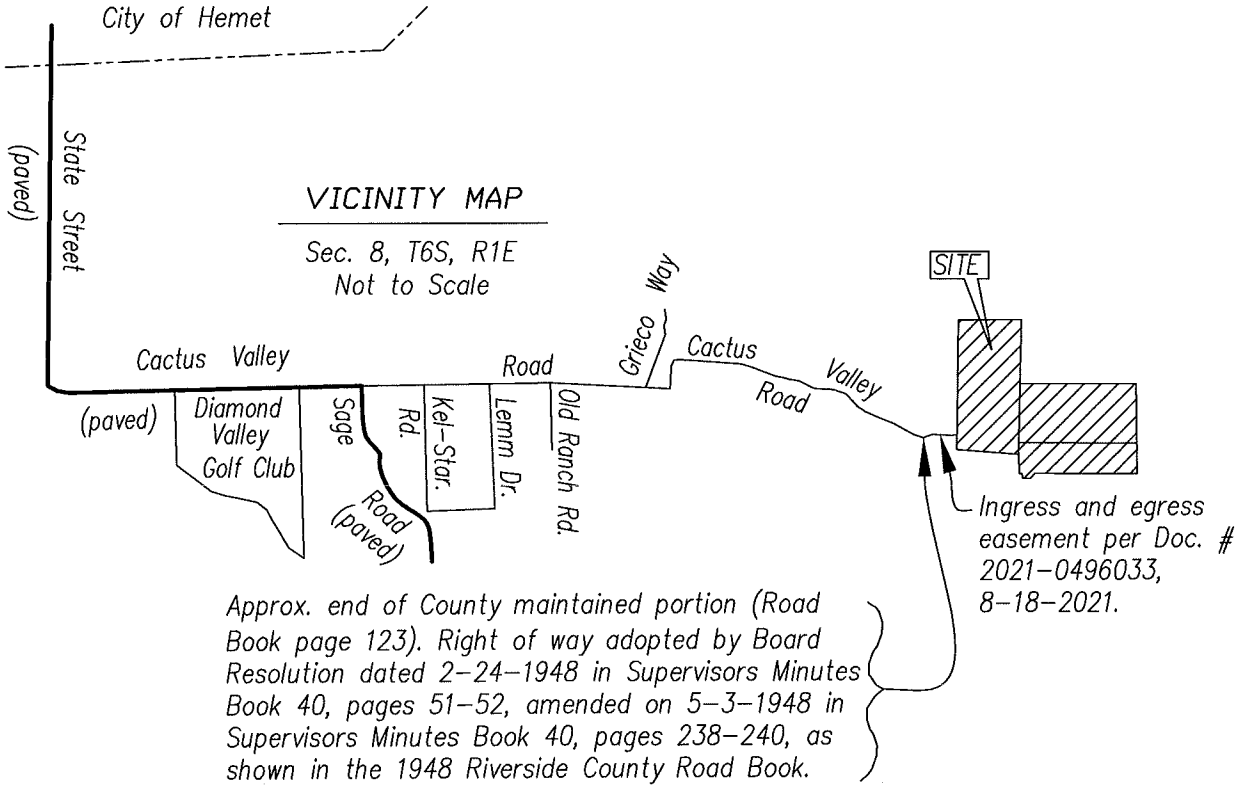


Matthew W. Spiro
LS 8461, Exp. 12/31/22
Dated: 11-1-2021

Prepared: June, 2021
Assessor's Parcel Numbers: 569-020-013, 024, 025, 026

EXHIBIT "B"– VICINITY MAP
LOT LINE ADJUSTMENT NO. LLA210115

SHEET 1 OF 4 SHEETS



VICINITY MAP

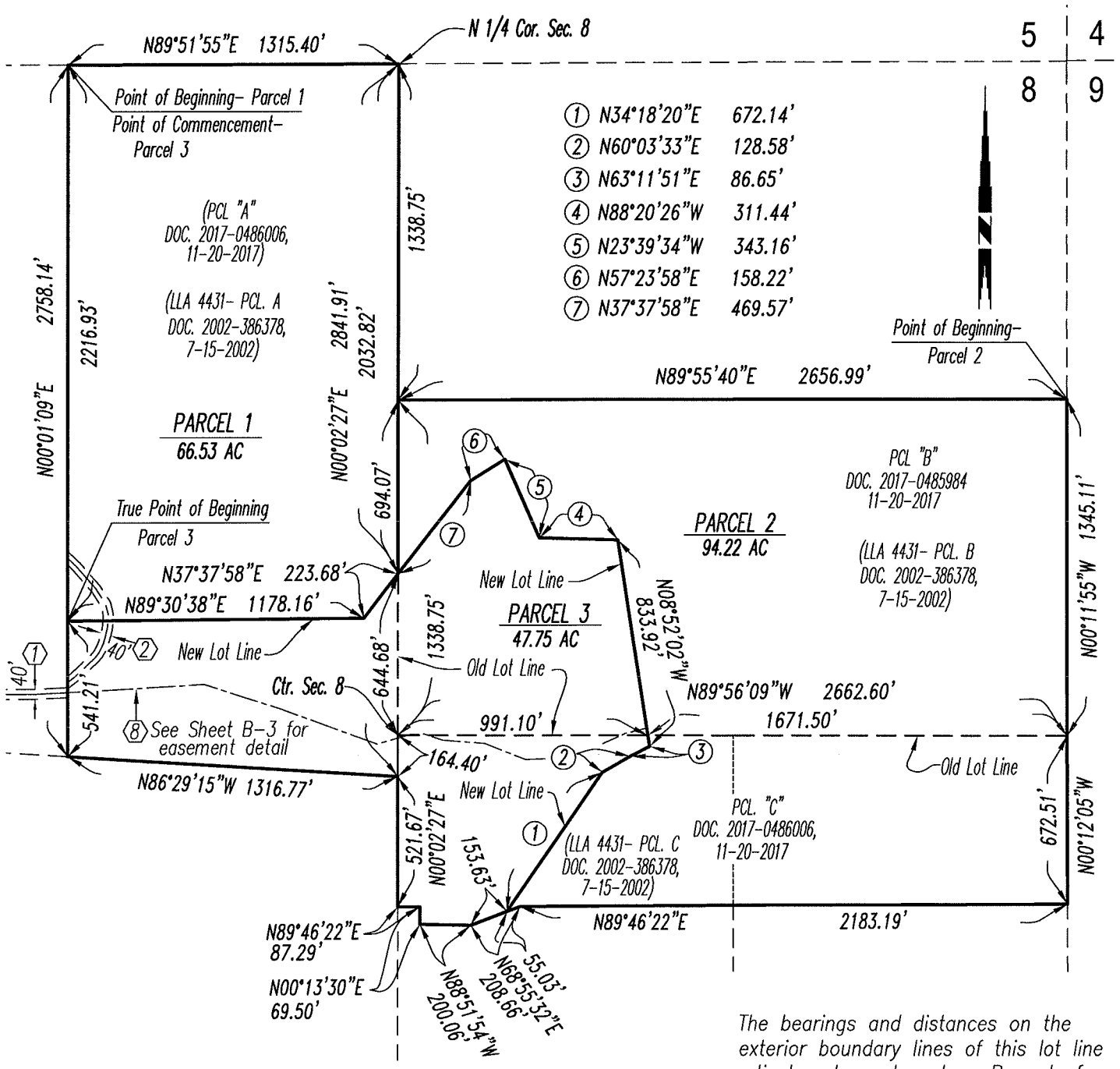
Sec. 8, T6S, R1E

Not to Scale

Sec. 8, T6S, R1E
Prepared: June, 2021
Assessor's Parcel Numbers: 569-020-013, 024, 025, 026

EXHIBIT "B"– MAP
LOT LINE ADJUSTMENT NO. LLA210115

SHEET 2 OF 4 SHEETS



See Sheet B-3 for Easement Detail.

The bearings and distances on the exterior boundary lines of this lot line adjustment are based on Record of Survey 21–027 filed in Book 157, Page 41

The proposed lot line will not laterally intersect a graded manufactured slope.

No drainage from the tributary area above a manufactured slope will sheet flow over the slope face.

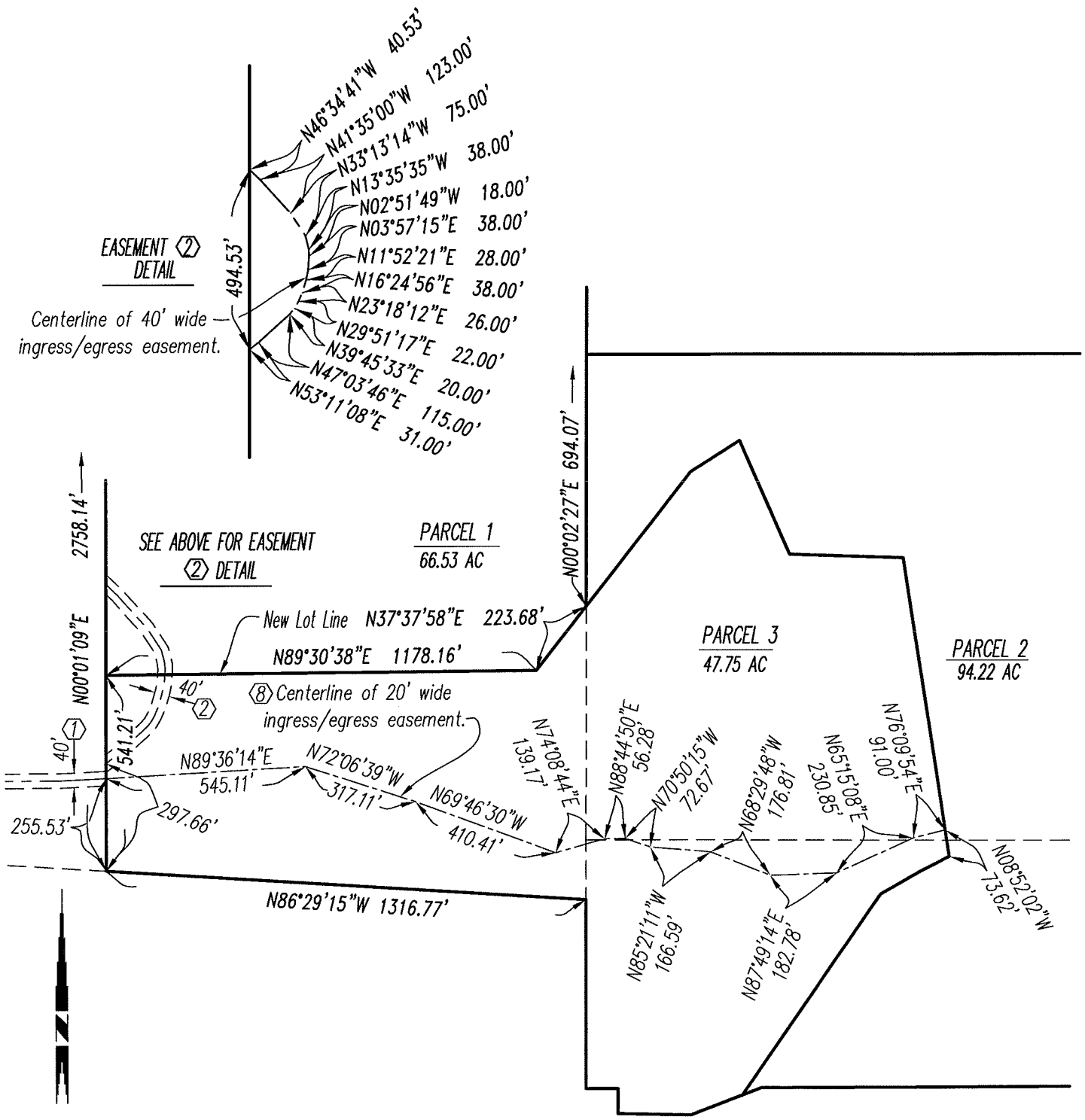
Sec. 8, T6S, R1E
Scale: 1"= 600'
Prepared: June, 2021
Assessor's Parcel Numbers: 569-020-013, 024, 025, 026

LICENSED LAND SURVEYOR
MATTHEW W. SPIRO
LS8461
EXPIRES
12–31–22
STATE OF CALIFORNIA

Matthew W. Spiro
LS 8461, Exp. 12/31/22
Dated: 11-1-2021

EXHIBIT "B"– EASEMENTS
LOT LINE ADJUSTMENT NO. LLA210115

SHEET 3 OF 4 SHEETS



See Sheet B-4 for Easement Notes.

Sec. 8, T6S, R1E
Scale: 1"= 400'
Prepared: June, 2021
Assessor's Parcel Numbers: 569-020-013, 024, 025, 026

EXHIBIT "B"– EASEMENT NOTES
LOT LINE ADJUSTMENT NO. LLA210115

SHEET 4 OF 4 SHEETS

⟨1⟩ *AN EASEMENT AGREEMENT FOR INGRESS AND EGRESS PER DOC. NO. 2021–0496033, REC. 8–18–2021.*

⟨2⟩ *AN EASEMENT AGREEMENT FOR INGRESS AND EGRESS PER DOC. NO. 2021–0496034, REC. 8–18–2021.*

3. *AN EASEMENT IN FAVOR OF GENERAL TELEPHONE CO. OF CALIFORNIA FOR CONDUITS AND INCIDENTAL PURPOSES PER INST. NO. 190406, REC. 9–27–1977. THE EXACT LOCATION AND EXTENT OF EASEMENT CANNOT BE DETERMINED.*

4. *A RESERVATION OF RIGHT OF WAY FOR DITCHES OR RESERVOIRS PER BOOK 2, PAGE 359 OF PATENTS, REC. 9–28–1900. THE EXACT LOCATION AND EXTENT OF RESERVATION CANNOT BE DETERMINED.*

5. *A RESERVATION OF RIGHT OF WAY FOR DITCHES OR CANALS PER BOOK 6, PAGE 151 OF PATENTS, REC. 10–28–1912. THE EXACT LOCATION AND EXTENT OF RESERVATION CANNOT BE DETERMINED.*

6. *A RESERVATION OF RIGHT OF WAY FOR DITCHES OR RESERVOIRS PER BOOK 8, PAGE 349 OF PATENTS, REC. 5–14–1923. THE EXACT LOCATION AND EXTENT OF RESERVATION CANNOT BE DETERMINED.*

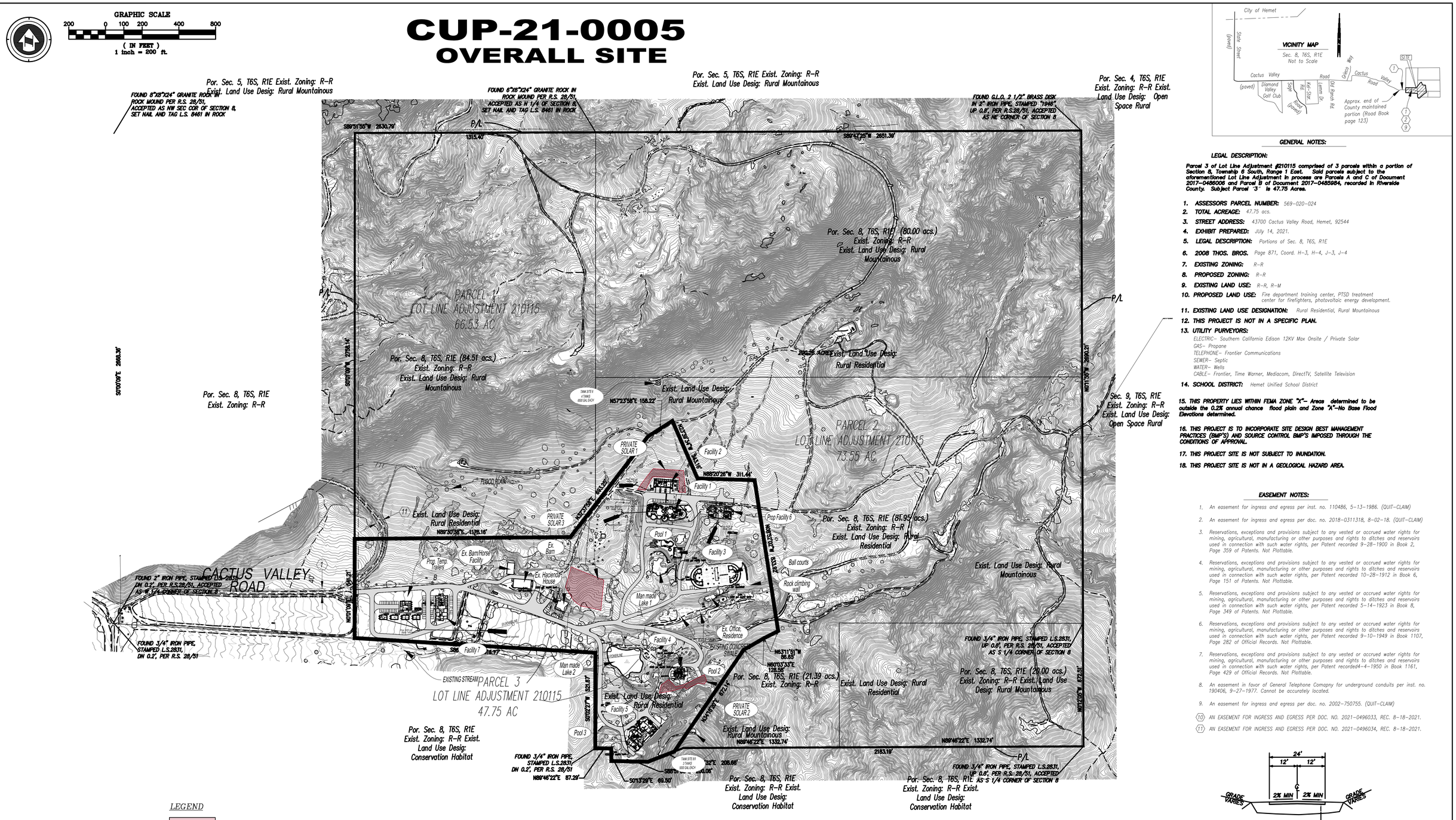
7. *A RESERVATION OF RIGHT OF WAY FOR DITCHES AND RESERVOIRS PER BOOK 1161, PAGE 429 OF OFFICIAL RECORDS, REC. 4–4–1950. THE EXACT LOCATION AND EXTENT OF RESERVATION CANNOT BE DETERMINED DUE TO ILLEGIBLE COPY. NO BETTER COPY CAN BE LOCATED.*

⟨8⟩ *A TWENTY FOOT (20') WIDE INGRESS AND EGRESS EASEMENT FOR ACCESS PURPOSES WITHIN AND ACROSS PARCEL 3 FOR THE BENEFIT OF PARCEL 2 AS SHOWN ON SHEET B–3.*

Sec. 8, T6S, R1E
Prepared: June, 2021
Assessor's Parcel Numbers: 569-020-013, 024, 025, 026

APPENDIX B

Site Plan



CUP-21-0005
OVERALL SITE

GENERAL NOTES:

LEGAL DESCRIPTION:

Parcel 3 of Lot Line Adjustment #210115 comprised of 3 parcels within a portion of Section 8, Township 6 South, Range 1 East. Said parcels subject to the aforementioned Lot Line Adjustment in process are Parcels A and C of Document 2017-0486006 and Parcel B of Document 2017-0485984, recorded in Riverside County. Subject Parcel "3" is 47.75 Acres.

1. **ASSESSORS PARCEL NUMBER:** 569-020-024
2. **TOTAL ACREAGE:** 47.75 acs.
3. **STREET ADDRESS:** 43700 Cactus Valley Road, Hemet, 92544
4. **EXHIBIT PREPARED:** JUly 14, 2021.
5. **LEGAL DESCRIPTION:** Portions of Sec. 8, T6S, R1E
6. **2008 THOS. BROS.** Page 871, Coord. H-3, H-4, J-3, J-4
7. **EXISTING ZONING:** R-R
8. **PROPOSED ZONING:** R-R
9. **EXISTING LAND USE:** R-R, R-M
10. **PROPOSED LAND USE:** Fire department training center, PTSD treatment center for firefighters, photovoltaic energy development.
11. **EXISTING LAND USE DESIGNATION:** Rural Residential, Rural Mountainous
12. **THIS PROJECT IS NOT IN A SPECIFIC PLAN.**
13. **UTILITY PURVEYORS:**
    - ELECTRIC- Southern California Edison 12KV Max Onsite / Private Solar
    - GAS- Propane
    - TELEPHONE- Frontier Communications
    - SEWER- Septic
    - WATER- Wells
    - CABLE- Frontier, Time Warner, Mediacom, DirectTV, Satellite Television
14. **SCHOOL DISTRICT:** Hemet Unified School District
15. **THIS PROPERTY LIES WITHIN FEMA ZONE "X"- Areas determined to be outside the 0.2% annual chance flood plain and Zone "A"-No Base Flood Elevations determined.**
16. **THIS PROJECT IS TO INCORPORATE SITE DESIGN BEST MANAGEMENT PRACTICES (BMP'S) AND SOURCE CONTROL BMP'S IMPOSED THROUGH THE CONDITIONS OF APPROVAL.**
17. **THIS PROJECT SITE IS NOT SUBJECT TO INUNDATION.**
18. **THIS PROJECT SITE IS NOT IN A GEOLOGICAL HAZARD AREA.**

EASEMENT NOTES:

1. An easement for ingress and egress per inst. no. 110486, 5-13-1986. (QUIT-CLAIM)
2. An easement for ingress and egress per doc. no. 2018-0311318, 8-02-18. (QUIT-CLAIM)
3. Reservations, exceptions and provisions subject to any vested or accrued water rights for mining, agricultural, manufacturing or other purposes and rights to ditches and reservoirs used in connection with such water rights, per Patent recorded 9-28-1900 in Book 2, Page 359 of Patents. Not Plottable.
4. Reservations, exceptions and provisions subject to any vested or accrued water rights for mining, agricultural, manufacturing or other purposes and rights to ditches and reservoirs used in connection with such water rights, per Patent recorded 10-28-1912 in Book 6, Page 151 of Patents. Not Plottable.
5. Reservations, exceptions and provisions subject to any vested or accrued water rights for mining, agricultural, manufacturing or other purposes and rights to ditches and reservoirs used in connection with such water rights, per Patent recorded 5-14-1923 in Book 8, Page 349 of Patents. Not Plottable.
6. Reservations, exceptions and provisions subject to any vested or accrued water rights for mining, agricultural, manufacturing or other purposes and rights to ditches and reservoirs used in connection with such water rights, per Patent recorded 9-10-1949 in Book 1107, Page 282 of Official Records. Not Plottable.
7. Reservations, exceptions and provisions subject to any vested or accrued water rights for mining, agricultural, manufacturing or other purposes and rights to ditches and reservoirs used in connection with such water rights, per Patent recorded4-4-1950 in Book 1161, Page 429 of Official Records. Not Plottable.
8. An easement in favor of General Telephone Comapny for underground conduits per inst. no. 190406, 9-27-1977. Cannot be accurately located.
9. An easement for ingress and egress per doc. no. 2002-750755. (QUIT-CLAIM)

(10) AN EASEMENT FOR INGRESS AND EGRESS PER DOC. NO. 2021-0496033, REC. 8-18-2021.

(11) AN EASEMENT FOR INGRESS AND EGRESS PER DOC. NO. 2021-0496034, REC. 8-18-2021.

ALL-WEATHER ACCESS ROAD

NTS

LEGEND

🟥 — GROUND-MOUNTED PRIVATE HOUSE USE SOLAR PANELS WITH EXPANSION AREA
▨ — PROP FIRE LANE
— PROP CONCRETE
— PROP PAVERS
EX MINOR CONTOURS
1095 EX MAJOR CONTOURS
EXISTING FENCE
NEIGHBORING LOT LINES
RIGHT OF WAY/EASEMENT LINES
CENTERLINE
PROJECT PROPERTY LINE
SANITARY SEWER LINE
WATER LINE
ADA PATH OF TRAVEL
APPROX. 100-YEAR FLOODPLAIN LIMITS

ABBREVIATIONS

PP .... POWER POLE
FH .... FIRE HYDRANT
ADD'L .... ADDITIONAL
PM .... PARCEL MAP
PAD .... PAD ELEVATION
GB .... GRADE BREAK
FF .... FINISHED FLOOR ELEVATION
FS .... FINISHED SURFACE
FL .... FLOW LINE
C/L .... CENTER LINE
R/W .... RIGHT OF WAY
P/L .... PROPERTY LINE
PROP ..... PROPOSED
EX .... EXISTING
D/W ....DRIVEWAY
PROP........PROPOSED
O/C ....OFF CENTERLINE
WL ....WATER LINE
SS ....SANITATION SEWER LINE
SD .... STORM DRAIN
PP .... EX POWER POLE
TBR .... TO BE REMOVED/RELOCATED
BVC .... BEGIN VERTICAL CURVE

NOTE: SEE SHEET 2 FOR AREA TABLES

NO.	DATE	REVISION
3	10/1/21	REVISED PER PC 2 COMMENTS

OWNER/APPLICANT:

PVR Management, LLC
C/o Kenneth W. Jackson
8895 Research Drive, Ste. 200
Irvine, Ca. 92618

jacksonv@cox.net
Tel. 231-700-7741

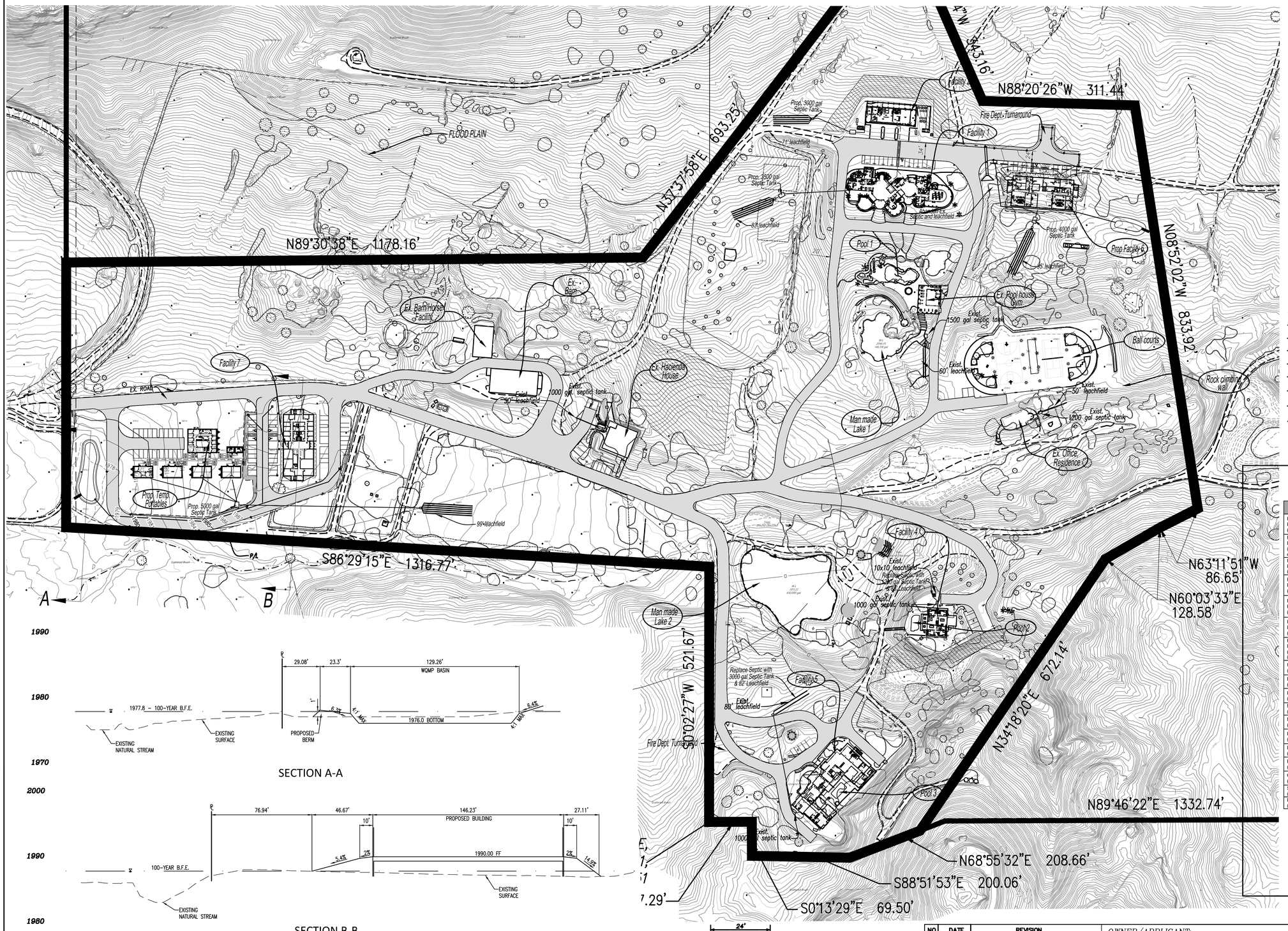
ENGINEER:

4M ENGINEERING AND DEVELOPMENT, INC.
41635 Enterprise Circle N. - Suite B
Temecula, California 92590
TEL: (951) 296-3466
KIRK R. MEDEIROS R.C.E. 86558

C-1
SHEET 1 OF 2

CUP-21-0005

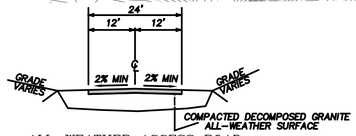
ENLARGED CONCEPT GRADE AND DRAINAGE



SECTION A-A

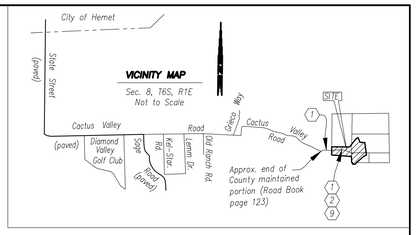
SECTION B-B

PRELMINARY EARTHWORK			
	CUT	FILL	NET
CUT/FILL	595 CU.YD.	5,955 CU.YD	5,360 CU.YD.



ALL-WEATHER ACCESS ROAD

NTS



GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

AREA TABLE – SOLAR

Private Solar 1	13,084 sqft.	
Private Solar 2	8700 sqft.	
Private Solar 3	33,452 sqft.	
TOTAL	55,236 sqft	

LEGEND

- GROUND-MOUNTED PRIVATE HOUSE USE SOLAR PANELS WITH EXPANSION AREA
- PROP FIRE LANE
- PROP CONCRETE
- PROP PAVERS
- EX MINOR CONTOURS
- 1095 EX MAJOR CONTOURS
- EXISTING FENCE
- NEIGHBORING LOT LINES
- RIGHT OF WAY/EASEMENT LINES
- CENTERLINE
- PROJECT PROPERTY LINE
- SANITARY SEWER LINE
- WATER LINE
- ADA PATH OF TRAVEL
- APPROX. 100-YEAR FLOODPLAIN LIMITS

Area Table - Structures

Site Plan ID	Area – Square Feet (sf)	UBC Existing Occupancy	UBC Proposed Occupancy
Facility 1 - Silverado House Phase 1A (Existing/Remocel – treatment facility)	8,467 sf	Group "R-3" (SFM)	R-4 Building Addition
Facility 2 – Garage Phase 1A (Existing/Remocel - commercial kitchen and dining)	2,400 sf	Group "U" (SFM)	A-2 Remodel
Facility 3 - Pool House/Fitness Phase 1A (Existing/Remocel – exercise facility)	945 sf	Group "U" (SFM)	A-3 Remodel
Facility 4 - Chaparral Lodge Phase 1B (Existing/Remocel – treatment facility)	2,160 sf	Group "C" (SFM)	R-4 Remodel
Facility 5 - Ponderosa Lodge Phase 1B (Existing/Remocel – treatment facility)	11,849 sf	Group "C" (SFM)	R-2.1 Remodel
Facility 6 - New Lodge Phase 2 (Proposed – treatment facility)	16,777 sf	N/A	B New Construction
Facility 7 - New Offices/Intake/Administrative Phase 2 (TEMPORARY OFFICE TRAILERS - PHASE 1B) (Proposed – offices, intake, administrative)	16,777 sf	N/A	R-2.1 New Construction
Untitled Barn (Existing)	2,560 sf	Group "U"	Group "U"
Barn/Horse Facility (Existing)	4,350 sf	Group "U"	Group "U"
Hacienda House (Wildfire Conservancy) (Existing)	2,000 sf	Group "R"	Group "R"
Manmade Lake 1 (Existing)	4,790 sf	N/A	N/A
Manmade Lake 2 (Existing)	20,030 sf	N/A	N/A
Pool 1 (Existing)	1,600 sf	N/A	N/A
Pool 2 (Existing)	500 sf	N/A	N/A
Pool 3 (Existing)	1,300 sf	N/A	N/A
Office/Residence (Existing)	838 sf	Group "C" (SFM)	Group "C" (SFM)
Sports Courts (Existing)	27,100 sf	Group "C" (SFM)	Group "C" (SFM)
Rock Climbing Wall (Existing)	315 sf	Group "C" (SFM)	Group "C" (SFM)

NO.	DATE	REVISION
3	10/7/21	REVISED PER PC 2 COMMENTS

OWNER/APPLICANT:

PVR Management, LLC
C/o Kenneth W. Jackson
8895 Research Drive, Ste. 200
Irvine, Ca. 92618

jacksonv@cox.net
Tel. 231-700-7741

ENGINEER:

4M ENGINEERING AND DEVELOPMENT, INC.
41635 Enterprise Circle N. – Suite B
Temecula, California 92590
TEL: (951) 296-3466
KIRK R. MEDEIROS R.C.E. 86558

ARS PARADISE VALLEY RANCH:
CONDITIONAL USE PERMIT NO: 210005
HEMET, CA

SITE INFORMATION:

PROJECT DESCRIPTION:
THE PARADISE VALLEY RANCH PROPERTY IS LOCATED IN UNINCORPORATED SOUTHWEST RIVERSIDE COUNTY, EAST OF THE CITY OF HEMET, APPROXIMATELY 4 MILES EAST OF STATE STREET, AT THE TERMINUS OF CACTUS VALLEY ROAD. THE SITE ADDRESS IS 43700 CACTUS VALLEY ROAD. CURRENTLY, THE COUNTY OF RIVERSIDE IS PROCESSING A LOT LINE ADJUSTMENT (LLA) INVOLVING THREE PARCELS [ASSESSOR PARCEL NUMBERS (APN) 569-020-024, -025, AND -026] ON THE PARADISE VALLEY RANCH PROPERTY. ONCE THIS LLA HAS BEEN PROCESSED, ONE OF THE THREE PARCELS (APPROXIMATELY 48-ACRES) WILL BE USED FOR A CONDITIONAL USE PERMIT (CUP) THAT IS REQUIRED FOR THE PROPOSED PROJECT. THIS PARCEL WILL BE REFERRED TO AS THE "CUP PARCEL". THE ULTIMATE APN FOR THE CUP PARCEL WILL BE DETERMINED UPON FINALIZATION AND RECORDATION OF THE LLA.

PARCEL 3 OF A LOT LINE ADJUSTMENT (LLA) #210115 COMPRISED OF 3 PARCELS WITHIN A PORTION OF SECTION 8, TOWNSHIP 6 SOUTH, RANGE 1 EAST. SAID PARCELS SUBJECT TO THE AFOREMENTIONED LOT LINE ADJUSTMENT IN PROCESS ARE PARCELS A AND C OF DOCUMENT 2017-0486006 AND PARCEL B OF DOCUMENT 2017-0485984, RECORDED IN RIVERSIDE COUNTY. SUBJECT PARCEL "3" IS 47.75 ACRES.

GEOLOGICAL HAZARDS: (PER GEOTECHNICAL REPORT BY SLADDEN ENGINEERING)
1. SURFACE RUPTURE - NO SIGNS OF ACTIVE SURFACE FAULT RUPTURE OR SECONDARY SEISMIC EFFECTS WERE IDENTIFIED DURING FIELD INVESTIGATION. THEREFORE, IT IS OUR OPINION THAT RISKS ASSOCIATED WITH PRIMARY SURFACE GROUND RUPTURE SHOULD BE CONSIDERED "LOW".
2. GROUND SHAKING - THE SITE MODIFIED PEAK GROUND ACCELERATION IS ESTIMATED TO BE 0.775G.
3. LIQUEFACTION - BASED ON THE PRESENCE OF SHALLOW SEATED BEDROCK AND OUR EXPERIENCE IN THE PROJECT VICINITY, RISKS ASSOCIATED WITH LIQUEFACTION RELATED HAZARDS SHOULD BE CONSIDERED "NEGLIGIBLE".
4. TSUNAMIS AND SEICHES - BECAUSE THE SITE IS SITUATED AT AN INLAND LOCATION AND IS NOT IMMEDIATELY ADJACENT TO ANY IMPOUNDED BODIES OF WATER, RISKS ASSOCIATED WITH TSUNAMIS AND SEICHES ARE CONSIDERED "NEGLIGIBLE".
5. SLOPE FAILURE, LAND SLIDING, ROCK FALLS - BASED ON OUR FIELD OBSERVATIONS OF THE SITE VICINITY, RISKS ASSOCIATED WITH SLOPE INSTABILITY SHOULD BE CONSIDERED "LOW".
6. EXPANSIVE SOIL - BASED ON THE RESULTS OF OUR LABORATORY TESTING, THE MATERIALS UNDERLYING THE SITE ARE CONSIDERED TO HAVE A "VERY LOW" EXPANSION POTENTIAL.
7. STATIC SETTLEMENT - THE ULTIMATE STATIC SETTLEMENT IS EXPECTED TO BE LESS THAN 1 INCH WHEN USING THE RECOMMENDED ALLOWABLE BEARING PRESSURES. AS A PRACTICAL MATTER, DIFFERENTIAL STATIC SETTLEMENT BETWEEN FOOTINGS CAN BE ASSUMED AS ONE-HALF OF THE TOTAL SETTLEMENT.
8. SUBSIDENCE - BASED UPON THE PRESENCE OF SHALLOW SEATED BEDROCK THROUGHOUT THE SITE, THE RISKS ASSOCIATED WITH SUBSIDENCE SHOULD BE CONSIDERED "NEGLIGIBLE".

SITE AREA: 47.75 ACRES (GROSS/NET)

PARCEL NO: PARCEL 3 OF LOT LINE ADJUSTMENT (LLA) #210115

LAND USE DESIGNATIONS
EXISTING ZONE: RURAL RESIDENTIAL
PROPOSED ZONE: NO CHANGE
GENERAL PLAN: RURAL RESIDENTIAL (R-R)
RURAL MOUNTAINOUS (R-M)
SPECIFIC PLAN: THE PROJECT IS NOT PART OF A SPECIFIC PLAN
CSA: THE PROJECT IS WITHIN CSA 152
CFD: THE PROJECT IS NOT WITHIN A CFD

USE
EXISTING USE: RESIDENTIAL/CAMP
PROPOSED USE: RESIDENTIAL TREATMENT FACILITY FOR MENTAL HEALTH AND SUBSTANCE ABUSE TREATMENT FOR FIREFIGHTERS, FIRE FIGHTING TRAINING CENTER

DEVELOPMENT STANDARDS
MINIMUM LOT SIZE: NOT LESS THAN 20,000 SQUARE FEET

MINIMUM YARD REQUIREMENTS
FRONT YARD: 20'-0"
SIDE YARD: 5'-0"
REAR YARD: 10'-0"

MAXIMUM BUILDING HEIGHT: 50'-0"

UTILITIES
WATER: PRIVATE WELLS (EMWD SERVICE > 1 MILE)
SEWER: ONSITE SEPTIC (EMWD SERVICE > 1 MILE)
GAS: PROPANE
ELECTRICITY: SOUTHERN CALIFORNIA EDISON
TELEPHONE: FRONTIER COMMUNICATIONS
CABLE TV: FRONTIER, TIME WARNER, MEDIACOM, DIRECT TV, SATELITE TELEVISION

SCHOOL DISTRICT: HEMET UNIFIED

THIS PROPERTY LIES WITHIN FEMA ZONE "X"- AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN AND ZONE "A"-NO BASE FLOOD ELEVATIONS DETERMINED.

THIS PROPERTY LIES WITHIN A HIGH FIRE SEVERITY ZONE LOCATION. CHAPTER 7A OF THE BUILDING CODE SHALL APPLY.

PROJECT TEAM:

OWNER/APPLICANT
PVR Management, LLC
8895 Research Drive, Suite 200
Irvine, CA 92590
Contact: Ken Jackson
e-mail: jacksonv@cox.net
Ph. (213) 700-7741

DEVELOPER
Advanced Recovery Systems
100 SE 3rd AVE #1800
Fort Lauderdale, FL. 33394
Contact: Jay Fertig
e-mail: JFertig@advancedrecoverysystems.com
Ph. (954) 860-7199

ARCHITECT
Johansson Wing Architects, PC
821 S.E. 14th Loop, Suite 109
P.O. Box 798
Battle Ground, WA 98604
Contact: Ryan Wing
e-mail: rwing@JohanssonWing.com
Ph. (360) 687-8379

CIVIL
4M Engineering & Development
41635 Enterprise Circle N, Suite B
Temecula, CA 92590
Contact: Sherrie Munroe
e-mail: sherrie@4med.net
Ph. (951) 296-3466

LANDSCAPE
Alhambra Group
41635 Enterprise Circle N, Suite C
Temecula, CA 92590
Contact: Vince DiDonato
e-mail: vince@alhambragroup.net
Ph. (951) 970-6156

GEOTECHNICAL
Sladden Engineering
45090 Golf Center Parkway, Suite F
Indio, CA 92201
Contact: Brett Anderson
e-mail: info@sladdenengineering.com
Ph. (760) 863-0713

FIRE CONSULTANT
Rahn Conservation Consulting, LLC
32787 Cleveland Street
Temecula, CA 92592
Contact: Matt Rahn
e-mail: mattrahn@me.com
Ph. (619) 846-1916

BUILDING SUMMARY:

EXISTING FACILITY 1 "SILVERADO LODGE" PHASE 1A
EXISTING DWELLING - PREVIOUS PERMIT #: 791080
REMODEL EXISTING DWELLING UNIT FOR RESIDENTIAL TREATMENT FACILITY
EXISTING OCCUPANCY = R-3 | PROPOSED OCCUPANCY = R-4
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = V-B
EXISTING BUILDING AREA = 8,051 SF | PROPOSED BUILDING AREA = 8,490 SF

EXISTING FACILITY 2 "KITCHEN AND DINING ROOM" PHASE 1A
EXISTING DETACHED GARAGE - PREVIOUS PERMIT #: BXX052138
REMODEL EXISTING GARAGE FOR KITCHEN AND DINING FACILITY
EXISTING OCCUPANCY = U | PROPOSED OCCUPANCY = A-2
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = V-B
EXISTING BUILDING AREA = 2,400 SF | PROPOSED BUILDING AREA = NO CHANGE

EXISTING FACILITY 3 "POOL HOUSE AND GYM" PHASE 1A
EXISTING POOL HOUSE - PREVIOUS PERMIT #: BXX025712
REMODEL EXISTING POOL HOUSE TO INCLUDE GYM SPACE
EXISTING OCCUPANCY = U | PROPOSED OCCUPANCY = A-3
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = V-B
EXISTING BUILDING AREA = 945 SF | PROPOSED BUILDING AREA = NO CHANGE

EXISTING FACILITY 4 "CHAPARRAL LODGE" PHASE 1B
EXISTING DWELLING - PREVIOUS PERMIT #: BZ155238
REMODEL EXISTING DWELLING FOR RESIDENTIAL TREATMENT FACILITY
EXISTING OCCUPANCY = R-3 | PROPOSED OCCUPANCY = R-4
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = V-B
EXISTING BUILDING AREA = 2,160 SF | PROPOSED BUILDING AREA = NO CHANGE

EXISTING FACILITY 5 "PONDEROSA LODGE" PHASE 1B
EXISTING DWELLING - PREVIOUS PERMIT #: NONE - APPROXIMATE BUILD DATE 1952
REMODEL EXISTING DWELLING FOR RESIDENTIAL TREATMENT FACILITY
EXISTING OCCUPANCY = R-3 | PROPOSED OCCUPANCY = R-2.1
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = V-A
EXISTING BUILDING AREA = 8,712 SF | PROPOSED BUILDING AREA = 11,849 SF

PROPOSED FACILITY 6 "LODGE" PHASE 2
PROPOSED RESIDENTIAL TREATMENT FACILITY
PROPOSED OCCUPANCY = R-2.1
PROPOSED CONSTRUCTION = V-A
PROPOSED BUILDING AREA = 16,777 SF

PROPOSED FACILITY 7 "ADMIN BUILDING" PHASE 2
PROPOSED ADMINISTRATIVE BUILDING
PROPOSED OCCUPANCY = B
PROPOSED CONSTRUCTION = V-B
PROPOSED BUILDING AREA = 16,777 SF

EXISTING GUEST COTTAGE - NO WORK
EXISTING GUEST DWELLING - PREVIOUS PERMIT #: BRS027380
NO WORK PROPOSED
EXISTING OCCUPANCY = R-3 | PROPOSED OCCUPANCY = NO CHANGE
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = NO CHANGE
EXISTING BUILDING AREA = 838 SF | PROPOSED BUILDING AREA = NO CHANGE

EXISTING HACIENDA HOUSE - NO WORK
EXISTING DWELLING - PREVIOUS PERMIT #: BZ149203
NO WORK PROPOSED
EXISTING OCCUPANCY = R-3 | PROPOSED OCCUPANCY = B
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = NO CHANGE
EXISTING BUILDING AREA = 2,000 SF | PROPOSED BUILDING AREA = NO CHANGE

EXISTING BARN - NO WORK
EXISTING BARN - PREVIOUS PERMIT #: NONE - APPROXIMATE BUILD DATE 1956
NO WORK PROPOSED
EXISTING OCCUPANCY = U | PROPOSED OCCUPANCY = NO CHANGE
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = NO CHANGE
EXISTING BUILDING AREA = 2,560 SF | PROPOSED BUILDING AREA = NO CHANGE

EXISTING BARN/EQUESTRIAN FACILITY - NO WORK
EXISTING BARN - PREVIOUS PERMIT #: BZ149970
NO WORK PROPOSED
EXISTING OCCUPANCY = U | PROPOSED OCCUPANCY = NO CHANGE
EXISTING CONSTRUCTION = V-B | PROPOSED CONSTRUCTION = NO CHANGE
EXISTING BUILDING AREA = 4,350 SF | PROPOSED BUILDING AREA = NO CHANGE

EMPLOYEE SUMMARY:

ADVANCED RECOVERY SYSTEMS

PHASE IA
32 BEDS
M-F DAY SHIFT = 36 EMPLOYEES
M-F SWING SHIFT = 13 EMPLOYEES
M-F NIGHT SHIFT = 5 EMPLOYEES
M-F TOTAL FULL TIME EMPLOYEES = 54 EMPLOYEES
S/S DAY SHIFT = 15 EMPLOYEES
S/S SWING SHIFT = 11 EMPLOYEES
S/S NIGHT SHIFT = 5 EMPLOYEES
S/S TOTAL FULL TIME EMPLOYEES = 31 EMPLOYEES

PHASE IB (INCLUDING PHASE IA)
80 BEDS
M-F DAY SHIFT = +17 (53 EMPLOYEES)
M-F SWING SHIFT = +6 (19 EMPLOYEES)
M-F NIGHT SHIFT = +1 (6 EMPLOYEES)
M-F TOTAL FULL TIME EMPLOYEES = +24 (78 EMPLOYEES)
S/S DAY SHIFT = +12 (27 EMPLOYEES)
S/S SWING SHIFT = +6 (17 EMPLOYEES)
S/S NIGHT SHIFT = +1 (6 EMPLOYEES)
S/S TOTAL FULL TIME EMPLOYEES = +19 (50 EMPLOYEES)

PHASE II
112 BEDS
M-F DAY SHIFT = +11 (64 EMPLOYEES)
M-F SWING SHIFT = +2 (21 EMPLOYEES)
M-F NIGHT SHIFT = +2 (8 EMPLOYEES)
M-F TOTAL FULL TIME EMPLOYEES = +15 (93 EMPLOYEES)
S/S DAY SHIFT = +5 (32 EMPLOYEES)
S/S SWING SHIFT = +1 (18 EMPLOYEES)
S/S NIGHT SHIFT = +2 (8 EMPLOYEES)
S/S TOTAL FULL TIME EMPLOYEES = +8 (58 EMPLOYEES)

WILDFIRE CONSERVANCY
TOTAL EMPLOYEES = 2-3 EMPLOYEES/2-4 DAYS PER WEEK

PARKING SUMMARY:

ADVANCED RECOVERY SYSTEMS

PHASE 1A
36 EMPLOYEES / 1 = 36 PARKING SPACES
32 BEDS / 4 = 8 PARKING SPACES
44 PARKING SPACES MINIMUM

- 69 PARKING SPACES PROVIDED
  4 ELECTRIC VEHICLE CHARGING SPACES
  4 ACCESSIBLE PARKING SPACES

PHASE 1B
53 EMPLOYEES / 1 = 53 PARKING SPACES
80 BEDS / 4 = 20 PARKING SPACES
73 PARKING SPACES MINIMUM

- 79 PARKING SPACES PROVIDED
  4 ELECTRIC VEHICLE CHARGING SPACES
  4 ACCESSIBLE PARKING SPACES

PHASE II
64 EMPLOYEES / 1 = 64 PARKING SPACES
112 BEDS / 4 = 28 PARKING SPACES
92 PARKING SPACES MINIMUM

- 97 PARKING SPACES PROVIDED
  4 ELECTRIC VEHICLE CHARGING SPACES
  4 ACCESSIBLE PARKING SPACES

WILDFIRE CONSERVANCY
3 EMPLOYEES / 1 = 3 PARKING SPACES MINIMUM

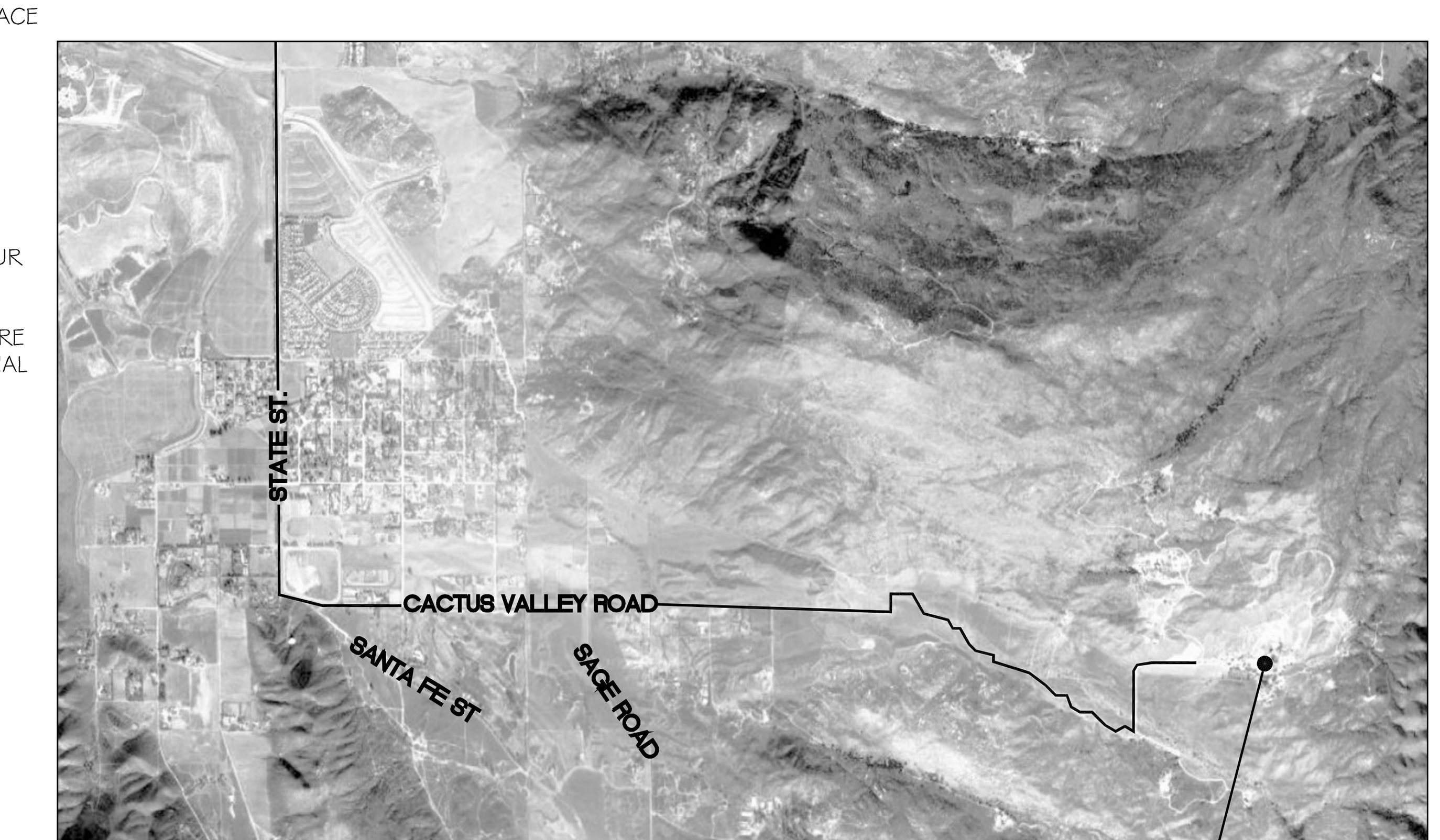
- 9 PARKING SPACES PROVIDED
  1 ACCESSIBLE PARKING SPACE

TRAINING EVENTS
LESS THAN 25 PARTICIPANTS
ONCE A MONTH ON WEEKENDS

25 PARTICIPANTS / 1 =
25 PARKING SPACES MINIMUM

- TRAINING EVENTS TO OCCUR ON WEEKENDS WHEN ADVANCED RECOVERY PARKING REQUIREMENTS ARE THE LOWEST, NO ADDITIONAL PARKING REQUIRED.

SHEET LIST:



PROJECT LOCATION

VICINITY MAP

N

JW architects

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT
MICHAEL RYAN WING
C-30868
5/31/23
RENEWAL DATE
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

821 S.E. 14th Loop, Suite 109
P.O. Box 798
Battle Ground, WA 98604
Ph 360-687-8379

ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd. Hemet, CA 92544

COVER SHEET

PROJECT # 20064

DATE 9/27/2021

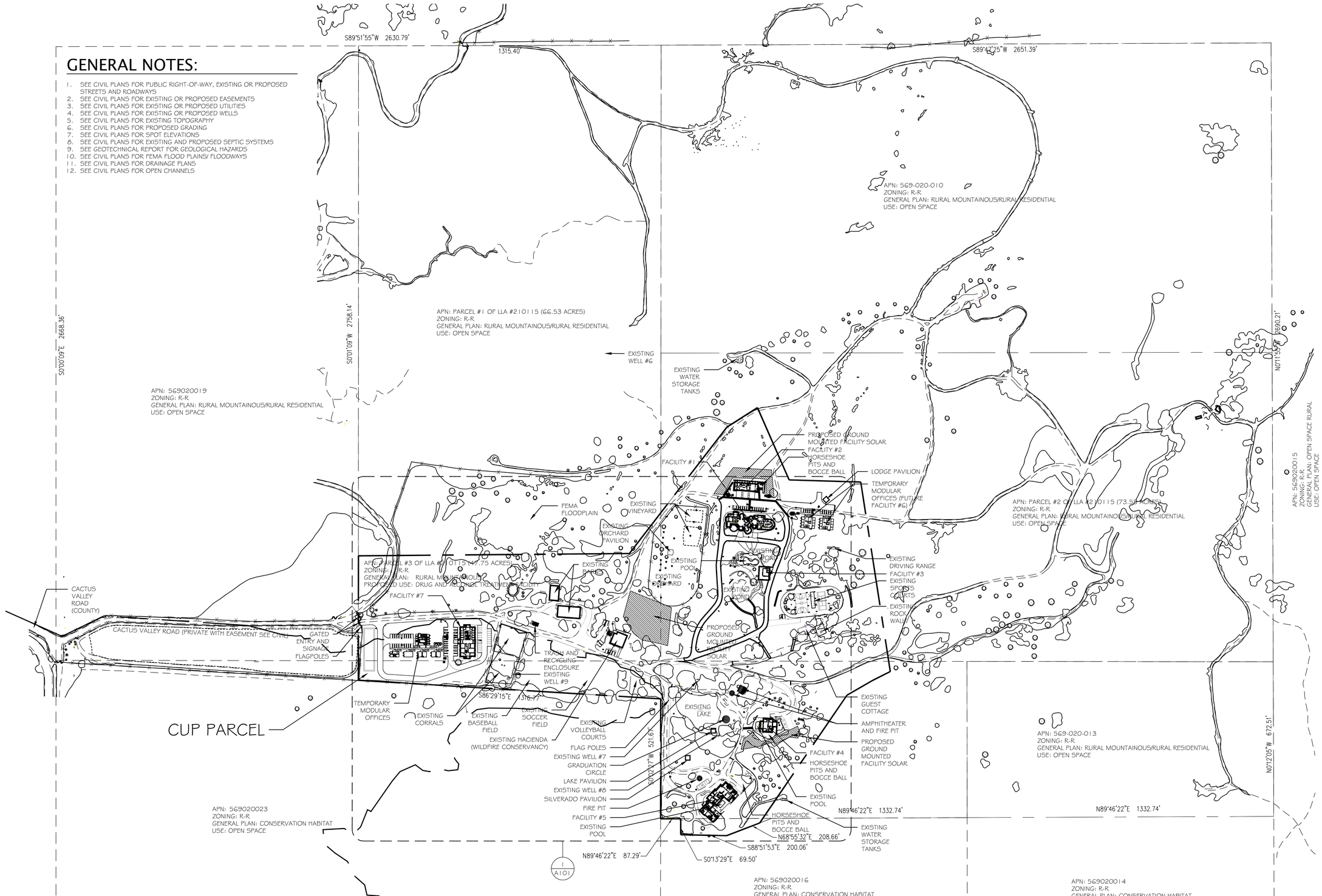
REV #	DATE	REASON

A000

SCHEMATIC DESIGN

GENERAL NOTES:

1. SEE CIVIL PLANS FOR PUBLIC RIGHT-OF-WAY, EXISTING OR PROPOSED STREETS AND ROADWAYS
2. SEE CIVIL PLANS FOR EXISTING OR PROPOSED EASEMENTS
3. SEE CIVIL PLANS FOR EXISTING OR PROPOSED UTILITIES
4. SEE CIVIL PLANS FOR EXISTING OR PROPOSED WELLS
5. SEE CIVIL PLANS FOR EXISTING TOPOGRAPHY
6. SEE CIVIL PLANS FOR PROPOSED GRADING
7. SEE CIVIL PLANS FOR SPOT ELEVATIONS
8. SEE CIVIL PLANS FOR EXISTING AND PROPOSED SEPTIC SYSTEMS
9. SEE GEOTECHNICAL REPORT FOR GEOLOGICAL HAZARDS
10. SEE CIVIL PLANS FOR FEMA FLOOD PLAINS/ FLOODWAYS
11. SEE CIVIL PLANS FOR DRAINAGE PLANS
12. SEE CIVIL PLANS FOR OPEN CHANNELS



N

1 OVERALL SITE PLAN

1" = 200'-0"

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT MICHAEL RYAN WING No. 30560 RENEWAL DATE 5/31/23 STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

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Battle Ground, WA 98604
Ph 360-687-8379

ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd. Hemet, CA 92544

OVERALL SITE PLAN

PROJECT # 20064

DATE 9/27/2021

REV #	DATE	REASON

A100

SCHEMATIC DESIGN

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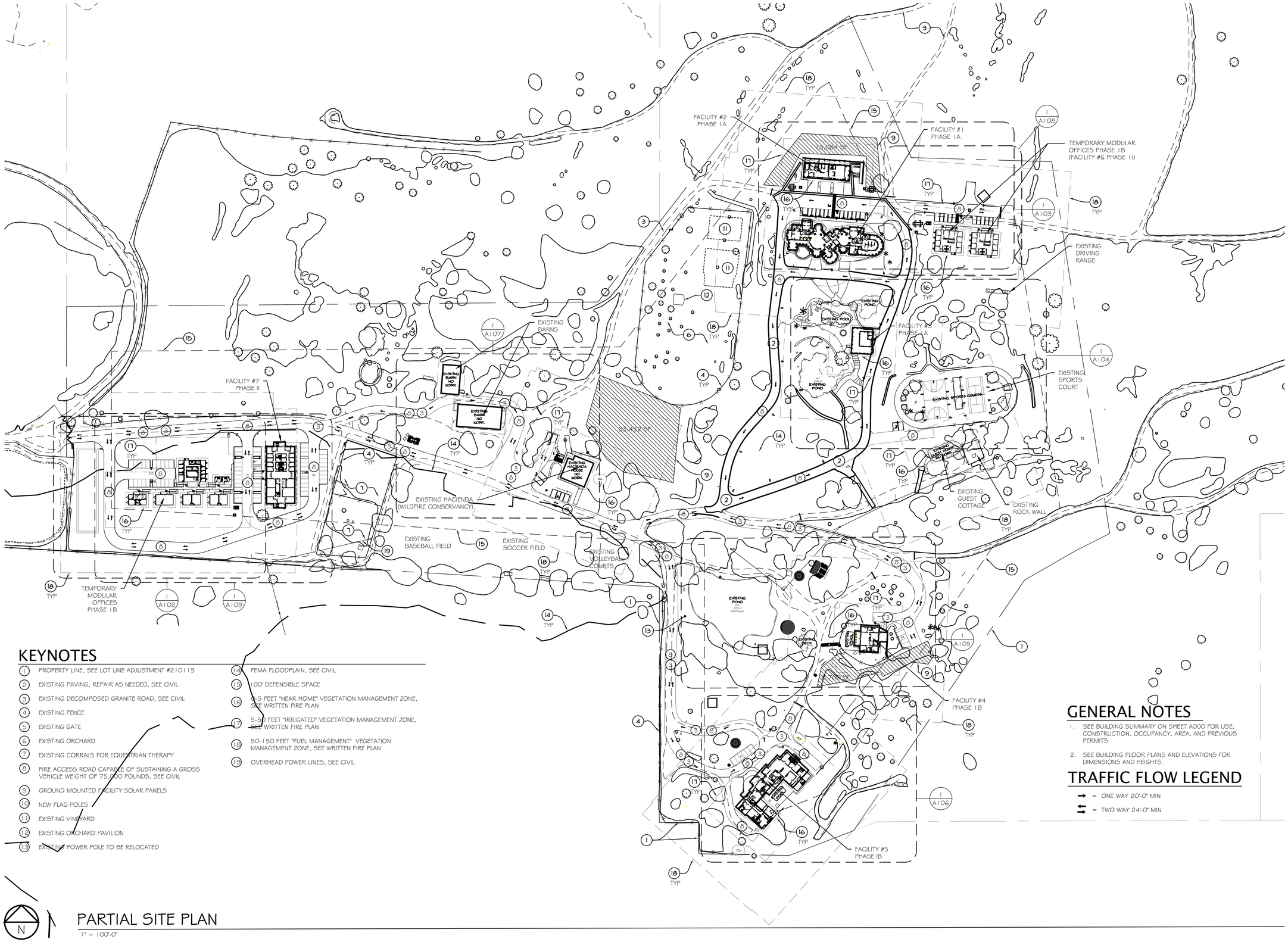

KEYNOTES

1. PROPERTY LINE, SEE LOT LINE ADJUSTMENT #210115
2. EXISTING PAVING, REPAIR AS NEEDED, SEE CIVIL
3. EXISTING DECOMPOSED GRANITE ROAD, SEE CIVIL
4. EXISTING FENCE
5. EXISTING GATE
6. EXISTING ORCHARD
7. EXISTING CORRALS FOR EQUESTRIAN THERAPY
8. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
9. GROUND MOUNTED FACILITY SOLAR PANELS
10. NEW FLAG POLES
11. EXISTING VINEYARD
12. EXISTING ORCHARD PAVILION
13. EXISTING POWER POLE TO BE RELOCATED
14. FEMA FLOODPLAIN, SEE CIVIL
15. 100' DEFENSIBLE SPACE
16. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
17. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
18. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
19. OVERHEAD POWER LINES, SEE CIVIL

GENERAL NOTES

1. SEE BUILDING SUMMARY ON SHEET A000 FOR USE, CONSTRUCTION, OCCUPANCY, AREA, AND PREVIOUS PERMITS
2. SEE BUILDING FLOOR PLANS AND ELEVATIONS FOR DIMENSIONS AND HEIGHTS.

TRAFFIC FLOW LEGEND

= ONE WAY 20'-0" MIN

= TWO WAY 24'-0" MIN

N

PARTIAL SITE PLAN

1" = 100'-0"

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT
MICHAEL RYAN WING
30506
RENEWAL DATE 5/31/23
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

821 S.E. 14th Loop, Suite 109
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Battle Ground, WA 98604
Ph 360-687-8379

ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd. Hemet, CA 92544

PARTIAL SITE PLAN

PROJECT # 20064

DATE 9/27/2021

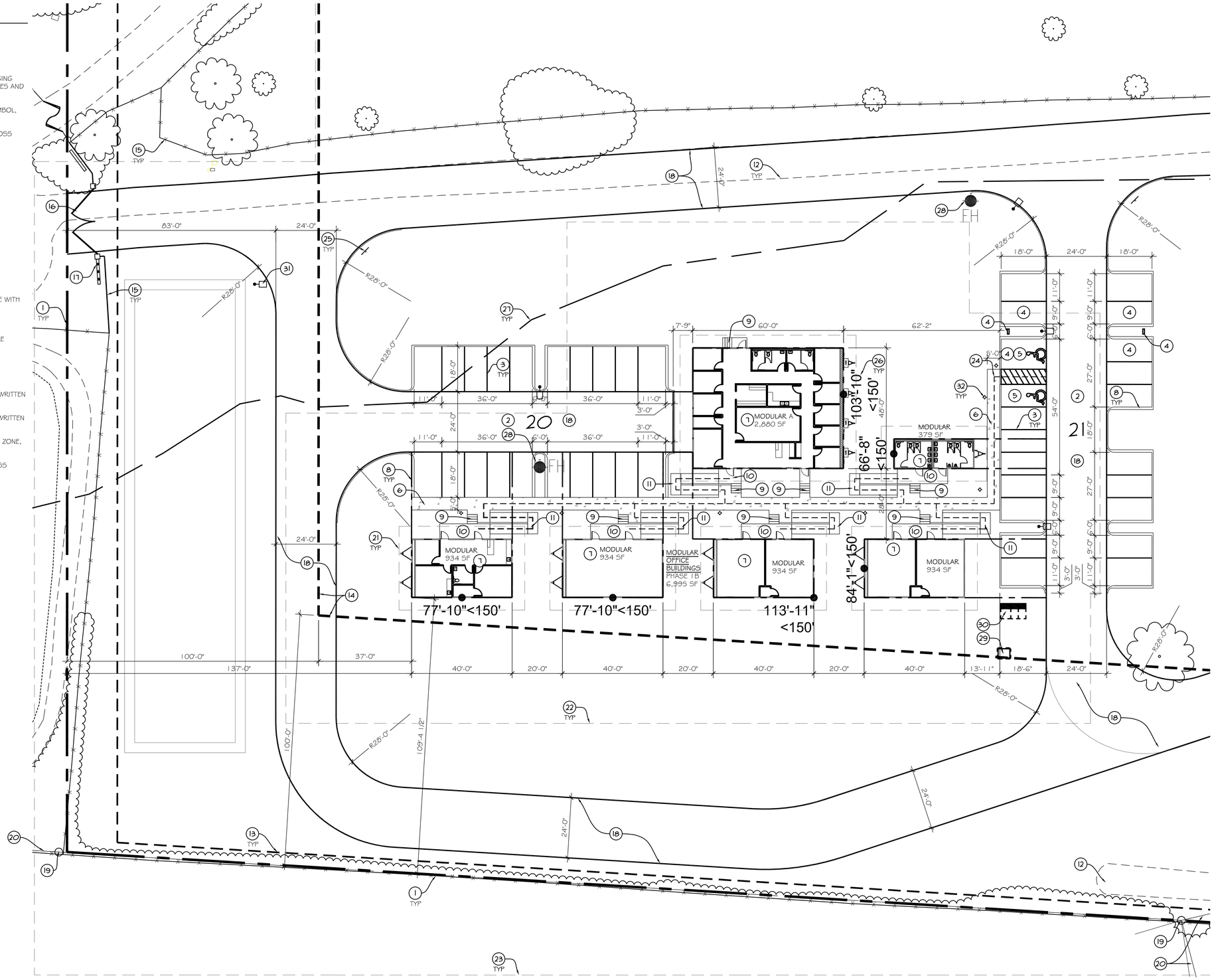
REV #	DATE	REASON

A101

SCHEMATIC DESIGN

KEYNOTES:

1. PROPERTY LINE, SEE LOT LINE ADJUSTMENT #210115
2. PAVING, PHASE 1B, SEE CIVIL
3. 4" WIDE PAINT STRIPE, TYPICAL
4. ELECTRIC VEHICLE PARKING/CHARGING SPACE, PROVIDE CHARGING STATION CAPABLE OF SERVING (2) ADJACENT ELECTRIC VEHICLES AND REQUIRED SIGNAGE
5. ACCESSIBLE PARKING SPACE; PROVIDE SIGNAGE, PAINTED SYMBOL, AND ACCESS AISLE, 2% SLOPE MAX ANY DIRECTION
6. CONCRETE SIDEWALK, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
7. MODULAR BUILDING, PHASE 1B, WUI LISTED
8. 12" CONCRETE STEP-OUT
9. STEEL STAIRS WITH GUARDRAILS AND HANDRAIL, PHASE 1B
10. STEEL LANDING WITH GUARDRAILS, PHASE 1B
11. STEEL RAMP WITH GUARDRAILS AND HANDRAILS, PHASE 1B
12. EXISTING DECOMPOSED GRANITE ROAD, SEE CIVIL
13. SETBACK
14. 100' DEFENSIBLE SPACE
15. EXISTING FENCE
16. NEW AUTOMATIC MOTOR OPERATED SWINGING ENTRANCE GATE WITH FIRE DEPARTMENT KNOX GATE SWITCH ACCESS
17. FLAG POLES
18. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
19. EXISTING UTILITY POLE
20. OVERHEAD POWER LINES, SEE CIVIL
21. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
22. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
23. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
24. ACCESSIBLE ROUTE, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
25. WAYFINDING SIGNAGE
26. FIRE DEPARTMENT HOSE PULL DISTANCE
27. FEMA FLOODPLAIN, SEE CIVIL
28. FIRE HYDRANT, SEE CIVIL
29. TRANSFORMER, SEE ELECTRICAL
30. ELECTRICAL SERVICE, SEE ELECTRICAL
31. LIGHT POLE, SEE ELECTRICAL
32. LIGHT BOLLARD, SEE ELECTRICAL



N

1 ENLARGED SITE PLAN - TEMPORARY MODULAR OFFICE BUILDINGS PHASE 1B

1" = 20'-0"

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT
MICHAEL RYAN WING
30564
5/31/23
RENEWAL DATE
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

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Battle Ground, WA 98604
Ph 360-687-8379

ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd. Hemet, CA 92544

ENLARGED SITE PLAN

PROJECT # 20064

DATE 9/27/2021

REV #	DATE	REASON

A102

SCHEMATIC DESIGN

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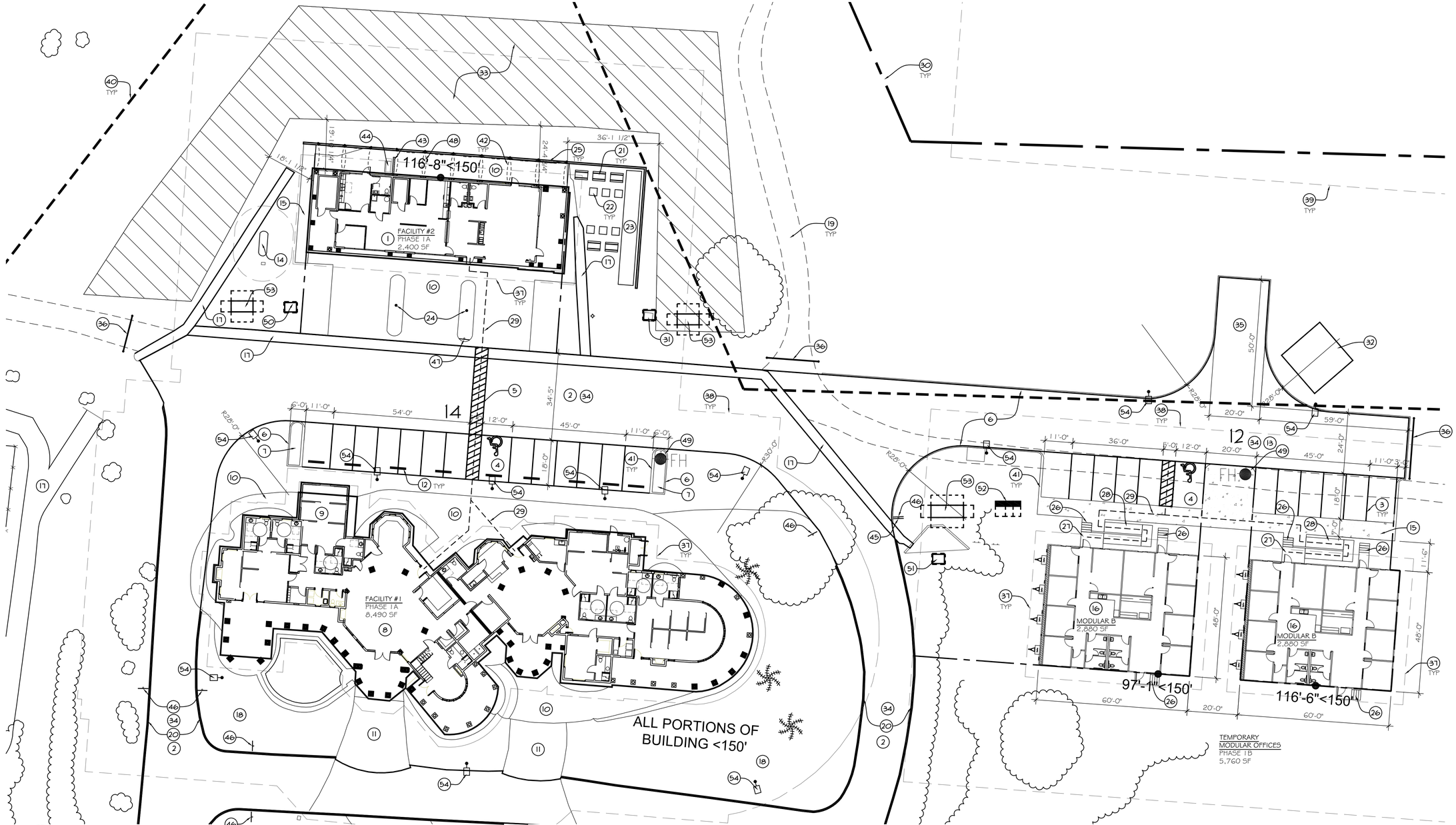

ENLARGED SITE PLAN - FACILITY 1 PHASE 1A, FACILITY 2 PHASE 1A, TEMPORARY MODULAR OFFICES PHASE 1A

1" = 20'-0"

KEYNOTES:

1. EXISTING GARAGE, FACILITY 2, ALTERATIONS FOR KITCHEN AND DINING HALL, PHASE 1A
2. EXISTING PAVING, SEE CIVIL, REPAIR AS NEEDED
3. 4" WIDE PAINT STRIPE, TYPICAL
4. ACCESSIBLE PARKING SPACE, PROVIDE SIGNAGE, PAINTED SYMBOL AND ACCESS AISLE, 2% SLOPE MAX ANY DIRECTION
5. PEDESTRIAN CROSSING WITH PAINTED DIAGONAL STRIPES, 1:20 DIRECTIONAL SLOPE MAX / 2% MAX CROSS SLOPE MAX
6. CAST IN PLACE CONCRETE CURB, PHASE IB
7. LANDSCAPE ISLAND, SEE LANDSCAPE
8. EXISTING SILVERADO LODGE, FACILITY 1, ALTERATIONS FOR RESIDENTIAL TREATMENT FACILITY, PHASE 1A
9. ENCLOSE EXISTING CARPORT, PHASE 1A
10. EXISTING CONCRETE PAVING
11. EXISTING CONCRETE STAIRS
12. CONCRETE WHEEL STOP
13. PAVING, PHASE IB, SEE CIVIL
14. RELOCATE EXISTING PROPANE TANK
15. CONCRETE SIDEWALK, PHASE IB
16. MODULAR BUILDING, PHASE 1B, WUI LISTED
17. EXISTING CONCRETE DRAINAGE DITCH, SEE CIVIL
18. EXISTING LANDSCAPING, SEE LANDSCAPE
19. EXISTING DECOMPOSED GRANITE ROAD, SHOWN DASHED, SEE CIVIL
20. EXISTING CURB
21. PICNIC TABLES, PHASE IB
22. HORSESHOE PIT, PHASE IB
23. BOCCE COURT, PHASE IB
24. FLAG POLE
25. RETAINING WALL WITH STONE VENEER AND STONE CAP, PHASE IB
26. STEEL STAIRS WITH GUARDRAILS AND HANDRAIL, PHASE 1B
27. STEEL LANDING WITH GUARDRAILS, PHASE 1B
28. STEEL RAMP WITH GUARDRAILS AND HANDRAILS, PHASE 1B
29. ACCESSIBLE ROUTE, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
30. PROPERTY LINE, SEE LOT LINE ADJUSTMENT #210115
31. EXISTING TRANSFORMER
32. OUTDOOR PAVILION, PHASE IB
33. GROUND MOUNTED FACILITY SOLAR
34. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
35. FIRE APPARATUS TURNAROUND
36. MANUAL SWINGING GATE
37. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
38. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
39. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
40. 100'-0" DEFENSIBLE SPACE
41. 12" CONCRETE STEP-OUT
42. SHADE STRUCTURE, ABOVE
43. 6' HIGH MASONRY PRIVACY WALL
44. GAS GRILL
45. WAYFINDING SIGNAGE
46. ONE WAY SIGNAGE
47. ACCESSIBLE LOADING ZONE SIGNAGE
48. FIRE DEPARTMENT HOSE PULL LENGTH
49. FIRE HYDRANT, SEE CIVIL
50. EXISTING TRANSFORMER
51. TRANSFORMER, SEE ELECTRICAL
52. ELECTRICAL SERVICES, SEE ELECTRICAL
53. GENERATOR, SEE ELECTRICAL
54. LIGHTPOLE, SEE ELECTRICAL

JW architects
JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT
MICHAEL RYAN WING
No. 30560
5/31/23
RENEWAL DATE
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

821 S.E. 14th Loop, Suite 109
P.O. Box 798
Battle Ground, WA 98604
Ph 360-687-8379

ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd. Hemet, CA 92544

ENLARGED SITE PLAN

PROJECT # 20064

DATE 9/27/2021

REV #	DATE	REASON

A103

SCHEMATIC DESIGN

KEYNOTES:

1. EXISTING POOL HOUSE, PROPOSED POOL HOUSE AND GYM ALTERATIONS, FACILITY 3, PHASE 1A
2. EXISTING CONCRETE SIDEWALK
3. EXISTING CONCRETE STAIRS
4. EXISTING POOL
5. EXISTING BASKETBALL COURT
6. EXISTING TENNIS COURT
7. EXISTING PAVING, SEE CIVIL, REPAIR AS NEEDED
8. EXISTING HOT TUB
9. EXISTING CURB
10. EXISTING POND
11. EXISTING POOL FENCING
12. EXISTING RETAINING WALL
13. EXISTING CONCRETE DRAINAGE DITCH, SEE CIVIL
14. EXISTING DRIVING RANGE
15. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
16. PAVING, PHASE 1A, SEE CIVIL
17. CAST IN PLACE CONCRETE CURB, PHASE 1B
18. 4" WIDE PAINT STRIPE TYPICAL
19. 12" CONCRETE STEP-OUT
20. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
21. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
22. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
23. ACCESSIBLE ROUTE 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
24. RAMP DOWN TO POOL DECK, 1:12 SLOPE MAX
25. WAYFINDING SIGNAGE
26. ONE WAY SIGNAGE
27. ACCESSIBLE LOADING ZONE SIGNAGE
28. FIRE DEPARTMENT HOSE PULL DIMENSION
29. LIGHTPOLE, SEE ELECTRICAL

ENLARGED SITE PLAN - FACILITY 3 PHASE 1A

1" = 20'-0"

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT
MICHAEL RYAN WING
No. 30504
RENEWAL 5/31/23
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

821 S.E. 14th Loop, Suite 109
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ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

**43700 Cactus Valley Rd.
Hemet, CA 92544**

ENLARGED SITE PLAN

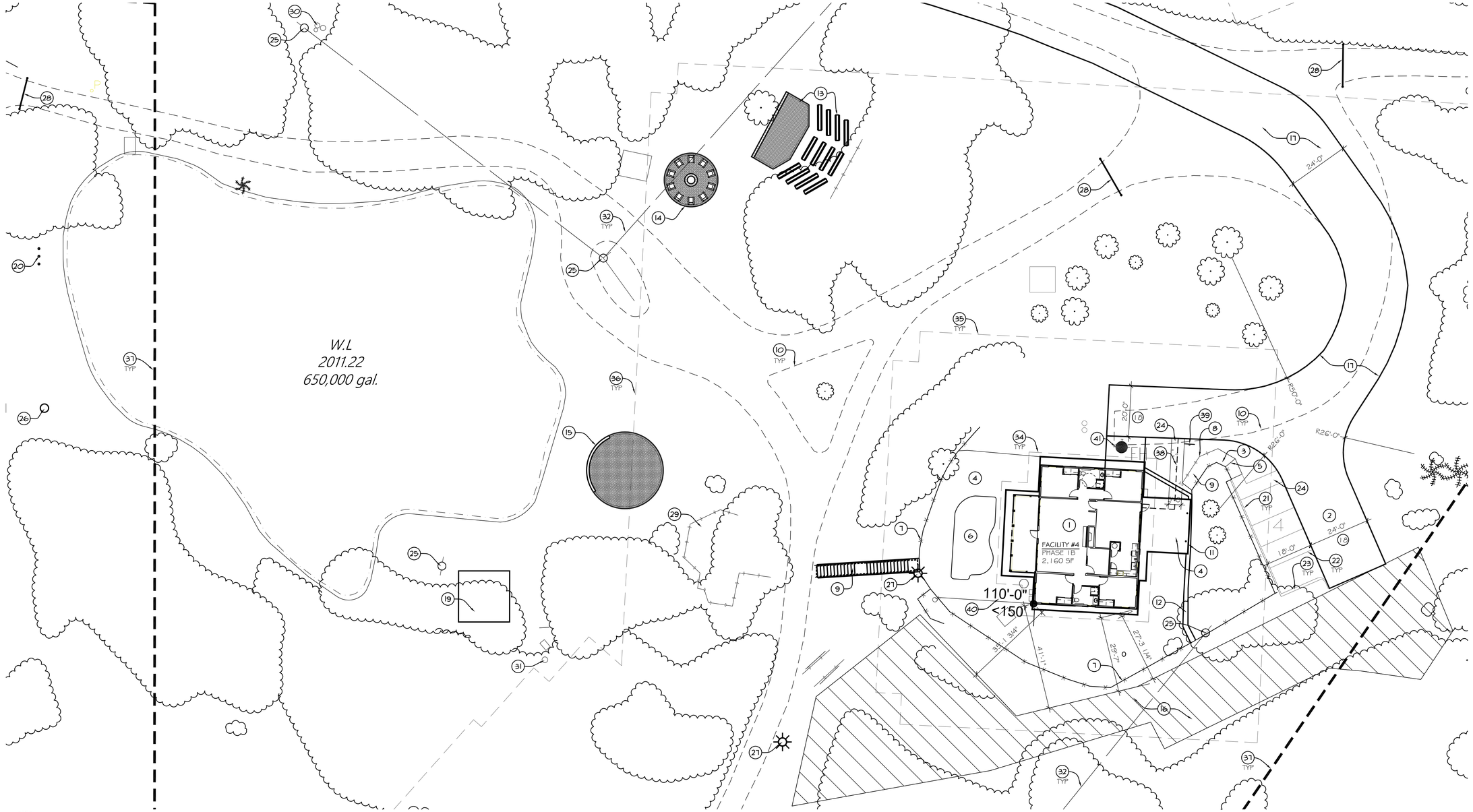
PROJECT # 20064

DATE 9/27/2021

REV #	DATE	REASON

A104

SCHEMATIC DESIGN



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ENLARGED SITE PLAN - FACILITY 4 PHASE 1B

1" = 20'-0"

KEYNOTES:

1. EXISTING CHAPARRAL LODGE, FACILITY 4, ALTERATIONS FOR RESIDENTIAL TREATMENT FACILITY, PHASE 1B
2. PAVING, PHASE 1B, SEE CIVIL
3. EXISTING CONCRETE SIDEWALK
4. EXISTING CONCRETE PATIO
5. EXISTING CONCRETE STAIRS
6. EXISTING POOL
7. EXISTING POOL FENCING
8. EXISTING RETAINING WALL
9. NEW CONCRETE STAIRS WITH METAL HANDRAIL EACH SIDE
10. EXISTING DECOMPOSED GRANITE ROAD, SHOWN DASHED, SEE CIVIL
11. EXISTING CANOPY, ABOVE
12. EXISTING CONCRETE DRAINAGE DITCH, SEE CIVIL
13. AMPHITHEATER, PROVIDE NEW STONE BENCH SEATING AND PAVERS
14. FIRE PIT WITH STONE VENEER, STONE CAP AND PAVERS
15. GRADUATION CIRCLE WITH LOW WALL WITH STONE VENEER AND PAVERS
16. GROUND MOUNTED FACILITY SOLAR
17. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
18. FIRE APPARATUS TURNAROUND
19. LAKE PAVILION
20. FLAG POLES
21. CAST IN PLACE CONCRETE CURB, PHASE IB
22. 4" WIDE PAINT STRIPE TYPICAL
23. 12" CONCRETE STEP-OUT
24. CONCRETE SIDEWALK, PHASE IB
25. EXISTING UTILITY POLE
26. RELOCATED UTILITY POLE
27. EXISTING LIGHT POLE
28. MANUAL SWINGING GATE
29. EXISTING DECK
30. EXISTING WELL #7
31. EXISTING WELL #8
32. OVERHEAD POWER LINE, SEE CIVIL
33. NOT USED
34. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
35. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
36. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
37. 100'-0" DEFENSIBLE SPACE
38. ACCESSIBLE ROUTE, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
39. ACCESSIBLE LOADING ZONE SIGNAGE
40. FIRE DEPARTMENT HOSE PULL DIMENSION
41. FIRE HYDRANT, SEE CIVIL

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT
MICHAEL RYAN WING
30604
5/31/23
RENEWAL DATE
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

821 S.E. 14th Loop, Suite 109
P.O. Box 798
Battle Ground, WA 98604
Ph 360-687-8379

ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd. Hemet, CA 92544

ENLARGED SITE PLAN

PROJECT # 20064

DATE 9/27/2021

REV #	DATE	REASON

A105

SCHEMATIC DESIGN

KEYNOTES:

1. PROPERTY LINE, SEE LOT LINE ADJUSTMENT #210115
2. EXISTING PONDEROSA LODGE, FACILITY 5, ADDITIONS AND ALTERATIONS FOR RESIDENTIAL TREATMENT FACILITY, PHASE 1B
3. PARKING, PHASE 1B
4. EXISTING CONCRETE PATIO
5. EXISTING CONCRETE STAIRS
6. EXISTING RETAINING WALL
7. EXISTING FENCING
8. EXISTING POOL
9. EXISTING CONCRETE SIDEWALK AND LOADING ZONE
10. EXISTING SLUMP STONE PATIO WALL
11. ACCESSIBLE ROUTE, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
12. EXISTING DECOMPOSED GRANITE ROAD, SHOWN DASHED, SEE CIVIL
13. SETBACK
14. 100' DEFENSIBLE SPACE
15. PAVING, SEE CIVIL
16. OVERHEAD POWER LINE, SEE CIVIL
17. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
18. FIRE APPARATUS TURNAROUND
19. PONDEROSA PAVILION
20. CAST IN PLACE CONCRETE CURB, PHASE 1B
21. 4" WIDE PAINT STRIPE TYPICAL
22. 12" CONCRETE STEP-OUT
23. RELOCATE EXISTING LIGHT POLE
24. FIRE PIT AND PAVERS
25. EXISTING WATER STORAGE TANKS
26. EXISTING PROPANE TANK
27. EXISTING LIGHT POLE
28. EXISTING POWER POLE
29. EXISTING BASKETBALL HOOP
30. MANUAL SWINGING GATE
31. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
32. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
33. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
34. ONE WAY SIGNAGE
35. ACCESSIBLE LOADING ZONE SIGNAGE
36. FIRE DEPARTMENT HOSE PULL DIMENSION
37. FIRE HYDRANT, SEE CIVIL

N

ENLARGED SITE PLAN - FACILITY 5 PHASE 1B

1" = 20'-0"

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT
MICHAEL RYAN WING
No. 30506
RENEWAL 5/31/23
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

821 S.E. 14th Loop, Suite 109
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Battle Ground, WA 98604
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ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd.
Hemet, CA 92544

ENLARGED SITE PLAN

PROJECT # 20064

DATE 9/27/2021

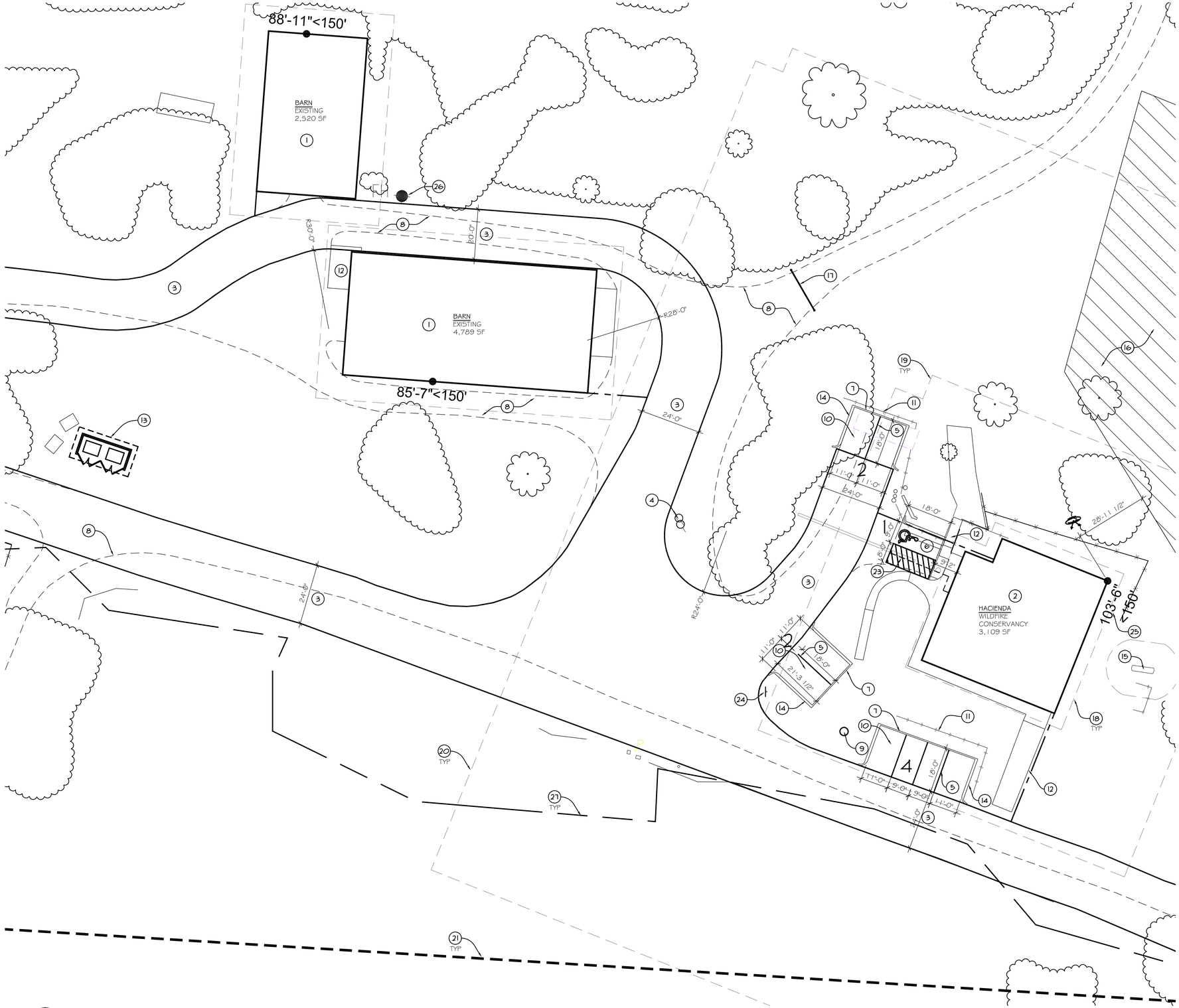
REV #	DATE	REASON

A106

SCHEMATIC DESIGN

KEYNOTES:

1. EXISTING BARN
2. EXISTING HACIENDA HOUSE, WILDFIRE CONSERVANCY
3. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
4. EXISTING UTILITY POLE
5. 4" WIDE PAINT STRIPE, TYPICAL
6. ACCESSIBLE PARKING SPACE; PROVIDE SIGNAGE, PAINTED SYMBOL AND ACCESS AISLE, 2% SLOPE MAX ANY DIRECTION
7. CAST IN PLACE CONCRETE CURB
8. EXISTING DECOMPOSED GRANITE ROAD, SHOWN DASHED. SEE CIVIL
9. RELOCATE EXISTING UTILITY POLE
10. PAVING, SEE CIVIL
11. EXISTING RETAINING WALL
12. EXISTING CONCRETE SIDEWALK, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
13. PROPOSED COVERED TRASH ENCLOSURE
14. 12" CONCRETE STEP-OUT
15. EXISTING PROPANE TANK
16. GROUND MOUNTED FACILITY SOLAR, SEE SHEET A100 FOR OVERALL FOOTPRINT AND AREA
17. MANUAL SWINGING GATE
18. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
19. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
20. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
21. 100'-0" DEFENSIBLE SPACE
22. OVERHEAD POWER LINES, SEE CIVIL
23. ACCESSIBLE ROUTE, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
24. WAYFINDING SIGNAGE
25. FIRE DEPARTMENT HOSE PULL DIMENSION
26. FIRE HYDRANT, SEE CIVIL
27. FEMA FLOODPLAIN, SEE CIVIL



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ENLARGED SITE PLAN - HACIENDA (WILDFIRE CONSERVANCY), EXISTING BARNS

1" = 20'-0"

JW architects

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT MICHAEL RYAN WING C-30604 RENEWAL 5/31/23 DATE STATE OF CALIFORNIA

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ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd. Hemet, CA 92544

ENLARGED SITE PLAN

PROJECT # 20064

DATE 9/27/2021

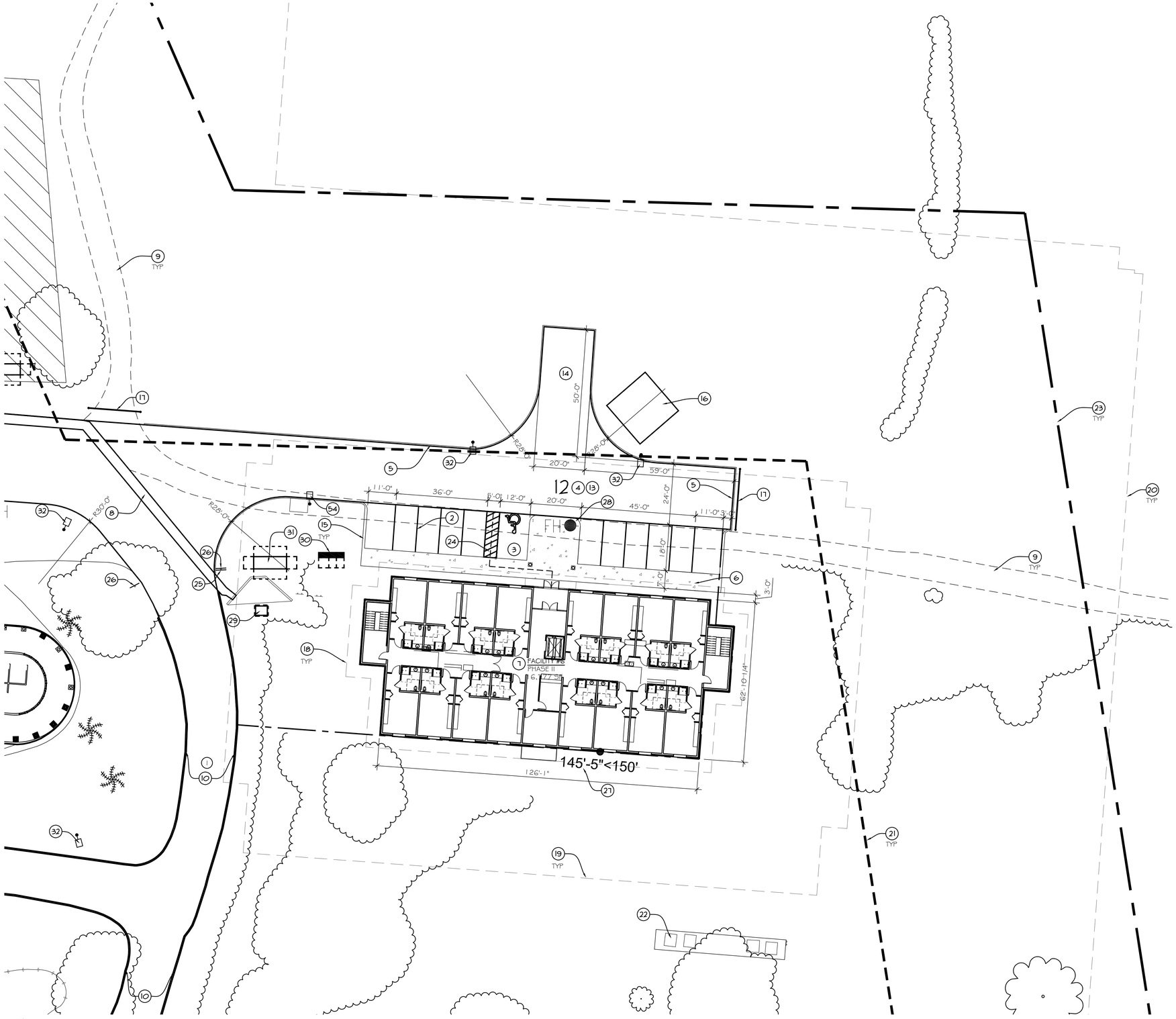
REV #	DATE	REASON

A107

SCHEMATIC DESIGN

KEYNOTES:

1. EXISTING PAVING, SEE CIVIL
2. 4" WIDE PAINT STRIPE, TYPICAL, PHASE IB
3. ACCESSIBLE PARKING SPACE, SIGNAGE, PAINTED SYMBOL AND ACCESS AISLE; PHASE IA, 2% SLOPE MAX ANY DIRECTION
4. PAVED PARKING, PHASE IB
5. CAST IN PLACE CONCRETE CURB, PHASE IB
6. CONCRETE SIDEWALK, PHASE IB, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
7. PROPOSED LODGE BUILDING, FACILITY 6, FOR RESIDENTIAL TREATMENT FACILITY, PHASE II
8. EXISTING CONCRETE DRAINAGE DITCH, SEE CIVIL
9. EXISTING DECOMPOSED GRANITE ROAD, SHOWN DASHED, SEE CIVIL
10. EXISTING CURB
11. GROUND MOUNTED SOLAR FACILITY
12. ROOF TOP MOUNTED FACILITY SOLAR
13. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
14. FIRE APPARATUS TURNAROUND
15. 12" CONCRETE STEP-OUT, PHASE IB
16. OUTDOOR PAVILION
17. MANUAL SWINGING GATE
18. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
19. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
20. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
21. 100'-0" DEFENSIBLE SPACE
22. EXISTING DRIVING RANGE
23. PROPERTY LINE, SEE LOT LINE ADJUSTMENT #210115
24. ACCESSIBLE ROUTE, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
25. WAYFINDING SIGNAGE
26. ONE WAY SIGNAGE
27. FIRE DEPARTMENT HOSE PULL DIMENSION
28. FIRE HYDRANT, SEE CIVIL
29. TRANSFORMER, SEE ELECTRICAL
30. ELECTRICAL SERVICE, SEE ELECTRICAL
31. GENERATOR, SEE ELECTRICAL
32. LIGHTPOLE, SEE ELECTRICAL



N

ENLARGED SITE PLAN - FACILITY 6 PHASE II

1" = 20'-0"

JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT MICHAEL RYAN WING No. 30504 RENEWAL 5/31/23 STATE OF CALIFORNIA

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ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd.
Hemet, CA 92544

ENLARGED SITE PLAN

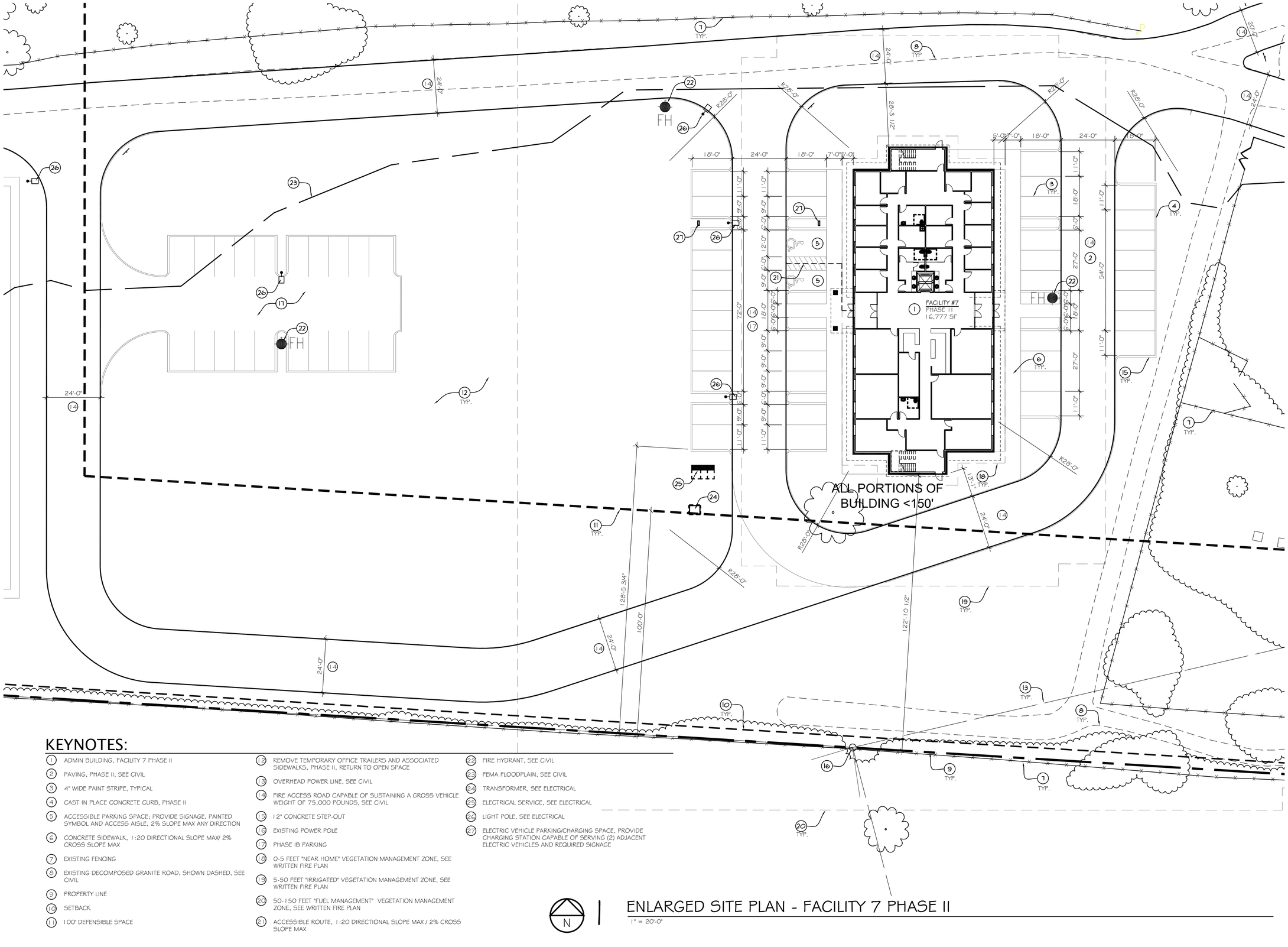
PROJECT # 20064

DATE 9/27/2021

REV #	DATE	REASON

A108

SCHEMATIC DESIGN



KEYNOTES:

1. ADMIN BUILDING, FACILITY 7 PHASE II
2. PAVING, PHASE II, SEE CIVIL
3. 4" WIDE PAINT STRIPE, TYPICAL
4. CAST IN PLACE CONCRETE CURB, PHASE II
5. ACCESSIBLE PARKING SPACE; PROVIDE SIGNAGE, PAINTED SYMBOL AND ACCESS AISLE, 2% SLOPE MAX ANY DIRECTION
6. CONCRETE SIDEWALK, 1:20 DIRECTIONAL SLOPE MAX/ 2% CROSS SLOPE MAX
7. EXISTING FENCING
8. EXISTING DECOMPOSED GRANITE ROAD, SHOWN DASHED, SEE CIVIL
9. PROPERTY LINE
10. SETBACK
11. 100' DEFENSIBLE SPACE
12. REMOVE TEMPORARY OFFICE TRAILERS AND ASSOCIATED SIDEWALKS, PHASE II, RETURN TO OPEN SPACE
13. OVERHEAD POWER LINE, SEE CIVIL
14. FIRE ACCESS ROAD CAPABLE OF SUSTAINING A GROSS VEHICLE WEIGHT OF 75,000 POUNDS, SEE CIVIL
15. 12" CONCRETE STEP-OUT
16. EXISTING POWER POLE
17. PHASE 1B PARKING
18. 0-5 FEET "NEAR HOME" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
19. 5-50 FEET "IRRIGATED" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
20. 50-150 FEET "FUEL MANAGEMENT" VEGETATION MANAGEMENT ZONE, SEE WRITTEN FIRE PLAN
21. ACCESSIBLE ROUTE, 1:20 DIRECTIONAL SLOPE MAX / 2% CROSS SLOPE MAX
22. FIRE HYDRANT, SEE CIVIL
23. FEMA FLOODPLAIN, SEE CIVIL
24. TRANSFORMER, SEE ELECTRICAL
25. ELECTRICAL SERVICE, SEE ELECTRICAL
26. LIGHT POLE, SEE ELECTRICAL
27. ELECTRIC VEHICLE PARKING/CHARGING SPACE, PROVIDE CHARGING STATION CAPABLE OF SERVING (2) ADJACENT ELECTRIC VEHICLES AND REQUIRED SIGNAGE

N

ENLARGED SITE PLAN - FACILITY 7 PHASE II

1" = 20'-0"

JW architects
JOHANSSON WING ARCHITECTS, PC

LICENSED ARCHITECT — MICHAEL RYAN WING — 30504 — RENEWAL 5/31/23 — STATE OF CALIFORNIA

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ADVANCED RECOVERY SYSTEMS

PARADISE VALLEY RANCH

43700 Cactus Valley Rd. Hemet, CA 92544

ENLARGED SITE PLAN

PROJECT # 20064

DATE 9/27/2021

REV #	DATE	REASON

A109

SCHEMATIC DESIGN

"Working for our firefighters, dedicated to our communities…"

Overview

The Wildfire Conservancy is a recognized leader in addressing wildland and urban interface fires in the United States. Created through a diverse collaboration with notable fire departments, state, federal, and tribal agencies, academic universities, and key stakeholders (including utilities, environmental organizations, and local government), the Conservancy serves as a collaborative, full-service non-profit foundation providing research, consulting, and training on wildfire and wildland urban interface issues. Our project team includes experts in the fire services with decades of experience in public health, firefighter health/safety, fire science, materials/textiles, engineering, chemistry, statistics, law, policy, and regulation. We have successfully administered funding and projects with FEMA/DHS, US Forest Service, Department of Commerce, CAL FIRE, CAL FIRE L2881, EPA, BIA, National Parks, and many others. Our mission is to meet the current and emerging needs of our communities and first responders who are at highest risk from wildland and urban interface fires, focusing on three key areas:

- Improving firefighter health and safety
- Advancing attack effectiveness
- Promoting community resilience and awareness

Within the proposed property at the Paradise Valley Ranch, and in collaboration with the IAFF/ARS Center of Excellence in Firefighter Behavioral Health, we will be utilizing the site for programs in research and training for issues related to wildland fires and the wildland urban interface. No live fire training, controlled burns, or similar activities involving actual fire will occur onsite.

The Conservancy anticipates the use of a single facility (Hacienda House) located at the south portion of the property. Between 2-3 staff members shall be on site weekly, 2-4 days per week (Monday - Friday) during normal operating hours (8am-6pm). Onsite parking for the Wildfire Conservancy staff will consist of 2-3 vehicles parked adjacent to the Hacienda House 2-4 days per week (Monday - Friday) between 8am-6pm. Majority of the day-to-day use of the facility includes small-scale, routine research, office work, reporting, writing, and data analysis. Outdoor use for research will include occasional testing of equipment used on wildfires (e.g., PPE, tools, hose clamps, etc.), and small-scale training activities that may include use of trails, fire breaks, and sports fields.

Additionally, the Conservancy will conduct research and demonstration projects related to attack effectiveness, community resilience, and firefighter health/safety. This may include the use of fire engines and related wildland apparatus to demonstrate activities related to extended hoselays, hiking, vegetation management, and PPE/tool use. These events will be infrequent, typically occurring less than once a month with on-site staff members, and (typically) 1-2 fire engines with 3-8 firefighters. These activities will typically occur on weekends during non-peak operational hours, coordinated with the treatment center staff to avoid any operational impacts to their facilities, staff, or visitors.
Larger-scale research and/or training activities will be limited to 25 attendees and will typically occur on weekends during non-peak operational hours, coordinated with the treatment center staff to avoid any operational impacts to their facilities, staff, or visitors. These activities will occur less than once per month.

All research, training, and demonstration project activities will be limited to only using pre-existing disturbed areas, trails, fire breaks, roads, and sports fields. All activities will be kept to the trails and designated research/training areas, with onsite staff ensuring compliance. No activities will occur during rain or other under any conditions that might increase sedimentation/erosion or cause any damage to roads/infrastructure.

Any projects contemplating vegetation management or research on defensible space and community resilience will work within the existing footprints of fuel management zones identified in the fire management plan for the property. The only environmental impacts anticipated from the projects would occur during regular maintenance of the fuel modification zone that occurs normally as part of the facility operations. No activities will cause any air, water, noise, or other environmental impacts.

APPENDIX C

Reserve Assembly Analysis Acreages

RESERVE ASSEMBLY ANALYSIS RESULTS

Cell Group	GIS Cell Size	Min Goal	Target Goal ARL	Max Goal	Parcel 3	Project Area (Includes Paved Roads)	Existing ARL	Additional ARL to North	Existing Development/Disturbed	Inactive JPR	Potential ARL	Target Goal ARL Need (+ exceeds or - shortfall)	Target Goal ARL Need w/Additional ARL to North
J'	1050.95	472.93	525.48	578.02	18.37	6.75	605.32	139.82	72.39	180.33	169.70	429.88	569.70
L'	1042.57	729.80	781.93	834.06	29.38	5.18	499.77	80.76	40.72	244.97	227.39	190.20	270.96

APPENDIX D

Plants Observed

The plants listed below were detected either on the CUP Parcel or the greater Property area during field surveys conducted on February 11, 12, and 18, March 31, April 1 and 20, and May 24-29, 2021. Nomenclature follows *The Jepson Online Interchange*. Introduced/Naturalized species are indicated with an (I). Not all planted ornamentals are included in the list below. Some plant identifications were assisted post field surveys by botanist Fred Roberts. The Location of each detection corresponds with the following:

CUP = CUP Parcel
P = Property

COMMON NAME	SCIENTIFIC NAME	LOCATION
Borage Family	**Boraginaceae**	
baby blue eyes	*Nemophila menziesii*	P
common cryptantha	*Cryptantha intermedia*	CUP/P
common fiddleneck	*Amsinckia menziesii*	CUP/P
common phacelia	*Phacelia distans*	P
fiddleneck phacelia	*Phacelia tanacetifolia*	P
foothill snowdrops	*Plagiobothrys nothofulvus*	P
narrow-toothed pectocarya	*Pectocarya linearis* subsp. *ferocula*	CUP/P
thick-leaved yerba santa	*Eriodictyon crassifolium* var. *crassifolium*	P
wild canterbury bells	Phacelia minor	P
Brake Family	**Pteridaceae**	
Cleveland's lip fern	*Myriopteris clevelandii*	P
Brodiaea Family	**Themidaceae**	
blue dicks	*Dipterostemon capitatus*	P
Broomrape Family	**Orobanchaceae**	
purple owl's-clover	*Castilleja exserta*	P
Buckthorn Family	**Rhamnaceae**	
buck brush	*Ceanothus cuneatus*	P
evergreen buckthorn	*Rhamnus ilicifolia*	CUP/P
Buckwheat Family	**Polygonaceae**	
California buckwheat	*Eriogonum fasciculatum*	CUP/P
long-stem wild buckwheat	*Eriogonum elongatum* var. *elongatum*	CUP/P
slender buckwheat	*Eriogonum gracile*	CUP/P
Butcher's Broom Family	**Ruscaceae**	
chaparral nolina	*Nolina cismontana*	P
Buttercup Family	**Ranunculaceae**	
desert larkspur	*Delphinium parishii*	P
ropevine	*Clematis pauciflora*	P
Cactus Family	**Cactaceae**	
prickly pear cactus	*Opuntia littoralis*	CUP/P
snake cholla	*Cylindropuntia californica*	CUP/P
Carrot Family	**Apiaceae**	
hoary bowlesia	*Bowlesia incana*	CUP/P
Century Plant Family	**Agavaceae**	
chaparral yucca	*Hesperoyucca whipplei*	CUP/P
Mojave yucca	*Yucca schidigera*	P
Evening-Primrose Family	**Onagraceae**	
California false mustard	*Eulobus californicus*	CUP/P
California sun cup	*Camissoniopsis bistorta*	CUP/P

COMMON NAME	SCIENTIFIC NAME	LOCATION
strigose sun cup	*Camissonia strigulosa*	CUP/P
Fig-Marigold Family	**Aizoaceae**	
freeway iceplant (I)	*Carpobrotus edulis*	CUP
Four O'Clock Family	**Nyctaginaceae**	
wishbone bush	*Mirabilis laevis*	CUP/P
Geranium Family	**Geraniaceae**	
long beaked filaree (I)	*Erodium botrys*	CUP/P
redstem filaree (I)	*Erodium cicutarium*	CUP/P
Goosefoot Family	**Chenopodiaceae**	
Russian thistle (I)	*Salsola tragus*	CUP/P
Gourd Family	**Cucurbitaceae**	
chilicothe	*Marah macrocarpa*	CUP/P
Grass Family	**Poaceae**	
alkali sacaton	*Sporobolus airoides*	P
beardless wild rye	*Elymus triticoides*	P
cheat grass (I)	*Bromus tectorum*	CUP/P
little California melica	*Melica imperfecta*	P
needle grass	*Stipa* sp.	P
rattail sixweeks grass (I)	*Festuca myuros*	CUP/P
red brome (I)	*Bromus rubens*	CUP/P
ripgut grass (I)	*Bromus diandrus*	CUP/P
slender wild oat (I)	*Avena barbata*	CUP/P
wall barley (I)	*Hordeum murinum*	CUP/P
wild oat (I)	*Avena fatua*	CUP/P
Heath Family	**Ericaceae**	
big-berry manzanita	*Arctostaphylos glauca*	CUP/P
Legume Family	**Fabaceae**	
burclover (I)	*Medicago polymorpha*	CUP/P
Coulter's lupine	*Lupinus sparsiflorus*	CUP/P
deerweed	*Acmispon glaber*	CUP/P
Mexican palo verde (I)	*Parkinsonia aculeata*	CUP
truncate lupine	*Lupinus truncatus*	CUP/P
yellow sweetclover (I)	*Melilotus officinalis*	CUP/P
Mint Family	**Lamiaceae**	
black sage	*Salvia mellifera*	CUP/P
chia	*Salvia columbariae*	CUP/P
thistle sage	*Salvia carduacea*	P
Mistletoe Family	**Viscaceae**	
American Christmas mistletoe	*Phoradendron leucarpum* subsp. *macrophyllum*	CUP/P
Morning-Glory Family	**Convolvulaceae**	
California bindweed	*Calystegia macrostegia*	P
chaparral dodder	*Cuscuta californica*	P
Mulberry Family	**Moraceae**	
mulberry (I)	*Morus* sp.	CUP
Muskroot Family	**Adoxaceae**	
blue elderberry	*Sambucus nigra* subsp. *caerulea*	CUP/P
Mustard Family	**Brassicaceae**	
black mustard (I)	*Brassica nigra*	CUP/P

COMMON NAME	SCIENTIFIC NAME	LOCATION
eastern rocket (I)	*Sisymbrium orientale*	CUP/P
fringe pod	*Thysanocarpus curvipes*	P
London rocket (I)	*Sisymbrium irio*	CUP/P
radish (I)	*Raphanus sativus*	CUP
shortpod mustard (I)	*Hirschfeldia incana*	CUP/P
tumble mustard (I)	*Sisymbrium altissimum*	CUP/P
Myrtle Family	**Myrtaceae**	
blue gum (I)	*Eucalyptus globulus*	CUP
bottlebrush (I)	*Melaleuca viminalis*	CUP
lemon-scented gum (I)	*Eucalyptus citriodora*	CUP
Nightshade Family	**Solanaceae**	
blue witch	*Solanum umbelliferum*	P
jimson weed	*Datura wrightii*	CUP/P
tree tobacco (I)	*Nicotiana glauca*	CUP/P
Oak Family	**Fagaceae**	
coast live oak	*Quercus agrifolia*	CUP/P
scrub oak	*Quercus berberidifolia*	CUP/P
Olive Family	**Oleaceae**	
olive (I)	*Olea europaea*	CUP
Phlox Family	**Polemoniaceae**	
chaparral gilia	*Gilia angelensis*	P
ground pink	*Linanthus dianthiflorus*	P
Pine Family	**Pinaceae**	
Aleppo pine (I)	*Pinus halepensis*	CUP/P
Plantain Family	**Plantaginaceae**	
chaparral beardtongue	*Keckiella antirrhinoides*	CUP/P
Poppy Family	**Papaveraceae**	
California poppy	*Eschscholzia californica*	CUP/P
cream cups	*Platystemon californicus*	P
Rose Family	**Rosaceae**	
chamise	*Adenostoma fasciculatum*	CUP/P
red shank	*Adenostoma sparsifolium*	P
toyon	*Heteromeles arbutifolia*	P
Spurge Family	**Euphorbiaceae**	
California croton	*Croton californicus*	CUP/P
doveweed	*Croton setiger*	CUP/P
linear-leaved stillingia	*Stillingia linearifolia*	P
Stonecrop Family	**Crassulaceae**	
pygmy-weed	*Crassula connata*	CUP/P
Sumac Family	**Anacardiaceae**	
laurel sumac	*Malosma laurina*	P
Peruvian pepper tree (I)	*Schinus molle*	CUP/P
skunk bush	*Rhus aromatica*	P
Sunflower Family	**Asteraceae**	
African daisy (I)	*Arctotis* sp.	CUP/P
arrow weed	*Pluchea sericea*	P
brittlebush	*Encelia farinosa*	CUP/P
California cudweed	*Pseudognaphalium californicum*	CUP/P

COMMON NAME	SCIENTIFIC NAME	LOCATION
common dandelion (I)	*Taraxacum officinale*	CUP
common goldfields	*Lasthenia gracilis*	CUP/P
common sandaster	*Corethrogyne filaginifolia*	CUP/P
common sunflower	*Helianthus annuus*	P
golden yarrow	*Eriophyllum confertiflorum*	CUP/P
hairy horsebrush	*Tetradymia comosa*	P
Canada horseweed	*Erigeron canadensis*	CUP/P
interior goldenbush	*Ericameria linearifolia*	P
Kellogg's tarweed	*Deinandra kelloggii*	CUP/P
Lindley's silverpuffs	*Uropappus lindleyi*	CUP/P
matchweed	*Gutierrezia sarothrae*	P
mule fat	*Baccharis salicifolia* subsp. *salicifolia*	P
prickly lettuce (I)	*Lactuca serriola*	CUP/P
rush sweetbush	*Bebbia juncea* var. *aspera*	P
sacapellote	*Acourtia microcephala*	P
small wirelettuce	*Stephanomeria exigua* subsp. *deanei*	CUP/P
stinknet (I)	*Oncosiphon pilulifer*	CUP/P
tarragon	*Artemisia dracunculus*	P
tidy tips	*Layia platyglossa*	CUP/P
tocalote (I)	*Centaurea melitensis*	CUP/P
western ragweed	*Ambrosia psilostachya*	CUP/P
yellow pincushion	*Chaenactis glabriuscula*	CUP/P
Sycamore Family	**Platanaceae**	
California sycamore	*Platanus racemosa*	CUP/P
Tamarisk Family	**Tamaricaceae**	
saltcedar (I)	*Tamarix ramosissima*	P
Willow Family	**Salicaceae**	
arroyo willow	*Salix lasiolepis*	CUP/P
Fremont cottonwood	*Populus fremontii* subsp. *fremontii*	CUP/P

APPENDIX E

Wildlife Observed

Birds

The bird species listed below were detected either on, above, or near the CUP Parcel and the greater Property area during field surveys conducted on February 11, 12, and 18, March 31, April 1 and 20, and May 24-29, 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Tytonidae), Common Name, and Scientific Name follow the American Ornithologists' Union (AOU) *Checklist of North and Middle American Birds*. Introduced species are indicated with an (I). The Location of each detection corresponds with the following:

CUP = CUP Parcel
P = Property
N = Near the CUP Parcel/Property but offsite; within a visual (i.e., with the use of 10 by 42 binoculars) and/or aural detection radius
OH = Flying overhead or above the CUP Parcel/Property

COMMON NAME	SCIENTIFIC NAME	LOCATION
Barn Owls	**Tytonidae**	
Barn Owl	*Tyto alba*	CUP
Blackbirds	**Icteridae**	
Brown-headed Cowbird (I)	*Molothrus ater*	CUP
Hooded Oriole	*Icterus cucullatus*	CUP/P
Red-winged Blackbird	*Agelaius phoeniceus*	CUP
Western Meadowlark	*Sturnella neglecta*	CUP/N
Caracaras and Falcons	**Falconidae**	
American Kestrel	*Falco sparverius*	CUP/P/N
Cardinals and Allies	**Cardinalidae**	
Black-headed Grosbeak	*Pheucticus melanocephalus*	CUP/P
Lazuli Bunting	*Passerina amoena*	CUP/P
Cormorants	**Phalacrocoracidae**	
Double-crested Cormorant	*Phalacrocorax auritus*	CUP
Crows and Jays	**Corvidae**	
California Scrub-Jay	*Aphelocoma californica*	CUP/P
Common Raven	*Corvus corax*	CUP/P/N/OH
Cuckoos, Roadrunners, and Anis	**Cuculidae**	
Greater Roadrunner	*Geococcyx californianus*	P
Ducks, Geese, and Swans	**Anatidae**	
Ring-necked Duck	*Aythya collaris*	CUP
Finches and Allies	**Fringillidae**	
American Goldfinch	*Spinus tristis*	CUP/P
House Finch	*Haemorhous mexicanus*	CUP/P/N
Lawrence's Goldfinch	*Spinus lawrencei*	CUP/P
Lesser Goldfinch	*Spinus psaltria*	CUP/P/N
Gnatcatchers and Gnatwrens	**Polioptilidae**	
California Gnatcatcher	*Polioptila californica*	P/N
Hawks, Kites, Eagles, and Allies	**Accipitridae**	
Cooper's Hawk	*Accipiter cooperii*	CUP/P
Red-shouldered Hawk	*Buteo lineatus*	P
Red-tailed Hawk	*Buteo jamaicensis*	P/N/OH
Sharp-shinned Hawk	*Accipiter striatus*	CUP
Swainson's Hawk	*Buteo swainsoni*	OH

COMMON NAME	SCIENTIFIC NAME	LOCATION
Herons, Bitterns, and Allies	**Ardeidae**	
Great Blue Heron	*Ardea herodias*	CUP/OH
Great Egret	*Ardea alba*	CUP/N/OH
Hummingbirds	**Trochilidae**	
Anna's Hummingbird	*Calypte anna*	CUP/P
Costa's Hummingbird	*Calypte costae*	CUP/P
Kingfishers	**Alcedinidae**	
Belted Kingfisher	*Megaceryle alcyon*	CUP
Long-tailed Tits and Bushtits	**Aegithalidae**	
Bushtit	*Psaltriparus minimus*	CUP/P
Mockingbirds and Thrashers	**Mimidae**	
California Thrasher	*Toxostoma redivivum*	P
Northern Mockingbird	*Mimus polyglottos*	CUP/N
New World Quail	**Odontophoridae**	
California Quail	*Callipepla californica*	N
New World Sparrows	**Passerellidae**	
Bell's Sparrow	*Artemisiospiza belli*	P
Black-chinned Sparrow	*Spizella atrogularis*	P
Brewer's Sparrow	*Spizella breweri*	P/N
California Towhee	*Melozone crissalis*	CUP/P/N
Chipping Sparrow	*Spizella passerina*	P
Dark-eyed Junco	*Junco hyemalis*	CUP
Lark Sparrow	*Chondestes grammacus*	CUP
Rufous-crowned Sparrow	*Aimophila ruficeps*	P
Savannah Sparrow	*Passerculus sandwichensis*	N
Spotted Towhee	*Pipilo maculatus*	CUP/P
White-crowned Sparrow	*Zonotrichia leucophrys*	CUP/P
New World Vultures	**Cathartidae**	
Turkey Vulture	*Cathartes aura*	OH
Pigeons and Doves	**Columbidae**	
Eurasian Collared-Dove (I)	*Streptopelia decaocto*	CUP
Mourning Dove	*Zenaida macroura*	CUP/P/N
Silky-flycatchers	**Ptiliogonatidae**	
Phainopepla	*Phainopepla nitens*	CUP
Starlings	**Sturnidae**	
European Starling (I)	*Sturnus vulgaris*	CUP/OH
Swallows	**Hirundinidae**	
Cliff Swallow	*Petrochelidon pyrrhonota*	CUP
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	CUP
Violet-green Swallow	*Tachycineta thalassina*	CUP
Swifts	**Apodidae**	
White-throated swift	*Aeronautes saxatalis*	OH
Sylviid Warblers	**Sylviidae**	
Wrentit	*Chamaea fasciata*	P/N
Typical Owls	**Strigidae**	
Great Horned Owl	*Bubo virginianus*	CUP

COMMON NAME	SCIENTIFIC NAME	LOCATION
Tyrant Flycatchers	**Tyrannidae**	
Black Phoebe	*Sayornis nigricans*	CUP/P
Cassin's Kingbird	*Tyrannus vociferans*	CUP/P/N
Say's Phoebe	*Sayornis saya*	CUP/P/N
Western Kingbird	*Tyrannus verticalis*	CUP/N
Woodpeckers and Allies	**Picidae**	
Acorn Woodpecker	*Melanerpes formicivorus*	CUP/P
Northern Flicker	*Colaptes auratus*	CUP/P/N
Nuttall's Woodpecker	*Dryobates nuttallii*	CUP/P
Red-breasted x Red-naped Sapsucker hybrid	*Sphyrapicus* sp.	CUP
Wood-Warblers	**Parulidae**	
Yellow-rumped Warbler	*Setophaga coronata*	CUP/P
Wrens	**Troglodytidae**	
Bewick’s Wren	*Thryomanes bewickii*	CUP/P/N
House Wren	*Troglodytes aedon*	CUP/P

Mammals

The mammals listed below were detected through diagnostic sign, physical sightings, and/or during a 500-night small mammal trapping survey either on or near the CUP Parcel and the greater Property area during field surveys conducted on February 11, 12, and 18, March 31, April 1 and 20, and May 24-29, 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Felidae), Common Name, and Scientific Name follow *Wilson & Reeder's Mammal Species of the World*. The Location of each detection corresponds with the following:

CUP = CUP Parcel
P = Property
N = Near the CUP Parcel/Property but offsite; within a visual (i.e., with the use of 10 by 42 binoculars) and/or aural detection radius

COMMON NAME	SCIENTIFIC NAME	LOCATION
Cats	**Felidae**	
bobcat	*Lynx rufus*	CUP/P
Coyotes, Dogs, Foxes, Jackals, and Wolves	**Canidae**	
coyote	*Canis latrans*	CUP/P/N
Deer	**Cervidae**	
mule deer	*Odocoileus hemionus*	CUP/P
Ground Squirrels	**Sciuridae**	
California ground squirrel	*Spermophilus beecheyi*	CUP/P/N
Hares and Rabbits	**Leporidae**	
black-tailed jackrabbit	*Lepus californicus*	CUP/P/N
desert cottontail	*Sylvilagus audubonii*	CUP/P/N
Kangaroo Rats, Pocket Mice, and relatives	**Heteromyidae**	
Dulzura kangaroo rat	*Dipodomys simulans*	CUP
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	CUP
northwestern San Diego pocket mouse	*Chaetodipus fallax fallax*	CUP
New World Rats and Mice, Voles, Hamsters, and relatives	**Cricetidae**	
North American deermouse	*Peromyscus maniculatus*	CUP
San Diego desert woodrat	*Neotoma lepida intermedia*	CUP
Pocket Gophers	**Geomyidae**	
Botta's pocket gopher	*Thomomys bottae*	CUP/P/N
Skunks and Stink Badgers	**Mephitidae**	
striped skunk	*Mephitus mephitus*	CUP/P

Herpetofauna

The herpetofauna listed below were detected through diagnostic sign or physical sightings either on or near the CUP Parcel and the greater Property area during field surveys conducted on February 11, 12, and 18, March 31, April 1 and 20, and May 24-29, 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Bufonidae), Common Name, and Scientific Name follow the Society for the Study of Amphibian and Reptiles (SSAR) *Standard English and Scientific Names*. The Location of each detection corresponds with the following:

CUP = CUP Parcel
P = Property
N = Near the CUP Parcel/Property but offsite; within a visual (i.e., with the use of 10 by 42 binoculars) and/or aural detection radius

COMMON NAME	SCIENTIFIC NAME	LOCATION
True Toads	**Bufonidae**	
Western Toad	*Anaxyrus boreas*	CUP
Boas and Pythons	**Boidae**	
Rosy Boa	*Lichanura orcutti*	P
Harmless Egg-Laying Snakes	**Colubridae**	
Red Racer	*Coluber flagellum piceus*	CUP
Whiptails and Racerunners	**Teiidae**	
San Diegan Tiger Whiptail	*Aspidoscelis tigris stejnegeri*	P
Zebra-tailed, Earless, Fringe-toed, Spiny, Tree, Side-blotched, and Horned Lizards	**Phrynosomatidae**	
Granite Spiny Lizard	*Sceloporus orcutti*	P
Great Basin Fence Lizard	*Sceloporus occidentalis longipes*	CUP/P
Western Side-blotched Lizard	*Uta stansburiana elegans*	CUP/P

APPENDIX F

Assessment Photographs

MSHCP Section 6.1.2 Assessment Photos

BSEARL BIOLOGICAL SERVICES

N

0 100 200 400 600 800 Feet

1 inch = 250 feet

Appendix F
MSHCP Section 6.1.2
Photographs

DATE: March 1, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, High Res Imagery, 4M, SBS

Center of Excellence
CUP 210005
HAN200008

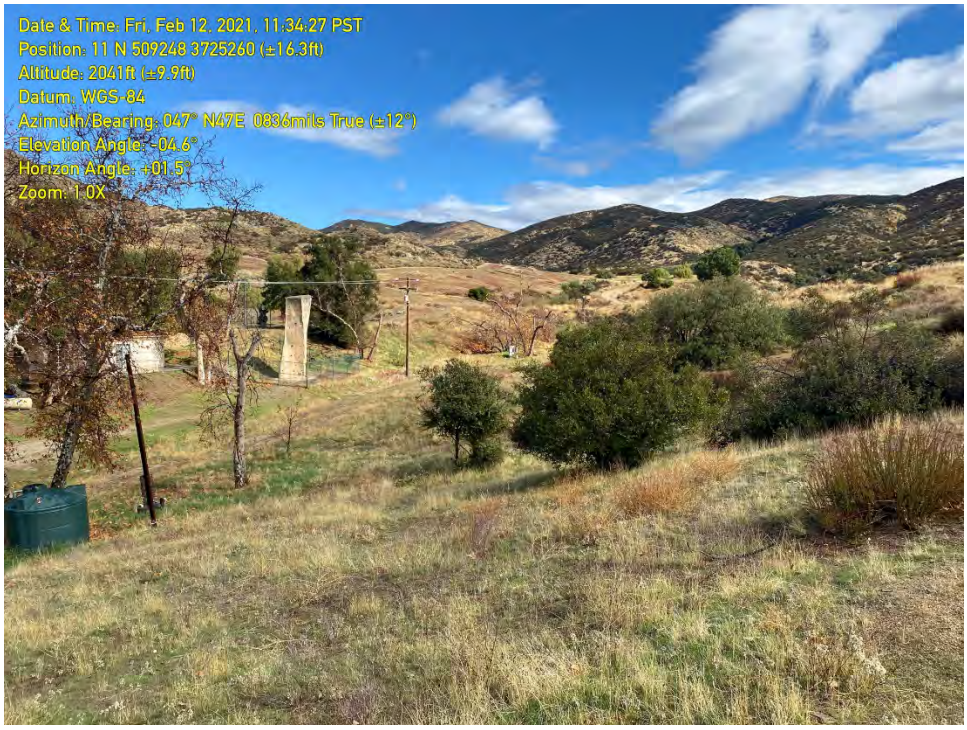
PHOTOGRAPH 1: A downstream view of Feature A. Most of this area was offsite.

PHOTOGRAPH 2: Two culverts within Feature A located at a dirt road crossing.

PHOTOGRAPH 3: A view of the Ruderal understory and a large coast live oak in Feature A. The culvert depicted was connected to Feature A_3.

PHOTOGRAPH 4: Ruderal understory and California sycamores of Feature A.

PHOTOGRAPH 5: A culvert in Feature A at a dirt road crossing.



PHOTOGRAPH 6: An overhead view of the upstream end of Feature A.

PHOTOGRAPH 7: The downstream end of Feature A_1 depicting the incised channel and habitat associated.

PHOTOGRAPH 8: The upstream end of Feature A_2.

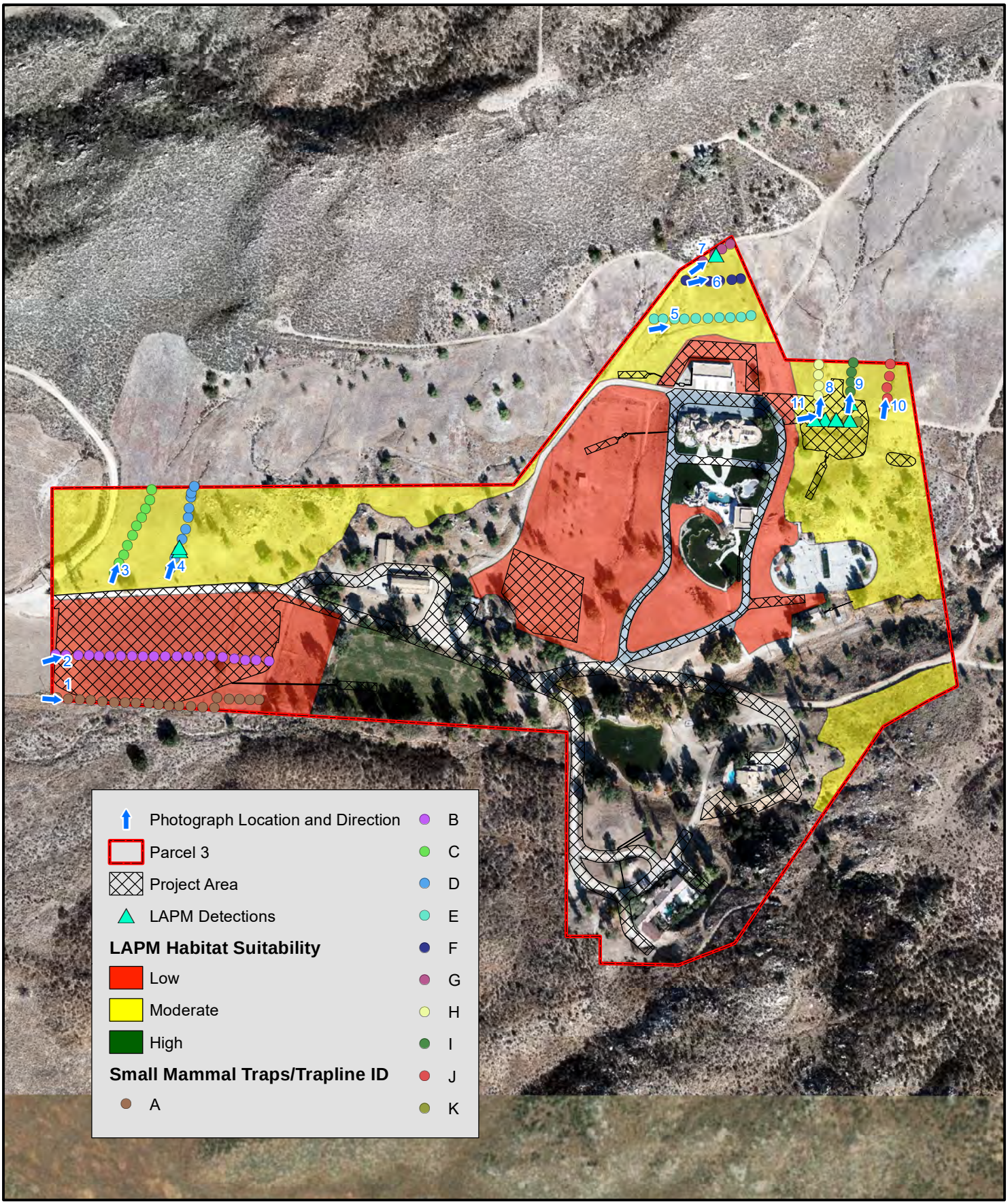
PHOTOGRAPH 9: A concrete channel leading down to the culverts of Feature A_2 under the sports complex.

PHOTOGRAPH 10: A concrete apron collecting discharge from the culverts of Feature A_2.

PHOTOGRAPH 11: The concrete V-ditch of Feature A_3.

PHOTOGRAPH 12: Feature A_3 downstream of the concrete V-ditch.

MSHCP Section 6.3.2 LAPM Assessment Photos



N

0 125 250 500 750 1,000 Feet

1 inch = 333 feet

Appendix F
LAPM Trapline Photographs

DATE: March 1, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (Feet)
SOURCE: ESRI World Imagery, 4M, Riverside County GIS Data, DBS, SBS

Center of Excellence
CUP 210005
HAN200008

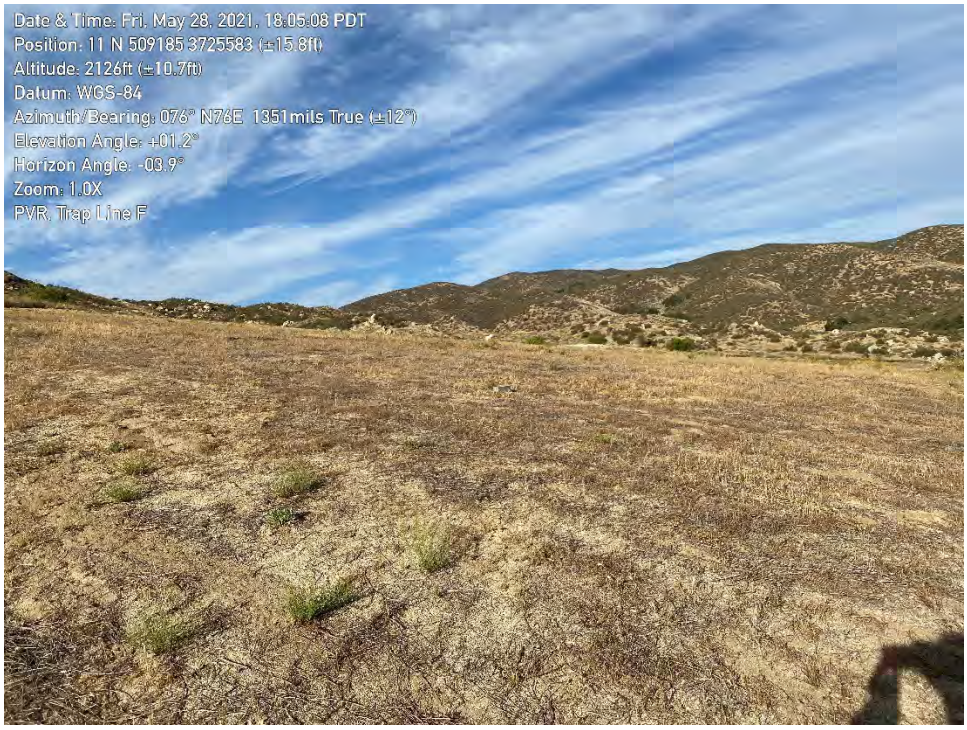
PHOTOGRAPH 1: An easterly view of Trapline A.

PHOTOGRAPH 2: An easterly view of Trapline B.

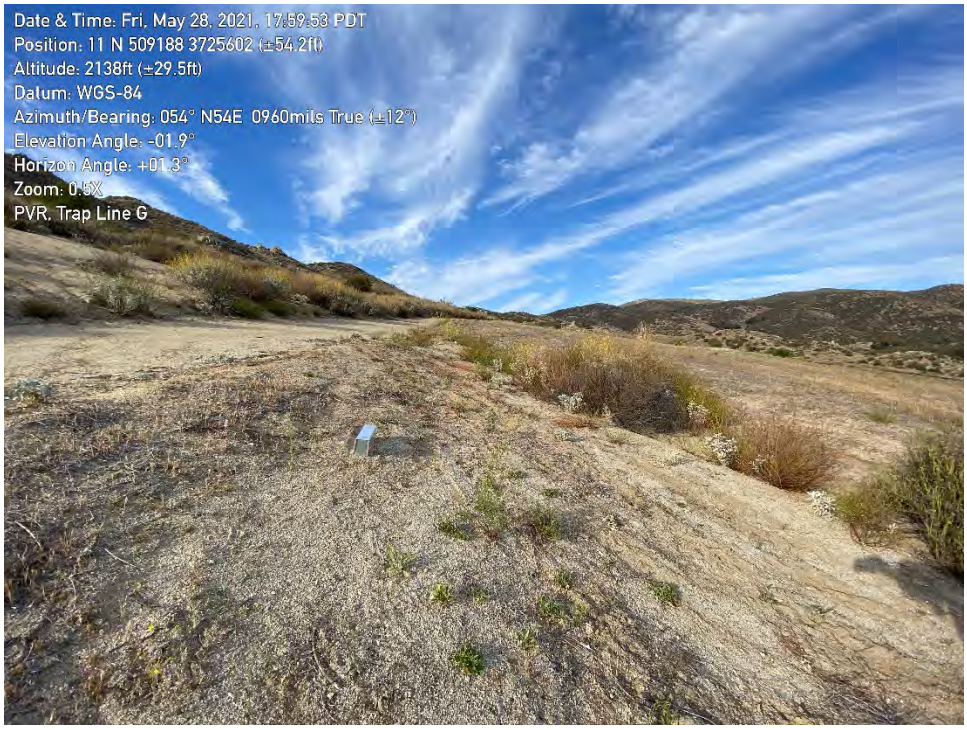
PHOTOGRAPH 3: A northerly view of Trapline C.

PHOTOGRAPH 4: A northerly view of Trapline D. LAPM was detected at trap D-3 on May 25 and recaptured on May 26.

PHOTOGRAPH 5: An easterly view of Trapline E.



PHOTOGRAPH 6: An easterly view of Trapline F.

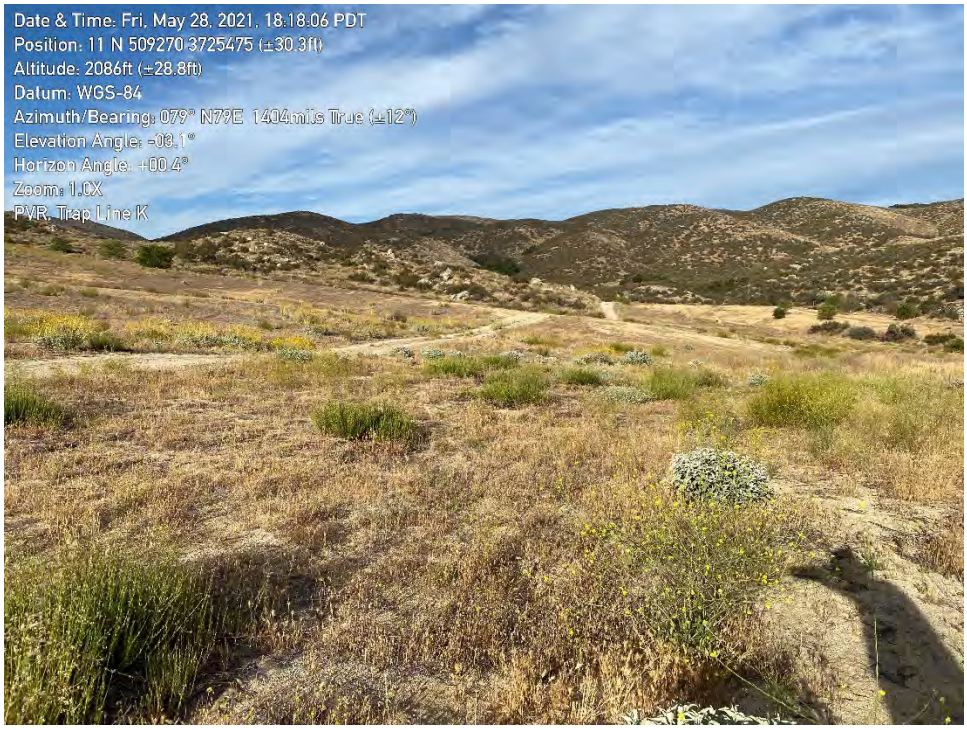


PHOTOGRAPH 7: A northeasterly view of Trapline G. LAPM was detected at trap G-3 on May 25.

PHOTOGRAPH 8: A northerly view of Trapline H.

PHOTOGRAPH 9: A northerly view of Trapline I. LAPM was detected at trap I-5 on May 26

PHOTOGRAPH 10: A northerly view of Trapline J.



PHOTOGRAPH 11: An easterly view of Trapline K. LAPM was detected at trap K-4 on May 25, K-3 on May 26 (recapture on May 29), K-2 on May 27 (recapture), and K-1 on May 29.

PHOTOGRAPH 12: A closeup view of LAPM.

PHOTOGRAPH 13: A LAPM after being released.

PHOTOGRAPH 14: A LAPM during processing. The short ear length is a diagnostic feature.

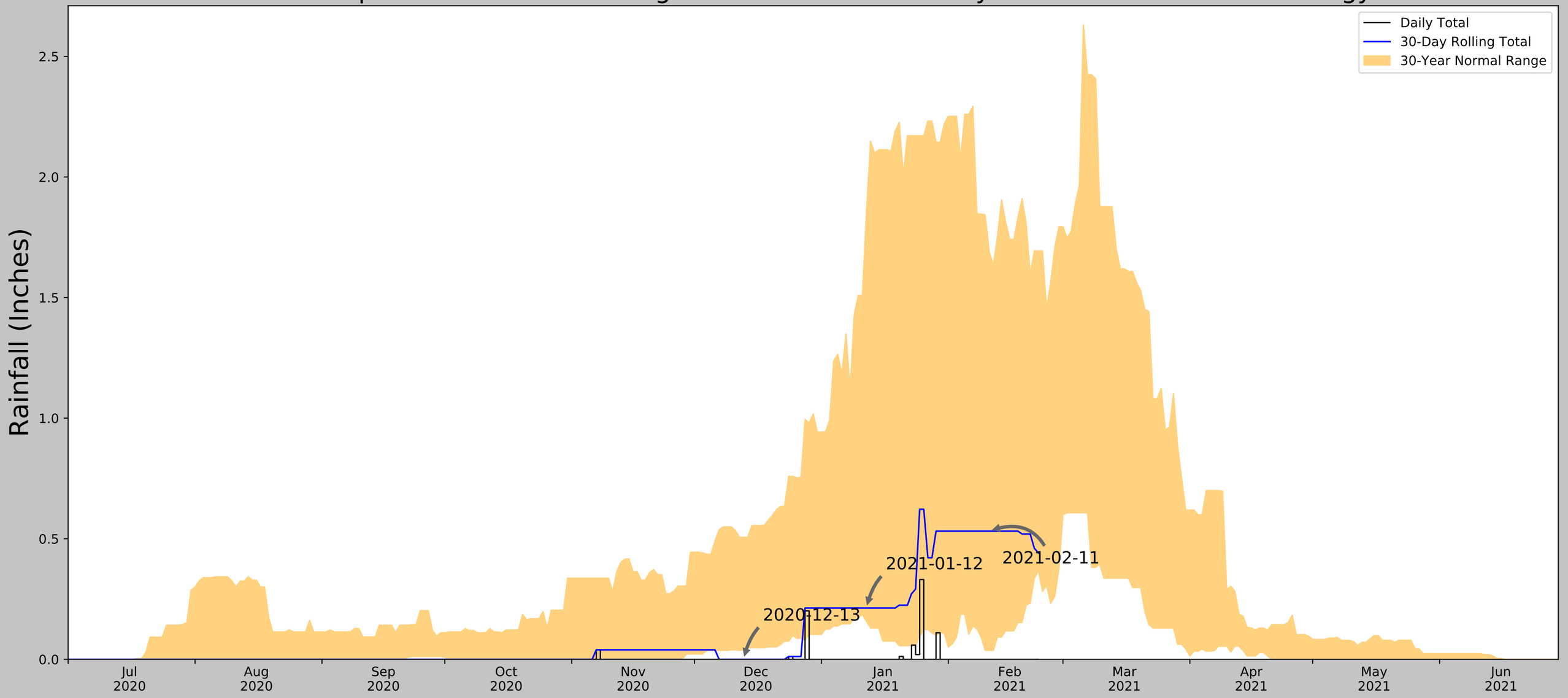
PHOTOGRAPH 15: A northwestern San Diego pocket mouse. Bigger ears and spiny hairs, both diagnostic features for differentiating from LAPM, are depicted.

PHOTOGRAPH 16: A Dulzura kangaroo rat.

APPENDIX G

Wetlands Climate Tables

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	33.67, -116.9
Observation Date	2021-02-11
Elevation (ft)	2112.17
Drought Index (PDSI)	Moderate drought (2021-01)
WebWIMP H_2O Balance	Wet Season

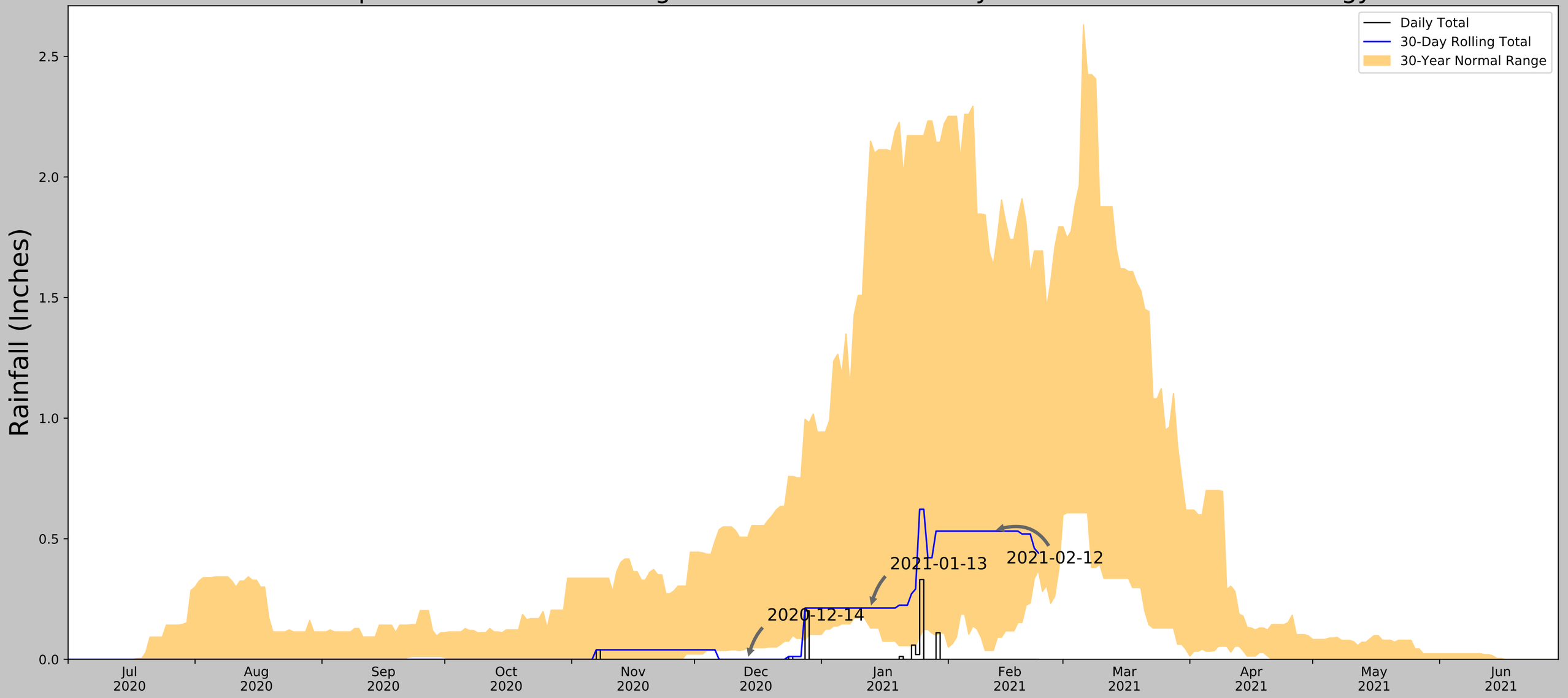
30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-02-11	0.037008	1.68937	0.531496	Normal	2	3	6
2021-01-12	0.15748	1.853937	0.212598	Normal	2	2	4
2020-12-13	0.03937	0.506299	0.0	Dry	1	1	1
Result							Normal Conditions - 11

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
PALM SPRINGS RGNL AP	33.8281, -116.5053	420.932	25.169	1691.238	53.894	8209	90
HEMET	33.7381, -116.8939	1811.024	4.718	301.146	3.544	3073	0
SAN JACINTO	33.7964, -116.9753	1524.934	9.746	587.236	10.109	71	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	33.67, -116.9
Observation Date	2021-02-12
Elevation (ft)	2112.17
Drought Index (PDSI)	Moderate drought (2021-01)
WebWIMP H_2O Balance	Wet Season

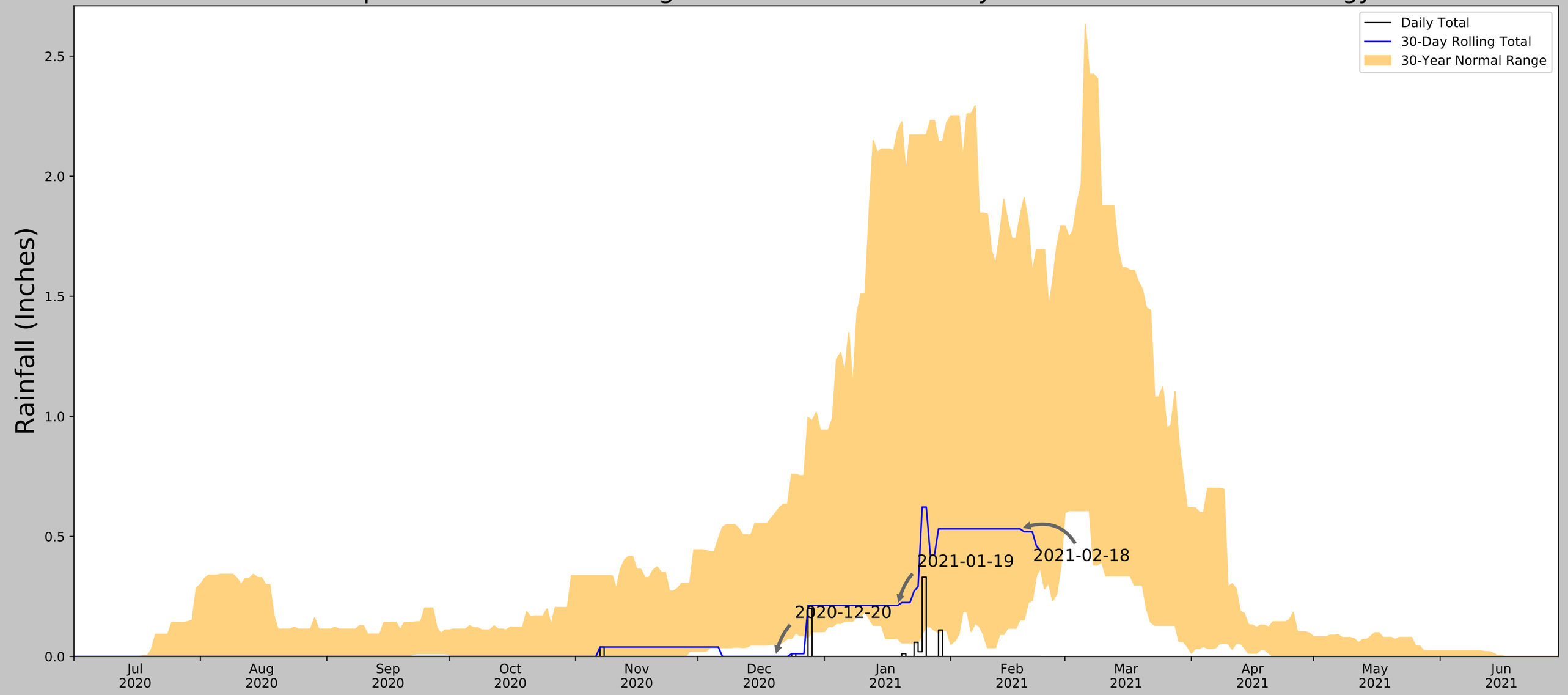
30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-02-12	0.037008	1.635039	0.531496	Normal	2	3	6
2021-01-13	0.129921	2.148425	0.212598	Normal	2	2	4
2020-12-14	0.047638	0.506299	0.0	Dry	1	1	1
Result							Normal Conditions - 11

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
PALM SPRINGS RGNL AP	33.8281, -116.5053	420.932	25.169	1691.238	53.893	8209	90
HEMET	33.7381, -116.8939	1811.024	4.718	301.146	3.544	3073	0
SAN JACINTO	33.7964, -116.9753	1524.934	9.746	587.236	10.109	71	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	33.67, -116.9
Observation Date	2021-02-18
Elevation (ft)	2112.17
Drought Index (PDSI)	Moderate drought (2021-01)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-02-18	0.152756	1.832677	0.531496	Normal	2	3	6
2021-01-19	0.075591	2.188976	0.212598	Normal	2	2	4
2020-12-20	0.051181	0.596457	0.0	Dry	1	1	1
Result							Normal Conditions - 11

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
PALM SPRINGS RGNL AP	33.8281, -116.5053	420.932	25.169	1691.238	53.893	8209	90
HEMET	33.7381, -116.8939	1811.024	4.718	301.146	3.544	3073	0
SAN JACINTO	33.7964, -116.9753	1524.934	9.746	587.236	10.109	71	0

APPENDIX H

Los Angeles Pocket Mouse Survey Results Report

Paradise Valley Ranch Project
Hemet, California
Los Angeles Pocket Mouse
Perognathus longimembris brevinasus
Survey Results
(Hemet 7.5 Minute Quadrangle, T6S, R1E, Section 8)

Prepared for:

Searl Biological Services
43430 E. Florida Ave. #F, PMB 291
Hemet, CA 92544

By

Arthur Davenport
Davenport Biological Services
P.O. Box 1692
Barstow, CA 92312

July 13, 2021

Introduction

Davenport Biological Services (DBS) was contracted by Searl Biological Services (SBS) to survey the Paradise Valley Ranch Project site (CUP Parcel) for the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)(LAPM). The LAPM is a California Species of Special Concern; the species is experiencing population declines due to habitat loss and fragmentation. The CUP Parcel is located within the eastern portion of Cactus Valley, which is located south of Hemet and East of Diamond Valley Lake, Riverside County, California (Figure 1).

Species Information

The LAPM is one of 19 subspecies of little pocket mice (*Perognathus longimembris*)(Hall 1982). The LAPM is one of two *P. longimembris* that occur on the coastal plane of southern California (i.e., south of the Transverse Range and west of the Peninsular Ranges). The marginal records for the distribution of the LAPM are: San Fernando; San Bernardino; Cabazon; Aguanga; 4 kilometers (2.5 miles) N Oak Grove; Burbank (Hall 1982).

Little pocket mice are small, have elongated skulls, nearly equal length front and hind legs, and external, fur-lined cheek pouches. The fur of Little pocket mice lacks spines, as found in other genera of pocket mice (e.g., *Chaetodipus*), and is very fine. Adult Little pocket mice are from 112 to 155 mm long (4 to 6 inches), and weighs from 7 to 12 grams (0.25 to 0.42 ounces (US))(Ingles 1965; Hall 1982).

Little pocket mice are able to enter torpor (become dormant) when environmental conditions become adverse (e.g., low food availability, cold, hot). During torpor, both breathing and heartbeat are reduced and energy is conserved. The species may remain in torpor for several months, depending on environmental conditions. In addition, individual LAPM within the same local population may enter torpor at different times, depending on the specific conditions found in their patch of habitat (Reichman and Price 1993).

In general, the LAPM typically occurs within native plant communities where the aerial cover provided by shrubs and trees is low and the ground is largely devoid of vegetation or debris. LAPM occur within coastal sage scrub, alluvial fan scrub, introduced European grasslands, and herbaceous grasslands. I have also observed this subspecies in associations of Great Basin sagebrush (*Artemesia tridentata*) which can occur at higher elevations. The LAPM is often found on sandy substrates where conditions are good for burrowing. Like other pocket mice, the LAPM predominantly collects and consumes seeds (e.g., grass), but will eat green vegetation as well as insects.

The ability of LAPM to enter torpor increases the difficulty of detecting this species when present. Additionally, the small size of the LAPM also complicates trapping this species, as some traps may not close upon the species entering the trap. The average initial detection probability for LAPM, when they are active, and based on five nights of trapping, is approximately 0.53 (StDev = 0.32; N = 53)(Davenport 2006). Thus, on average, there is a 47% chance per trap night they will not be detected when actually present and active on the surface. When inactive due to adverse environmental conditions, populations of this species will likely go undetected despite being present.

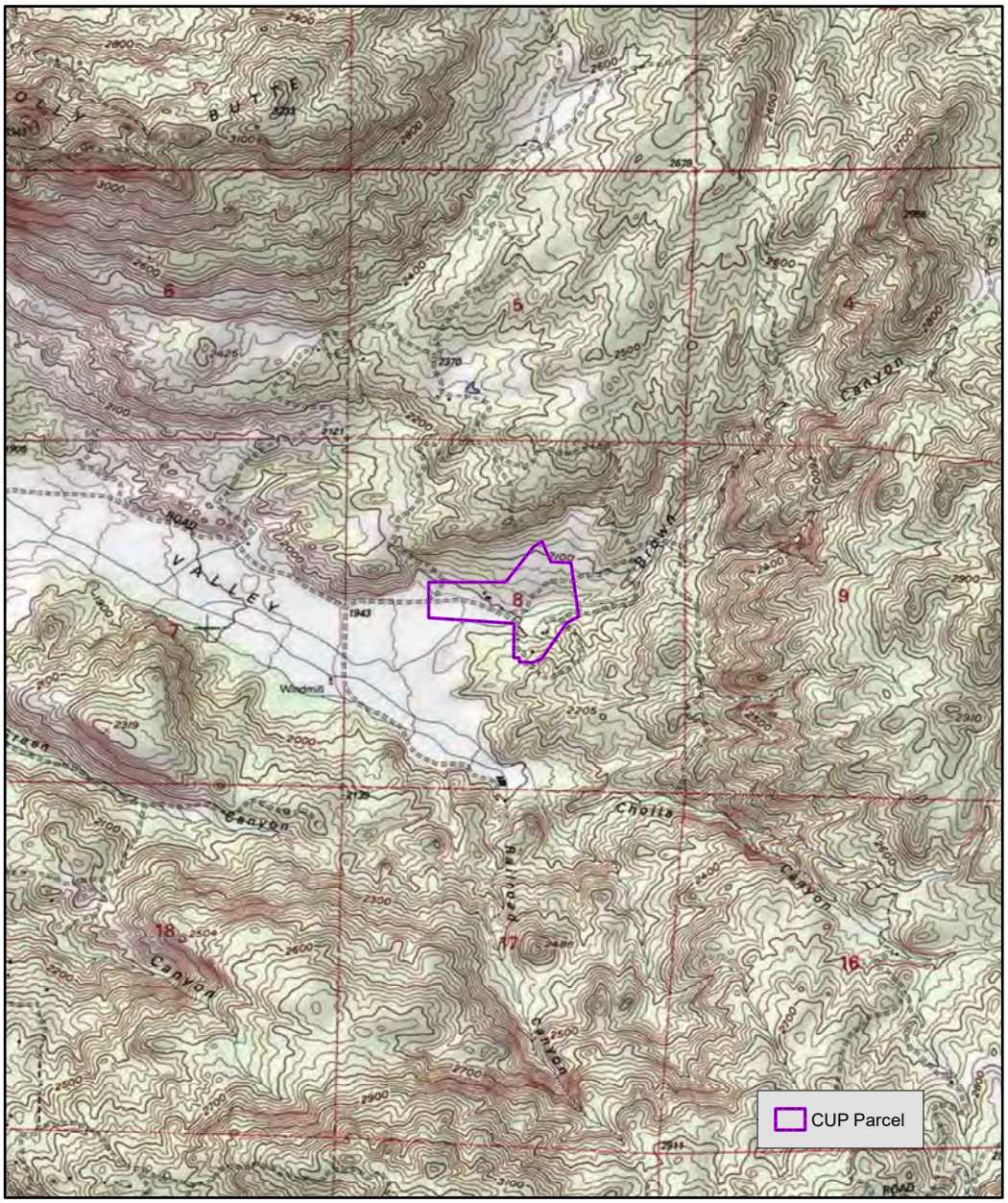


Figure 1. General location of the CUP Parcel (USGS 7.5" Quad, T6S R1E, Section 8).

Habitat Suitability

On 20 Apr 2021, the CUP Parcel and surrounding area were reviewed as to its suitability for LAPM by Arthur Davenport and Tim Searl. The elevation of CUP Parcel is approximately 625 meters (2,050 feet) above mean seal level, well within the elevational range of LAPM. Prior to this onsite habitat assessment, the soil types were reviewed within the CUP Parcel in an effort to anticipate the suitability of soils and the potential distribution of LAPM. Based on the soil map, soils found within the project area are sandy loams (Figure 2). Sandy loams are compatible with burrow construction of LAPM and were determined to be suitable for this animal.

The general plant communities within the CUP Parcel include Brittlebush (*Encelia farinosa*) dominated coastal sage scrub, herbaceous plant communities, areas dominated by European annual grasses and phorbs, oak woodland associated with a drainage, and ornamental plantings of trees and shrubs. The coastal sage scrub within the CUP Parcel has been mowed for fire management.

Although quality varried across the site, the CUP Parcel was found to contain plant communities associated with the LAPM and were determined to be suitable for this species. Habitat suitability was ranked as high, moderate, and low based on vegetation cover and soil conditions. High moderate, and low quality habitat was mapped within the CUP Parcel (Figure 3). High quality habitat was located adjacent to the CUP Parcel.

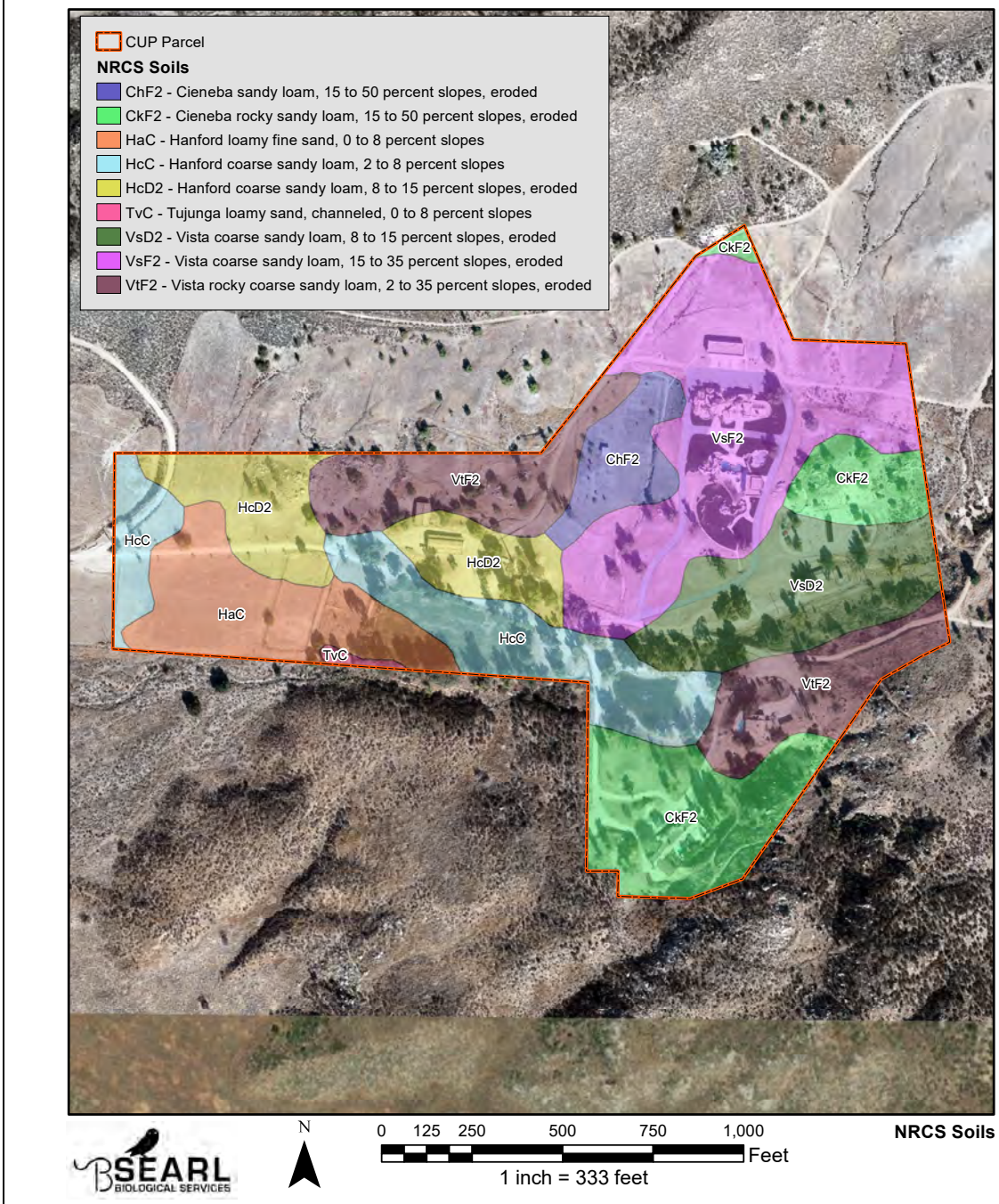


Figure 2. Soil types within the CUP Parcel.

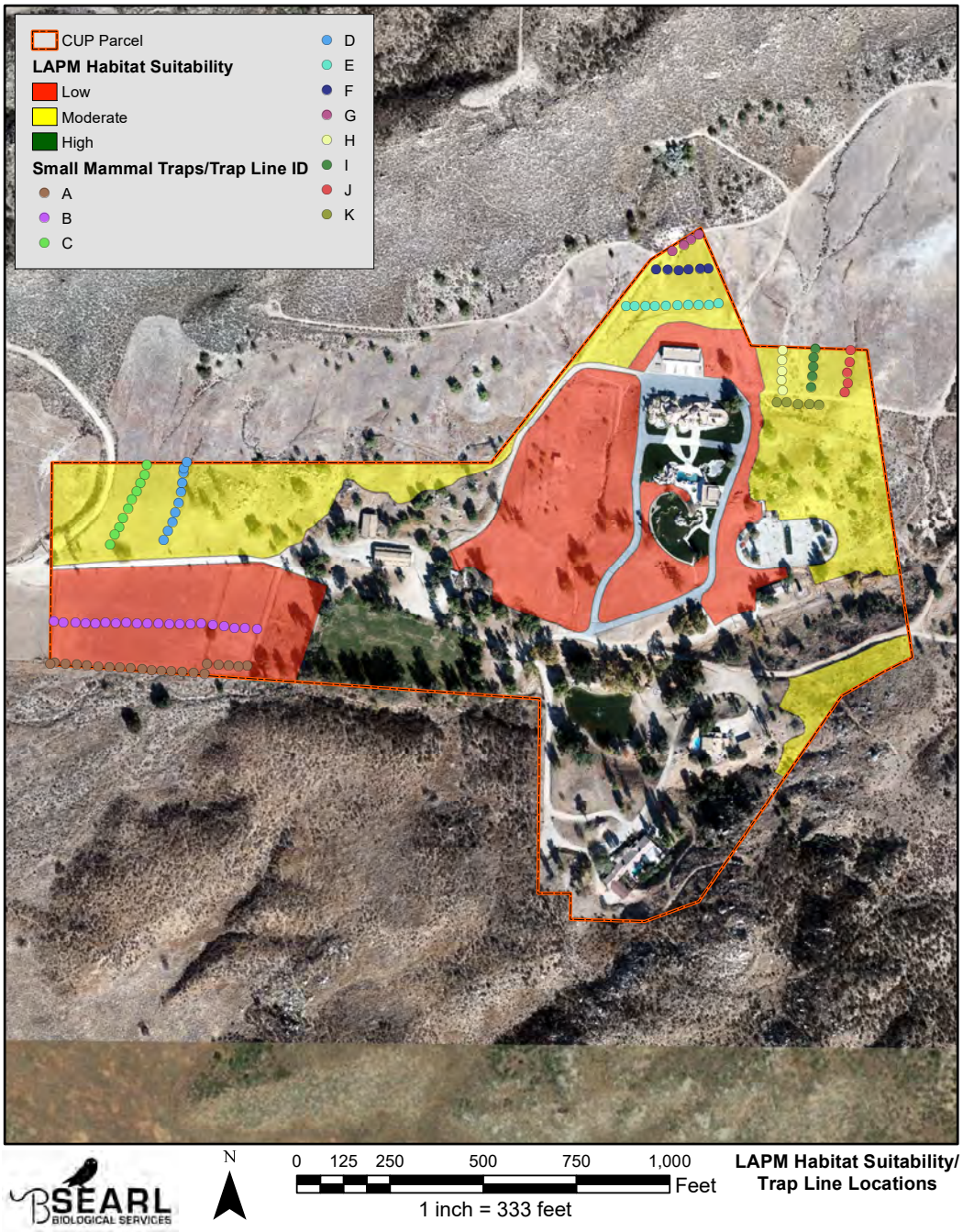


Figure 3. Habitat suitability for LAPM within the CUP Parcel.

Methods

Survey of the CUP Parcel for the LAPM was initiated on the evening of 24 May 2021, and concluded on morning of 29 May 2021 (Table 1). Surveys included visual inspection for small mammal sign potentially attributable to LAPM (e.g., tracks, scat, and/or burrows) and trapping. Trapping was completed under Scientific Collecting Permit 8469 and associated Memorandum of Understanding with the California Department of Fish and Wildlife. Tim Searl assisted, and the identification of all trapped animals were reviewed.

All of the coastal sage scrub and herbaceous grasslands located within the CUP Parcel that was determined to be suitable for this animal was sampled for LAPM. One-hundred live-traps were distributed within both low and moderate quality habitat to maximize the potential of detecting this species. One hundred live-traps were used and were spaced approximately 10 meters apart along transects which sampled the proposed CUP Parcel (Figure 3). The traps used for this survey were 12 inches long, Sherman®, folding live-traps.

Each trap location was trapped for five consecutive nights. Weather conditions were checked near midnight, and weather conditions permitting, the traps were then checked and cleared in the morning. The traps were closed during the day and reopened and baited each evening. Traps were baited with rolled oats (Quaker® Old Fashion). A total of 100 locations were trapped for five consecutive nights for a total of 500 trap-nights. All traps were washed and disinfected with a 10% bleach solution before being deployed in the field. Upon completion of the survey, all traps, trap bags, boots and other equipement that were used in the field were also disinfected with a 10% bleach solution.

Table 1. Dates, times, and weather conditions during each night of the survey.

Survey Dates	Time (24 Hour)	Temperature (F^o)	Wind Speed (mph)	Cloud Cover (%)
	Start/Stop	Start/Stop	Start/Stop	Start/Stop
24-25 May 2021	1530/0730	94/71	1/0	0/0
25-26 May 2021	1730/0800	85/68	2/2	80/80 H
26-27 May 2021	1730/0800	77/58	3/2	0/5 H
27-28 May2021	1730/0800	80/64	0/1	0/0
28-29 May 2021	1730/0830	80/60	5/0	10/10

Results

Six (6) individual LAPM were captured within the CUP Parcel during this survey. All of the trap locations where the LAPM were trapped are provided (Figure 4). In addition to the LAPM, 6 other species of rodents were trapped or otherwise detected within the CUP Parcel. The rodents included the California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), Dulzura kangaroo rat (*Dipodomys simulans*), San Deigo desert woodrat (*Neotoma lepida intermedia*), deer mouse (*Peromyscus maniculatus*). In addition to the rodents, two species of lagomorphs, the desert cottontail rabbit (*Sylvilagus audoboni*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) were also observed within or immediately adjecent to the CUP Parcel. Based on diagnostic sign (i.e., tracks), striped skunk (*Mephitis mephitis*), and coyote (*Canis latrans*) were also detected on site.

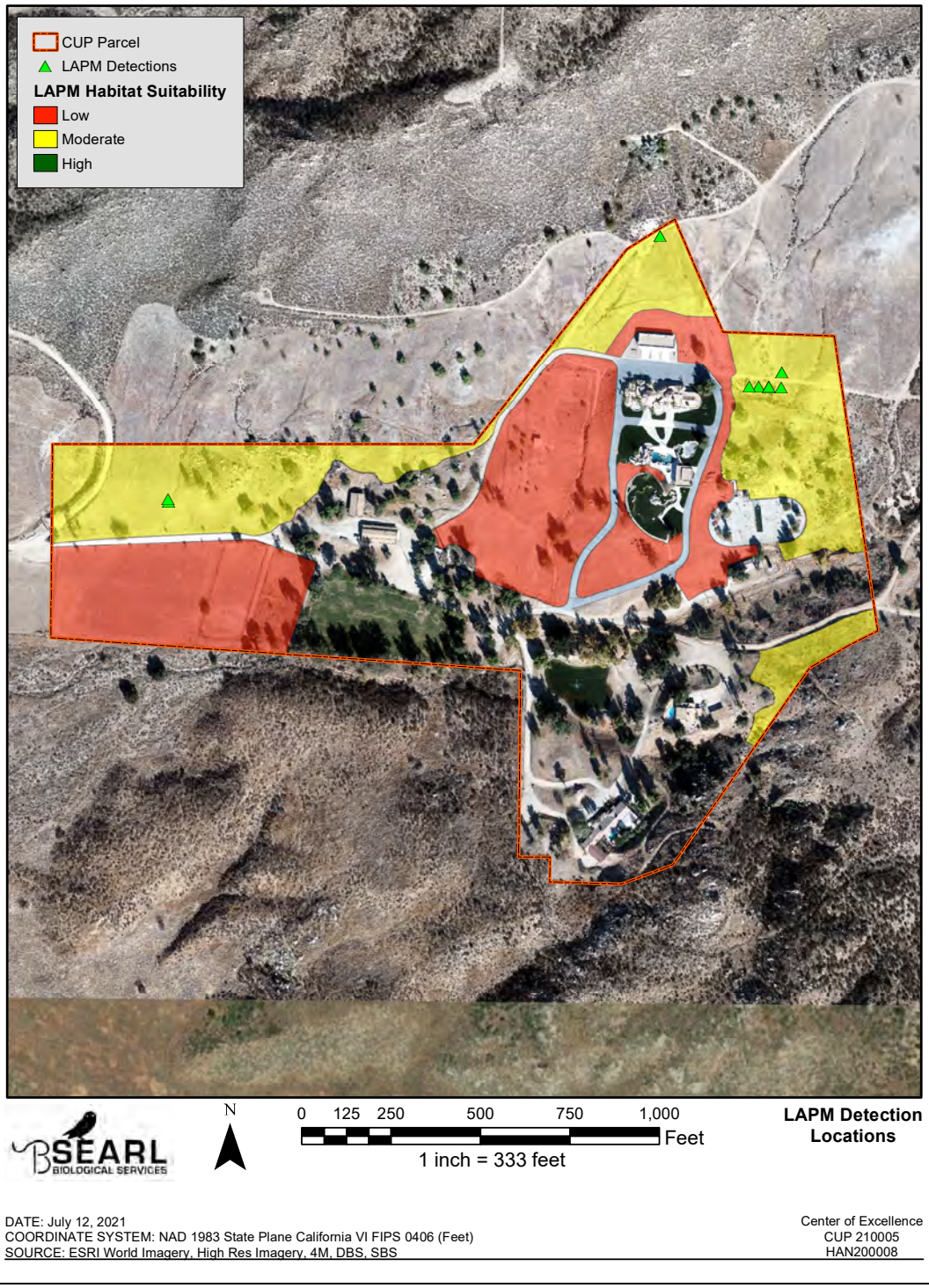


Figure 4. Shows locations where LAPM were trapped within the CUP Parcel.

Discussion

LAPM were found to occur within the CUP Parcel. Based on the habitat conditions and locations of where LAPM were trapped, this species is anticipated to occur throughout all of the high and moderate quality habitat located within the CUP Parcel. In addition, LAPM are anticipated to occasionally occur within the low quality habitat areas as they disperse across the CUP Parcel. Although not trapped, LAPM are also anticipated to occur throughout the high quality Brittlebush dominated coastal sage scrub and moderate quality mowed habitat that occurs immediately adjacent to the CUP Parcel.

The Brittlebush dominated coastal sage scrub, including the mowed portion of this plant community (i.e., fire management zone), provide suitable habitat for LAPM. Although no LAPM were detected within the habitat located within the corrals/pasture areas in the southwestern portion, they likely disperse across this habitat in search of higher quality habitat; the compacted soils within the corrals/pasture areas currently provide poor conditions for burrowing for LAPM.

The portions of the CUP Parcel located closest to current structures is poor quality habitat due to grading associated with the original construction of homes and the compacted nature of soils in those areas. Where grading has occurred and the soils compacted, though they may occasionally move through those areas, LAPM are not anticipated to establilsh burrows in those areas.

In order to determine the actual size of the LAPM population within the CUP Parcel, a much more extensive live-trapping study would need to be completed. Live-traps would need to be deployed across the CUP Parcel in a large grid using 5 meter spacing. Like the initial study, taking into consideration the detection probability of the species, the traps would need to be run for 5 consecutive nights.

In addition to the LAPM, three other sensitive animals, all California Species of Special Concern were trapped or otherwise detected on or immediately adjacent to the CUP Parcel. These sensitive species included: San Diego Desert woodrat (*Neotoma lepida intermedia*) northwestern San Diego pocket mouse, and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

Conclusion

LAPM were captured within the CUP Parcel. A population of LAPM are anticipated to occur throughout the moderate quality habitat mapped within the CUP Parcel. Additional LAPM are anticipated to occur within the high quality Brittlebush dominated coastal sage scrub and moderate quality mowed habitat that occurs immediately adjacent to the CUP Parcel.

Literature Cited

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APPENDIX I

Plants to Avoid Adjacent to the MSHCP Conservation Area

TABLE 6-2. PLANTS THAT SHOULD BE AVOIDED ADJACENT TO THE MSHCP CONSERVATION AREA

BOTANICAL NAME	COMMON NAME
Acacia spp. (all species)	acacia
Achillea millefolium var. *millefolium*	common yarrow
Ailanthus altissima	tree of heaven
Aptenia cordifolia	red apple
Arctotheca calendula	cape weed
Arctotis spp. (all species & hybrids)	African daisy
Arundo donax	giant reed or arundo grass
Asphodelus fistulosus	asphodel
Atriplex glauca	white saltbush
Atriplex semibaccata	Australian saltbush
Carex spp. (all species*)	sedge
Carpobrotus chilensis	ice plant
Carpobrotus edulis	sea fig
Centranthus ruber	red valerian
Chrysanthemum coronarium	annual chrysanthemum
Cistus ladanifer (incl. hybrids/varieties)	gum rockrose
Cortaderia jubata [*syn.C. Atacamensis*]	jubata grass, pampas grass
Cortaderia dioica [syn. *C. sellowana*]	pampas grass
Cotoneaster spp. (all species)	cotoneaster
Cynodon dactylon (incl. hybrids varieties)	Bermuda grass
Cyperus spp. (all species*)	nutsedge, umbrella plant
Cytisus spp. (all species)	broom
Delosperma 'Alba'	white trailing ice plant
Dimorphotheca spp. (all species)	African daisy, Cape marigold
Drosanthemum floribundum	rosea ice plant
Drosanthemum hispidum	purple ice plant
Eichhornia crassipes	water hyacinth
Elaegnus angustifolia	Russian olive
Eucalyptus spp. (all species)	eucalyptus or gum tree
Eupatorium coelestinum [syn. *Ageratina* sp.]	mist flower
Festuca arundinacea	tall fescue
Festuca rubra	creeping red fescue
Foeniculum vulgare	sweet fennel
Fraxinus uhdei (and cultivars)	evergreen ash, shamel ash
Gaura (spp.) (all species)	gaura
Gazania spp. (all species & hybrids)	gazania

TABLE 6-2. PLANTS THAT SHOULD BE AVOIDED ADJACENT TO THE MSHCP CONSERVATION AREA (*Cont.*)

BOTANICAL NAME	COMMON NAME
Genista spp. (all species)	broom
Hedera canariensis	Algerian ivy
Hedera helix	English ivy
Hypericum spp. (all species)	St. John's Wort
Ipomoea acuminata	Mexican morning glory
Lampranthus spectabilis	trailing ice plant
Lantana camara	common garden lantana
Lantana montevidensis [syn. *L. sellowiana*]	lantana
Limonium perezii	sea lavender
Linaria bipartita	toadflax
Lolium multiflorum	Italian ryegrass
Lolium perenne	perennial ryegrass
Lonicera japonica (incl. 'Halliana')	Japanese honeysuckle
Lotus corniculatus	birdsfoot trefoil
Lupinus arboreus	yellow bush lupine
Lupinus texanus	Texas blue bonnets
Malephora crocea	ice plant
Malephora luteola	ice plant
Mesembryanthemum nodiflorum	little ice plant
Myoporum laetum	myoporum
Myoporum pacificum	shiny myoproum
Myoporum parvifolium (incl. 'Prostratum')	ground cover myoporum
Oenothera berlandieri	Mexican evening primrose
Olea europea	European olive tree
Opuntia ficus-indica	Indian fig
Osteospermum spp. (all species)	trailing African daisy, African daisy,
Oxalis pes-caprae	Bermuda buttercup
Parkinsonia aculeata	Mexican palo verde
Pennisetum clandestinum	Kikuyu grass
Pennisetum setaceum	fountain grass
Phoenix canariensis	Canary Island date palm
Phoenix dactylifera	date palm
Plumbago auriculata	cape plumbago
Polygonum spp. (all species)	knotweed
Populus nigra 'italica'	Lombardy poplar
Prosopis spp. (all species*)	mesquite
Ricinus communis	castorbean

TABLE 6-2. PLANTS THAT SHOULD BE AVOIDED ADJACENT TO THE MSHCP CONSERVATION AREA (*Cont.*)

BOTANICAL NAME	COMMON NAME
Robinia pseudoacacia	black locust
Rubus procerus	Himalayan blackberry
Sapium sebiferum	Chinese tallow tree
Saponaria officinalis	bouncing bet, soapwart
Schinus molle	Peruvian pepper tree, California pepper
Schinus terebinthifolius	Brazilian pepper tree
Spartium junceum	Spanish broom
Tamarix spp. (all species)	tamarisk, salt cedar
Trifolium tragiferum	strawberry clover
Tropaelolum majus	garden nasturtium
Ulex europaeus	prickly broom
Vinca major	periwinkle
Yucca gloriosa	Spanish dagger

An asterisk (*) indicates some native species of the genera exist that may be appropriate.

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego-Department of Agriculture.